**C:\Users\patrick.ravi-pinto\Desktop\BFH_TI_DE.gif**

**Programmierreferenz**

**PacMan Multiplayerspiel**

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[MovObjStruct Constructor](#topic_00000000000000E3)

[Compare Method](#topic_00000000000000E4)

[**TimeStamp Structure**](#topic_00000000000000E7)

[TimeStamp Constructor](#topic_00000000000000E8)

## PacManShared Namespace

## Classes

[GameStateManager](#topic_000000000000012B), [Sprite](#topic_0000000000000077)

## Interfaces

[IGameTime](#topic_0000000000000127)

### GameStateManager Class

This clas holds all the current game objects. This class exists to separate object handeling from game logic.

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.GameStateManager**

|  |
| --- |
| [Visual Basic]  **Public Class GameStateManager** |

|  |
| --- |
| [C#]  **public class GameStateManager** |

|  |
| --- |
| [C++]  **public ref class GameStateManager** |

|  |
| --- |
| [JScript]  **public class GameStateManager** |

## Requirements

**Namespace:** [PacManShared](#topic_0000000000000076)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[GameStateManager Constructor](#topic_000000000000012C)

## Properties

[GameState](#topic_0000000000000138), [Level](#topic_0000000000000139), [MovableObjects](#topic_000000000000013C), [TimeStampManager](#topic_000000000000013B), [TimeStamps](#topic_000000000000013A)

## Methods

[AddPlayers](#topic_000000000000012D), [ChangeFormerGameState](#topic_0000000000000132), [CreateTimestamp](#topic_0000000000000131), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetAllOfType<T>](#topic_0000000000000135), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetTimeStamp](#topic_0000000000000134), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [RemovePlayer](#topic_000000000000012E), [RollBack](#topic_0000000000000137), [SetToFormerTimeStamp](#topic_0000000000000133), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [getFromId](#topic_0000000000000136)

#### GameStateManager Constructor

Default constructor, initializes all objects

|  |
| --- |
| [Visual Basic]  **Public Sub New()** |

|  |
| --- |
| [C#]  **public GameStateManager()** |

|  |
| --- |
| [C++]  **public:  GameStateManager()** |

|  |
| --- |
| [JScript]  **public function GameStateManager();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.GameState Property

The current gamestate

|  |
| --- |
| [Visual Basic]  **Public Property GameState() As** [**GameState**](#topic_000000000000002B) |

|  |
| --- |
| [C#]  **public** [**GameState**](#topic_000000000000002B) **GameState {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**GameState**](#topic_000000000000002B) **GameState {** [**GameState**](#topic_000000000000002B) **get( );  void set(** [**GameState**](#topic_000000000000002B) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get GameState() :** [**GameState**](#topic_000000000000002B)**; public function set GameState(value :** [**GameState**](#topic_000000000000002B)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.Level Property

The current level

|  |
| --- |
| [Visual Basic]  **Public Property Level() As** [**Level**](#topic_000000000000008D) |

|  |
| --- |
| [C#]  **public** [**Level**](#topic_000000000000008D) **Level {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Level**](#topic_000000000000008D)**^ Level {** [**Level**](#topic_000000000000008D)**^ get( );  void set(** [**Level**](#topic_000000000000008D)**^ value  ); }** |

|  |
| --- |
| [JScript]  **public function get Level() :** [**Level**](#topic_000000000000008D)**; public function set Level(value :** [**Level**](#topic_000000000000008D)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.MovableObjects Property

List of all Movable objects (Pacmans, Ghosts)

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property MovableObjects() As** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**(Of** [**MovableObject**](#topic_000000000000010B)**)** |

|  |
| --- |
| [C#]  **public** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<**[**MovableObject**](#topic_000000000000010B)**> MovableObjects {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<**[**MovableObject**](#topic_000000000000010B)**^>^ MovableObjects {** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<**[**MovableObject**](#topic_000000000000010B)**^>^ get( ); }** |

|  |
| --- |
| [JScript]  **JScript does not support generic types and methods.** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.TimeStampManager Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property TimeStampManager() As** [**TimeStampManager**](#topic_000000000000013D) |

|  |
| --- |
| [C#]  **public** [**TimeStampManager**](#topic_000000000000013D) **TimeStampManager {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**TimeStampManager**](#topic_000000000000013D)**^ TimeStampManager {** [**TimeStampManager**](#topic_000000000000013D)**^ get( ); }** |

|  |
| --- |
| [JScript]  **public function get TimeStampManager() :** [**TimeStampManager**](#topic_000000000000013D)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.TimeStamps Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property TimeStamps() As** [**LinkedList**](http://msdn.microsoft.com/en-us/library/he2s3bh7.aspx)**(Of** [**TimeStamp**](#topic_00000000000000E7)**)** |

|  |
| --- |
| [C#]  **public** [**LinkedList**](http://msdn.microsoft.com/en-us/library/he2s3bh7.aspx)**<**[**TimeStamp**](#topic_00000000000000E7)**> TimeStamps {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**LinkedList**](http://msdn.microsoft.com/en-us/library/he2s3bh7.aspx)**<**[**TimeStamp**](#topic_00000000000000E7)**>^ TimeStamps {** [**LinkedList**](http://msdn.microsoft.com/en-us/library/he2s3bh7.aspx)**<**[**TimeStamp**](#topic_00000000000000E7)**>^ get( ); }** |

|  |
| --- |
| [JScript]  **JScript does not support generic types and methods.** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.AddPlayers Method

Adds players. Supports params

|  |
| --- |
| [Visual Basic]  **Public Sub AddPlayers( \_  ByVal ParamArray *movableObjects* As** [**MovableObject**](#topic_000000000000010B)**() \_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **AddPlayers(  params** [**MovableObject**](#topic_000000000000010B)**[] *movableObjects* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **AddPlayers(  ...array< array<** [**MovableObject**](#topic_000000000000010B)**^ >^ >^ *movableObjects* )** |

|  |
| --- |
| [JScript]  **public function AddPlayers(  ... *movableObjects* :** [**MovableObject**](#topic_000000000000010B)**[] );** |

## Parameters

*movableObjects*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.ChangeFormerGameState Method

|  |
| --- |
| [Visual Basic]  **Public Sub ChangeFormerGameState( \_  ByVal *time* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal ParamArray *movObjStruct* As** [**MovObjStruct**](#topic_00000000000000E2)**() \_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ChangeFormerGameState(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time*,  params** [**MovObjStruct**](#topic_00000000000000E2)**[] *movObjStruct* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ChangeFormerGameState(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time*,  ...array< array<** [**MovObjStruct**](#topic_00000000000000E2) **>^ >^ *movObjStruct* )** |

|  |
| --- |
| [JScript]  **public function ChangeFormerGameState(  *time* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  ... *movObjStruct* :** [**MovObjStruct**](#topic_00000000000000E2)**[] );** |

## Parameters

*time*

*movObjStruct*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.CreateTimestamp Method

Creates a timestamp for the given time

|  |
| --- |
| [Visual Basic]  **Public Sub CreateTimestamp( \_  ByVal *time* As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **CreateTimestamp(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **CreateTimestamp(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time* )** |

|  |
| --- |
| [JScript]  **public function CreateTimestamp(  *time* :** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **);** |

## Parameters

*time*

The time value since the game (the actuall gameplay) started

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.GetAllOfType<T> Method

Gets a list of all the specified movable objects inside the gamestate manager

|  |
| --- |
| [Visual Basic]  **Public Function GetAllOfType(Of \_  *T* As** [**MovableObject**](#topic_000000000000010B)**)() As** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**(Of T)** |

|  |
| --- |
| [C#]  **public** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<T> GetAllOfType<T>()  where T :** [**MovableObject**](#topic_000000000000010B) |

|  |
| --- |
| [C++]  **generic<typename T> where T :** [**MovableObject**](#topic_000000000000010B)**^ public:** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<T>^ GetAllOfType()** |

|  |
| --- |
| [JScript]  **JScript does not support generic types and methods.** |

## Type Parameters

*T*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.GetTimeStamp Method

|  |
| --- |
| [Visual Basic]  **Public Function GetTimeStamp( \_  ByVal *time* As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **\_ ) As** [**TimeStamp**](#topic_00000000000000E7) |

|  |
| --- |
| [C#]  **public** [**TimeStamp**](#topic_00000000000000E7) **GetTimeStamp(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time* )** |

|  |
| --- |
| [C++]  **public:** [**TimeStamp**](#topic_00000000000000E7) **GetTimeStamp(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time* )** |

|  |
| --- |
| [JScript]  **public function GetTimeStamp(  *time* :** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **) :** [**TimeStamp**](#topic_00000000000000E7)**;** |

## Parameters

*time*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.RemovePlayer (System.Int32) Method

Removes a player

|  |
| --- |
| [Visual Basic]  **Public Sub RemovePlayer( \_  ByVal *ID* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **RemovePlayer(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***ID* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **RemovePlayer(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***ID* )** |

|  |
| --- |
| [JScript]  **public function RemovePlayer(  *ID* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*ID*

the ID of the player

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.RemovePlayer (System.String) Method

Removes a player

|  |
| --- |
| [Visual Basic]  **Public Sub RemovePlayer( \_  ByVal *name* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **RemovePlayer(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***name* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **RemovePlayer(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *name* )** |

|  |
| --- |
| [JScript]  **public function RemovePlayer(  *name* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **);** |

## Parameters

*name*

The name of the player

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.RemovePlayer (PacManShared.Entities.Player.MovableObject) Method

Removes a player

|  |
| --- |
| [Visual Basic]  **Public Sub RemovePlayer( \_  ByVal *movableObject* As** [**MovableObject**](#topic_000000000000010B) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **RemovePlayer(** [**MovableObject**](#topic_000000000000010B) ***movableObject* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **RemovePlayer(** [**MovableObject**](#topic_000000000000010B)**^ *movableObject* )** |

|  |
| --- |
| [JScript]  **public function RemovePlayer(  *movableObject* :** [**MovableObject**](#topic_000000000000010B) **);** |

## Parameters

*movableObject*

The player to remove

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.RollBack Method

|  |
| --- |
| [Visual Basic]  **Public Function RollBack( \_  ByVal *time* As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx)**, \_  ByVal *localId* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Stack**](http://msdn.microsoft.com/en-us/library/3278tedw.aspx)**(Of** [**Command**](#topic_00000000000000E9)**)** |

|  |
| --- |
| [C#]  **public** [**Stack**](http://msdn.microsoft.com/en-us/library/3278tedw.aspx)**<**[**Command**](#topic_00000000000000E9)**> RollBack(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***localId* )** |

|  |
| --- |
| [C++]  **public:** [**Stack**](http://msdn.microsoft.com/en-us/library/3278tedw.aspx)**<**[**Command**](#topic_00000000000000E9)**>^ RollBack(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***localId* )** |

|  |
| --- |
| [JScript]  **JScript does not support generic types and methods.** |

## Parameters

*time*

*localId*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.SetToFormerTimeStamp Method

Resets the gamestate manager to the closest possible time frame, given through the parameter

|  |
| --- |
| [Visual Basic]  **Public Sub SetToFormerTimeStamp( \_  ByVal *time* As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetToFormerTimeStamp(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetToFormerTimeStamp(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time* )** |

|  |
| --- |
| [JScript]  **public function SetToFormerTimeStamp(  *time* :** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **);** |

## Parameters

*time*

The time to which the gamestate manager should reset to

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

#### GameStateManager.getFromId Method

|  |
| --- |
| [Visual Basic]  **Public Function getFromId( \_  ByVal *id* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**MovableObject**](#topic_000000000000010B) |

|  |
| --- |
| [C#]  **public** [**MovableObject**](#topic_000000000000010B) **getFromId(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [C++]  **public:** [**MovableObject**](#topic_000000000000010B)**^ getFromId(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [JScript]  **public function getFromId(  *id* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**MovableObject**](#topic_000000000000010B)**;** |

## Parameters

*id*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameStateManager](#topic_000000000000012B)

### Sprite Class

A basic class for sprites

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Sprite**

[PacManShared.Entities.PickUp.PickUp](#topic_00000000000000D1)

[PacManShared.Entities.Player.MovableObject](#topic_000000000000010B)

[PacManShared.LevelClasses.Cells.Cell](#topic_0000000000000005)

|  |
| --- |
| [Visual Basic]  **Public MustInherit Class Sprite** |

|  |
| --- |
| [C#]  **public abstract class Sprite** |

|  |
| --- |
| [C++]  **public ref class Sprite abstract** |

|  |
| --- |
| [JScript]  **public abstract class Sprite** |

## Requirements

**Namespace:** [PacManShared](#topic_0000000000000076)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Sprite Constructor](#topic_0000000000000078)

## Properties

[Center](#topic_000000000000007F), [IntersectRectangle](#topic_0000000000000080), [Size](#topic_000000000000007C), [Texture](#topic_000000000000007E), [TextureAsset](#topic_000000000000007D)

## Methods

[Draw](#topic_000000000000007B), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [LoadContent](#topic_0000000000000079), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_000000000000007A)

#### Sprite Constructor

Creates an empty sprite

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Sprite(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset* )** |

|  |
| --- |
| [C++]  **public:  Sprite(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset* )** |

|  |
| --- |
| [JScript]  **public function Sprite(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **);** |

## Parameters

*textureAsset*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Sprite](#topic_0000000000000077)

#### Sprite.Center Property

Gets the center of a sprite

|  |
| --- |
| [Visual Basic]  **Public ReadOnly MustOverride Property Center() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public abstract** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {get;}** |

|  |
| --- |
| [C++]  **public:  virtual property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( ); abstract }** |

|  |
| --- |
| [JScript]  **public abstract function get Center() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Sprite](#topic_0000000000000077)

#### Sprite.IntersectRectangle Property

Generates an Intersect Rectangle

|  |
| --- |
| [Visual Basic]  **Public ReadOnly MustOverride Property IntersectRectangle() As** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) |

|  |
| --- |
| [C#]  **public abstract** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **IntersectRectangle {get;}** |

|  |
| --- |
| [C++]  **public:  virtual property** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **IntersectRectangle {** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **get( ); abstract }** |

|  |
| --- |
| [JScript]  **public abstract function get IntersectRectangle() :** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Sprite](#topic_0000000000000077)

#### Sprite.Size Property

Gets the size of a sprite

|  |
| --- |
| [Visual Basic]  **Public MustOverride Property Size() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public abstract** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Size {get; set;}** |

|  |
| --- |
| [C++]  **public:  virtual property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Size {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( ); abstract  void set(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **value  ); abstract }** |

|  |
| --- |
| [JScript]  **public abstract function get Size() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**; public abstract function set Size(value :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Sprite](#topic_0000000000000077)

#### Sprite.Texture Property

Gets or sets the texture of this sprite

|  |
| --- |
| [Visual Basic]  **Public Property Texture() As** [**Texture2D**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.texture2d.aspx) |

|  |
| --- |
| [C#]  **public** [**Texture2D**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.texture2d.aspx) **Texture {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Texture2D**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.texture2d.aspx)**^ Texture {** [**Texture2D**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.texture2d.aspx)**^ get( );  void set(** [**Texture2D**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.texture2d.aspx)**^ value  ); }** |

|  |
| --- |
| [JScript]  **public function get Texture() :** [**Texture2D**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.texture2d.aspx)**; public function set Texture(value :** [**Texture2D**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.texture2d.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Sprite](#topic_0000000000000077)

#### Sprite.TextureAsset Property

The path to the texture of this sprite object

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property TextureAsset() As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) |

|  |
| --- |
| [C#]  **public** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **TextureAsset {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ TextureAsset {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( ); }** |

|  |
| --- |
| [JScript]  **public function get TextureAsset() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Sprite](#topic_0000000000000077)

#### Sprite.Draw Method

Draws this sprite

|  |
| --- |
| [Visual Basic]  **Public MustOverride Sub Draw( \_  ByVal *spriteBatch* As** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**, \_  ByVal *layer* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *levelPosition* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public abstract** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx) ***spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [C++]  **public:  virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**^ *spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* ) abstract** |

|  |
| --- |
| [JScript]  **public abstract function Draw(  *spriteBatch* :** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**,  *layer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *levelPosition* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **);** |

## Parameters

*spriteBatch*

the spritebatch

*layer*

the layer we want to render into

*levelPosition*

The position of the level onscreen

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Sprite](#topic_0000000000000077)

#### Sprite.LoadContent Method

Loads the content for this sprite

|  |
| --- |
| [Visual Basic]  **Public Overridable Sub LoadContent( \_  ByVal *contentManager* As** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) ***contentManager* )** |

|  |
| --- |
| [C++]  **public:  virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx)**^ *contentManager* )** |

|  |
| --- |
| [JScript]  **public function LoadContent(  *contentManager* :** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **);** |

## Parameters

*contentManager*

The contentmangaer

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Sprite](#topic_0000000000000077)

#### Sprite.Update Method

Updates this sprite

|  |
| --- |
| [Visual Basic]  **Public MustOverride Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  **public abstract** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:  virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* ) abstract** |

|  |
| --- |
| [JScript]  **public abstract function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

the current gametime

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Sprite](#topic_0000000000000077)

### IGameTime Interface

|  |
| --- |
| [Visual Basic]  **Public Interface IGameTime** |

|  |
| --- |
| [C#]  **public interface IGameTime** |

|  |
| --- |
| [C++]  **public interface class IGameTime** |

|  |
| --- |
| [JScript]  **public interface IGameTime** |

## Requirements

**Namespace:** [PacManShared](#topic_0000000000000076)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Properties

[ElapsedGameTime](#topic_000000000000012A), [IsRunningSlowly](#topic_0000000000000128), [TotalGameTime](#topic_0000000000000129)

#### IGameTime.ElapsedGameTime Property

Gets .

|  |
| --- |
| [Visual Basic]  **ReadOnly Property ElapsedGameTime() As** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) |

|  |
| --- |
| [C#]  [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **ElapsedGameTime {get;}** |

|  |
| --- |
| [C++]   **property** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **ElapsedGameTime {** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **function get ElapsedGameTime() :** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [IGameTime](#topic_0000000000000127)

#### IGameTime.IsRunningSlowly Property

Gets a value indicating whether this instance .

|  |
| --- |
| [Visual Basic]  **ReadOnly Property IsRunningSlowly() As** [**Boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) |

|  |
| --- |
| [C#]  [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsRunningSlowly {get;}** |

|  |
| --- |
| [C++]   **property** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsRunningSlowly {** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **function get IsRunningSlowly() :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**;** |

## Property Value

**true** if this instance ; otherwise, **false**.

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [IGameTime](#topic_0000000000000127)

#### IGameTime.TotalGameTime Property

Gets .

|  |
| --- |
| [Visual Basic]  **ReadOnly Property TotalGameTime() As** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) |

|  |
| --- |
| [C#]  [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **TotalGameTime {get;}** |

|  |
| --- |
| [C++]   **property** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **TotalGameTime {** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **function get TotalGameTime() :** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [IGameTime](#topic_0000000000000127)

## PacManShared.Controllers Namespace

## Classes

[Controller](#topic_00000000000000C8), [ControllerDecorator](#topic_0000000000000109), [EmptyController](#topic_0000000000000060)

### Controller Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Controllers.Controller**

[PacManShared.Controllers.AI.GhostController](#topic_00000000000000B0)

[PacManShared.Controllers.ControllerDecorator](#topic_0000000000000109)

[PacManShared.Controllers.EmptyController](#topic_0000000000000060)

|  |
| --- |
| [Visual Basic]  **Public MustInherit Class Controller** |

|  |
| --- |
| [C#]  **public abstract class Controller** |

|  |
| --- |
| [C++]  **public ref class Controller abstract** |

|  |
| --- |
| [JScript]  **public abstract class Controller** |

## Requirements

**Namespace:** [PacManShared.Controllers](#topic_000000000000005F)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Controller Constructor](#topic_00000000000000C9)

## Properties

[Direction](#topic_00000000000000CC), [ID](#topic_00000000000000CE), [MovObjType](#topic_00000000000000CD), [Name](#topic_00000000000000CB)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_00000000000000CA)

#### Controller Constructor

Initializes a new instance of the [Controller](#topic_00000000000000C8) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *id* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Controller(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [C++]  **public:  Controller(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [JScript]  **public function Controller(  *id* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*id*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Controller](#topic_00000000000000C8)

#### Controller.Direction Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public MustOverride Property Direction() As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public abstract** [**Direction**](#topic_00000000000000F0) **Direction {get; set;}** |

|  |
| --- |
| [C++]  **public:  virtual property** [**Direction**](#topic_00000000000000F0) **Direction {** [**Direction**](#topic_00000000000000F0) **get( ); abstract  void set(** [**Direction**](#topic_00000000000000F0) **value  ); abstract }** |

|  |
| --- |
| [JScript]  **public abstract function get Direction() :** [**Direction**](#topic_00000000000000F0)**; public abstract function set Direction(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Controller](#topic_00000000000000C8)

#### Controller.ID Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public Property ID() As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) |

|  |
| --- |
| [C#]  **public** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **ID {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **ID {** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **get( );  void set(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get ID() :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**; public function set ID(value :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Controller](#topic_00000000000000C8)

#### Controller.MovObjType Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly MustOverride Property MovObjType() As** [**MovObjType**](#topic_00000000000000AE) |

|  |
| --- |
| [C#]  **public abstract** [**MovObjType**](#topic_00000000000000AE) **MovObjType {get;}** |

|  |
| --- |
| [C++]  **public:  virtual property** [**MovObjType**](#topic_00000000000000AE) **MovObjType {** [**MovObjType**](#topic_00000000000000AE) **get( ); abstract }** |

|  |
| --- |
| [JScript]  **public abstract function get MovObjType() :** [**MovObjType**](#topic_00000000000000AE)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Controller](#topic_00000000000000C8)

#### Controller.Name Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public MustOverride Property Name() As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) |

|  |
| --- |
| [C#]  **public abstract** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get; set;}** |

|  |
| --- |
| [C++]  **public:  virtual property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( ); abstract  void set(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ value  ); abstract }** |

|  |
| --- |
| [JScript]  **public abstract function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**; public abstract function set Name(value :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Controller](#topic_00000000000000C8)

#### Controller.Update Method

|  |
| --- |
| [Visual Basic]  **Public MustOverride Sub Update( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005) **\_ )** |

|  |
| --- |
| [C#]  **public abstract** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005) ***currentCell* )** |

|  |
| --- |
| [C++]  **public:  virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005)**^ *currentCell* ) abstract** |

|  |
| --- |
| [JScript]  **public abstract function Update(  *currentCell* :** [**Cell**](#topic_0000000000000005) **);** |

## Parameters

*currentCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Controller](#topic_00000000000000C8)

### ControllerDecorator Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

[PacManShared.Controllers.Controller](#topic_00000000000000C8)

**PacManShared.Controllers.ControllerDecorator**

[PacManShared.Controllers.Network.NetworkController](#topic_00000000000000BB)

[PacManShared.Controllers.Network.NetworkGhostController](#topic_0000000000000082)

|  |
| --- |
| [Visual Basic]  **Public MustInherit Class ControllerDecorator  Inherits** [**Controller**](#topic_00000000000000C8) |

|  |
| --- |
| [C#]  **public abstract class ControllerDecorator :** [**Controller**](#topic_00000000000000C8) |

|  |
| --- |
| [C++]  **public ref class ControllerDecorator abstract : public** [**Controller**](#topic_00000000000000C8)**^** |

|  |
| --- |
| [JScript]  **public abstract class ControllerDecorator  extends** [**Controller**](#topic_00000000000000C8) |

## Requirements

**Namespace:** [PacManShared.Controllers](#topic_000000000000005F)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[ControllerDecorator Constructor](#topic_000000000000010A)

## Properties

[Direction](#topic_00000000000000CC) (inherited from [Controller](#topic_00000000000000C8)), [ID](#topic_00000000000000CE) (inherited from [Controller](#topic_00000000000000C8)), [MovObjType](#topic_00000000000000CD) (inherited from [Controller](#topic_00000000000000C8)), [Name](#topic_00000000000000CB) (inherited from [Controller](#topic_00000000000000C8))

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_00000000000000CA) (inherited from [Controller](#topic_00000000000000C8))

#### ControllerDecorator Constructor

Initializes a new instance of the [ControllerDecorator](#topic_0000000000000109) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *controller* As** [**Controller**](#topic_00000000000000C8)**, \_  ByVal *id* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public ControllerDecorator(** [**Controller**](#topic_00000000000000C8) ***controller*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [C++]  **public:  ControllerDecorator(** [**Controller**](#topic_00000000000000C8)**^ *controller*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [JScript]  **public function ControllerDecorator(  *controller* :** [**Controller**](#topic_00000000000000C8)**,  *id* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*controller*

*id*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [ControllerDecorator](#topic_0000000000000109)

### EmptyController Class

|  |
| --- |
| [Visual Basic]  **Public Class EmptyController  Inherits** [**Controller**](#topic_00000000000000C8) |

|  |
| --- |
| [C#]  **public class EmptyController :** [**Controller**](#topic_00000000000000C8) |

|  |
| --- |
| [C++]  **public ref class EmptyController : public** [**Controller**](#topic_00000000000000C8)**^** |

|  |
| --- |
| [JScript]  **public class EmptyController  extends** [**Controller**](#topic_00000000000000C8) |

## Requirements

**Namespace:** [PacManShared.Controllers](#topic_000000000000005F)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[EmptyController Constructor](#topic_0000000000000061)

## Properties

[Direction](#topic_0000000000000066), [ID](#topic_00000000000000CE) (inherited from [Controller](#topic_00000000000000C8)), [MovObjType](#topic_0000000000000065), [Name](#topic_0000000000000067)

## Methods

[Empty](#topic_0000000000000063), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_0000000000000064)

#### EmptyController Constructor (System.Int32)

Initializes a new instance of the [EmptyController](#topic_0000000000000060) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *id* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public EmptyController(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [C++]  **public:  EmptyController(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [JScript]  **public function EmptyController(  *id* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*id*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [EmptyController](#topic_0000000000000060)

#### EmptyController Constructor (PacManShared.Enums.Direction, System.String, System.Int32, PacManShared.Enums.MovObjType)

Initializes a new instance of the [EmptyController](#topic_0000000000000060) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *direction* As** [**Direction**](#topic_00000000000000F0)**, \_  ByVal *name* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**, \_  ByVal *id* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *movObjType* As** [**MovObjType**](#topic_00000000000000AE) **\_ )** |

|  |
| --- |
| [C#]  **public EmptyController(** [**Direction**](#topic_00000000000000F0) ***direction*,** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***name*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id*,** [**MovObjType**](#topic_00000000000000AE) ***movObjType* )** |

|  |
| --- |
| [C++]  **public:  EmptyController(** [**Direction**](#topic_00000000000000F0) ***direction*,** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *name*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id*,** [**MovObjType**](#topic_00000000000000AE) ***movObjType* )** |

|  |
| --- |
| [JScript]  **public function EmptyController(  *direction* :** [**Direction**](#topic_00000000000000F0)**,  *name* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**,  *id* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *movObjType* :** [**MovObjType**](#topic_00000000000000AE) **);** |

## Parameters

*direction*

*name*

*id*

*movObjType*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [EmptyController](#topic_0000000000000060)

#### EmptyController.Direction Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public Overrides Property Direction() As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public override** [**Direction**](#topic_00000000000000F0) **Direction {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Direction**](#topic_00000000000000F0) **Direction {** [**Direction**](#topic_00000000000000F0) **get( );  void set(** [**Direction**](#topic_00000000000000F0) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Direction() :** [**Direction**](#topic_00000000000000F0)**; public function set Direction(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [EmptyController](#topic_0000000000000060)

#### EmptyController.MovObjType Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property MovObjType() As** [**MovObjType**](#topic_00000000000000AE) |

|  |
| --- |
| [C#]  **public override** [**MovObjType**](#topic_00000000000000AE) **MovObjType {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**MovObjType**](#topic_00000000000000AE) **MovObjType {** [**MovObjType**](#topic_00000000000000AE) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get MovObjType() :** [**MovObjType**](#topic_00000000000000AE)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [EmptyController](#topic_0000000000000060)

#### EmptyController.Name Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public Overrides Property Name() As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) |

|  |
| --- |
| [C#]  **public override** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( );  void set(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ value  ); }** |

|  |
| --- |
| [JScript]  **public function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**; public function set Name(value :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [EmptyController](#topic_0000000000000060)

#### EmptyController.Empty Method

|  |
| --- |
| [Visual Basic]  **Public Shared Function Empty( \_  ByVal *UID* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**EmptyController**](#topic_0000000000000060) |

|  |
| --- |
| [C#]  **public static** [**EmptyController**](#topic_0000000000000060) **Empty(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***UID* )** |

|  |
| --- |
| [C++]  **public:  static** [**EmptyController**](#topic_0000000000000060)**^ Empty(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***UID* )** |

|  |
| --- |
| [JScript]  **public static function Empty(  *UID* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**EmptyController**](#topic_0000000000000060)**;** |

## Parameters

*UID*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [EmptyController](#topic_0000000000000060)

#### EmptyController.Update Method

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Update( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005) ***currentCell* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005)**^ *currentCell* )** |

|  |
| --- |
| [JScript]  **public function Update(  *currentCell* :** [**Cell**](#topic_0000000000000005) **);** |

## Parameters

*currentCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [EmptyController](#topic_0000000000000060)

## PacManShared.Controllers.AI Namespace

## Classes

[GhostController](#topic_00000000000000B0)

## Interfaces

[IGhostStateObserver](#topic_00000000000000CF)

### GhostController Class

|  |
| --- |
| [Visual Basic]  **Public Class GhostController  Inherits** [**Controller**](#topic_00000000000000C8) **Implements** [**IGhostStateObserver**](#topic_00000000000000CF) |

|  |
| --- |
| [C#]  **public class GhostController :** [**Controller**](#topic_00000000000000C8)**,** [**IGhostStateObserver**](#topic_00000000000000CF) |

|  |
| --- |
| [C++]  **public ref class GhostController : public** [**Controller**](#topic_00000000000000C8)**^,  public** [**IGhostStateObserver**](#topic_00000000000000CF)**^** |

|  |
| --- |
| [JScript]  **public class GhostController  extends** [**Controller**](#topic_00000000000000C8) **implements** [**IGhostStateObserver**](#topic_00000000000000CF) |

## Requirements

**Namespace:** [PacManShared.Controllers.AI](#topic_00000000000000AF)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[GhostController Constructor](#topic_00000000000000B1)

## Properties

[CurrentCell](#topic_00000000000000B8), [Direction](#topic_00000000000000BA), [ID](#topic_00000000000000CE) (inherited from [Controller](#topic_00000000000000C8)), [MovObjType](#topic_00000000000000B7), [Name](#topic_00000000000000B9), [NextDirection](#topic_00000000000000B6)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [SetGhostState](#topic_00000000000000B5), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_00000000000000B2)

#### GhostController Constructor

Initializes a new instance of the [GhostController](#topic_00000000000000B0) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *level* As** [**Level**](#topic_000000000000008D)**, \_  ByVal *ghostAi* As** [**GhostAi**](#topic_0000000000000039)**, \_  ByVal *id* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public GhostController(** [**Level**](#topic_000000000000008D) ***level*,** [**GhostAi**](#topic_0000000000000039) ***ghostAi*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [C++]  **public:  GhostController(** [**Level**](#topic_000000000000008D)**^ *level*,** [**GhostAi**](#topic_0000000000000039)**^ *ghostAi*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [JScript]  **public function GhostController(  *level* :** [**Level**](#topic_000000000000008D)**,  *ghostAi* :** [**GhostAi**](#topic_0000000000000039)**,  *id* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*level*

*ghostAi*

*id*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

#### GhostController.CurrentCell Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public Property CurrentCell() As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **CurrentCell {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Cell**](#topic_0000000000000005)**^ CurrentCell {** [**Cell**](#topic_0000000000000005)**^ get( );  void set(** [**Cell**](#topic_0000000000000005)**^ value  ); }** |

|  |
| --- |
| [JScript]  **public function get CurrentCell() :** [**Cell**](#topic_0000000000000005)**; public function set CurrentCell(value :** [**Cell**](#topic_0000000000000005)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

#### GhostController.Direction Property

Gets or sets .

|  |
| --- |
| [C#]  **public override** [**Direction**](#topic_00000000000000F0) **Direction {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Direction**](#topic_00000000000000F0) **Direction {** [**Direction**](#topic_00000000000000F0) **get( );  void set(** [**Direction**](#topic_00000000000000F0) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Direction() :** [**Direction**](#topic_00000000000000F0)**; public function set Direction(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

#### GhostController.MovObjType Property

Gets .

|  |
| --- |
| [C#]  **public override** [**MovObjType**](#topic_00000000000000AE) **MovObjType {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**MovObjType**](#topic_00000000000000AE) **MovObjType {** [**MovObjType**](#topic_00000000000000AE) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get MovObjType() :** [**MovObjType**](#topic_00000000000000AE)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

#### GhostController.Name Property

Gets or sets .

|  |
| --- |
| [C#]  **public override** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( );  void set(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ value  ); }** |

|  |
| --- |
| [JScript]  **public function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**; public function set Name(value :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

#### GhostController.NextDirection Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public Property NextDirection() As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public** [**Direction**](#topic_00000000000000F0) **NextDirection {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Direction**](#topic_00000000000000F0) **NextDirection {** [**Direction**](#topic_00000000000000F0) **get( );  void set(** [**Direction**](#topic_00000000000000F0) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get NextDirection() :** [**Direction**](#topic_00000000000000F0)**; public function set NextDirection(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

#### GhostController.SetGhostState Method

Sets the state of the ghost

|  |
| --- |
| [Visual Basic]  **Public Sub SetGhostState( \_  ByVal *eGhostStateBehaviour* As** [**EGhostBehaviour**](#topic_0000000000000108) **\_ ) Implements \_** [**IGhostStateObserver.SetGhostState**](#topic_00000000000000D0) |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetGhostState(** [**EGhostBehaviour**](#topic_0000000000000108) ***eGhostStateBehaviour* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetGhostState(** [**EGhostBehaviour**](#topic_0000000000000108) ***eGhostStateBehaviour* )** |

|  |
| --- |
| [JScript]  **public function SetGhostState(  *eGhostStateBehaviour* :** [**EGhostBehaviour**](#topic_0000000000000108) **);** |

## Parameters

*eGhostStateBehaviour*

the new ghoststate

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

#### GhostController.Update (PacManShared.LevelClasses.Cells.Cell, PacManShared.Enums.EGhostBehaviour) Method

|  |
| --- |
| [Visual Basic]  **Public Sub Update( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005)**, \_  ByVal *behaviour* As** [**EGhostBehaviour**](#topic_0000000000000108) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005) ***currentCell*,** [**EGhostBehaviour**](#topic_0000000000000108) ***behaviour* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005)**^ *currentCell*,** [**EGhostBehaviour**](#topic_0000000000000108) ***behaviour* )** |

|  |
| --- |
| [JScript]  **public function Update(  *currentCell* :** [**Cell**](#topic_0000000000000005)**,  *behaviour* :** [**EGhostBehaviour**](#topic_0000000000000108) **);** |

## Parameters

*currentCell*

*behaviour*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

#### GhostController.Update (PacManShared.LevelClasses.Cells.Cell) Method

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005) ***CurrentCell* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005)**^ *CurrentCell* )** |

|  |
| --- |
| [JScript]  **public function Update(  *CurrentCell* :** [**Cell**](#topic_0000000000000005) **);** |

## Parameters

*CurrentCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

#### GhostController.Update Method

|  |
| --- |
| [Visual Basic]  **Public Sub Update()** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update()** |

|  |
| --- |
| [JScript]  **public function Update();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostController](#topic_00000000000000B0)

### IGhostStateObserver Interface

Interface for an object that observers a ghosts state

|  |
| --- |
| [Visual Basic]  **Public Interface IGhostStateObserver** |

|  |
| --- |
| [C#]  **public interface IGhostStateObserver** |

|  |
| --- |
| [C++]  **public interface class IGhostStateObserver** |

|  |
| --- |
| [JScript]  **public interface IGhostStateObserver** |

## Requirements

**Namespace:** [PacManShared.Controllers.AI](#topic_00000000000000AF)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[SetGhostState](#topic_00000000000000D0)

#### IGhostStateObserver.SetGhostState Method

Sets the state of the ghost

|  |
| --- |
| [Visual Basic]  **Sub SetGhostState( \_  ByVal *eGhostStateBehaviour* As** [**EGhostBehaviour**](#topic_0000000000000108) **\_ )** |

|  |
| --- |
| [C#]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetGhostState(** [**EGhostBehaviour**](#topic_0000000000000108) ***eGhostStateBehaviour* )** |

|  |
| --- |
| [C++]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetGhostState(** [**EGhostBehaviour**](#topic_0000000000000108) ***eGhostStateBehaviour* )** |

|  |
| --- |
| [JScript]  **function SetGhostState(  *eGhostStateBehaviour* :** [**EGhostBehaviour**](#topic_0000000000000108) **);** |

## Parameters

*eGhostStateBehaviour*

the new ghoststate

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [IGhostStateObserver](#topic_00000000000000CF)

## PacManShared.Controllers.AI.IndividualAI Namespace

## Classes

[Blinky](#topic_00000000000000EB), [Clyde](#topic_00000000000000C4), [GhostAi](#topic_0000000000000039), [Inky](#topic_0000000000000035), [Pinky](#topic_0000000000000072)

### Blinky Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

[PacManShared.Controllers.AI.IndividualAI.GhostAi](#topic_0000000000000039)

**PacManShared.Controllers.AI.IndividualAI.Blinky**

|  |
| --- |
| [Visual Basic]  **Public Class Blinky  Inherits** [**GhostAi**](#topic_0000000000000039) |

|  |
| --- |
| [C#]  **public class Blinky :** [**GhostAi**](#topic_0000000000000039) |

|  |
| --- |
| [C++]  **public ref class Blinky : public** [**GhostAi**](#topic_0000000000000039)**^** |

|  |
| --- |
| [JScript]  **public class Blinky  extends** [**GhostAi**](#topic_0000000000000039) |

## Requirements

**Namespace:** [PacManShared.Controllers.AI.IndividualAI](#topic_0000000000000034)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Blinky Constructor](#topic_00000000000000EC)

## Properties

[MovObjType](#topic_000000000000003F) (inherited from [GhostAi](#topic_0000000000000039)), [Name](#topic_00000000000000EF)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FrightBehaviour](#topic_000000000000003D) (inherited from [GhostAi](#topic_0000000000000039)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [HuntBehaviour](#topic_00000000000000EE), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [SetGhostState](#topic_000000000000003E) (inherited from [GhostAi](#topic_0000000000000039)), [TargetCell](#topic_00000000000000ED), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### Blinky Constructor

Creates a new blinky AI

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *pacMan* As** [**PacMan**](#topic_000000000000004C)**, \_  ByVal *scatterTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *exitPoint* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *homeTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Blinky(** [**PacMan**](#topic_000000000000004C) ***pacMan*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitPoint*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget* )** |

|  |
| --- |
| [C++]  **public:  Blinky(** [**PacMan**](#topic_000000000000004C)**^ *pacMan*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitPoint*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget* )** |

|  |
| --- |
| [JScript]  **public function Blinky(  *pacMan* :** [**PacMan**](#topic_000000000000004C)**,  *scatterTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *exitPoint* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *homeTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **);** |

## Parameters

*pacMan*

A pacman

*scatterTarget*

the cell this ghost targets in scatter mode

*exitPoint*

the cell where this ghost leaves the house

*homeTarget*

the cell where this ghost has his home

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Blinky](#topic_00000000000000EB)

#### Blinky.Name Property

Gets the name of this ghost

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property Name() As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) |

|  |
| --- |
| [C#]  **public override** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( ); }** |

|  |
| --- |
| [JScript]  **public function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Blinky](#topic_00000000000000EB)

#### Blinky.HuntBehaviour Method

Returns a target Blinky wants to go to

|  |
| --- |
| [Visual Basic]  **Protected Overrides Function HuntBehaviour( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005) **\_ ) As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **protected override** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005) ***currentCell* )** |

|  |
| --- |
| [C++]  **protected:** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005)**^ *currentCell* )** |

|  |
| --- |
| [JScript]  **protected function HuntBehaviour(  *currentCell* :** [**Cell**](#topic_0000000000000005) **) :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Parameters

*currentCell*

The current cell

## Returns

The target this AI wants to go to

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Blinky](#topic_00000000000000EB)

#### Blinky.TargetCell Method

returns the targeted cell for this AI

|  |
| --- |
| [Visual Basic]  **Public Function TargetCell() As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **TargetCell()** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ TargetCell()** |

|  |
| --- |
| [JScript]  **public function TargetCell() :** [**Cell**](#topic_0000000000000005)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Blinky](#topic_00000000000000EB)

### Clyde Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

[PacManShared.Controllers.AI.IndividualAI.GhostAi](#topic_0000000000000039)

**PacManShared.Controllers.AI.IndividualAI.Clyde**

|  |
| --- |
| [Visual Basic]  **Public Class Clyde  Inherits** [**GhostAi**](#topic_0000000000000039) |

|  |
| --- |
| [C#]  **public class Clyde :** [**GhostAi**](#topic_0000000000000039) |

|  |
| --- |
| [C++]  **public ref class Clyde : public** [**GhostAi**](#topic_0000000000000039)**^** |

|  |
| --- |
| [JScript]  **public class Clyde  extends** [**GhostAi**](#topic_0000000000000039) |

## Requirements

**Namespace:** [PacManShared.Controllers.AI.IndividualAI](#topic_0000000000000034)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Clyde Constructor](#topic_00000000000000C5)

## Properties

[MovObjType](#topic_000000000000003F) (inherited from [GhostAi](#topic_0000000000000039)), [Name](#topic_00000000000000C7)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FrightBehaviour](#topic_000000000000003D) (inherited from [GhostAi](#topic_0000000000000039)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [HuntBehaviour](#topic_00000000000000C6), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [SetGhostState](#topic_000000000000003E) (inherited from [GhostAi](#topic_0000000000000039)), [TargetCell](#topic_000000000000003B) (inherited from [GhostAi](#topic_0000000000000039)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### Clyde Constructor

Initializes a new instance of the [Clyde](#topic_00000000000000C4) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *pacMan* As** [**PacMan**](#topic_000000000000004C)**, \_  ByVal *scatterTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *exitPoint* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *homeTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Clyde(** [**PacMan**](#topic_000000000000004C) ***pacMan*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitPoint*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget* )** |

|  |
| --- |
| [C++]  **public:  Clyde(** [**PacMan**](#topic_000000000000004C)**^ *pacMan*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitPoint*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget* )** |

|  |
| --- |
| [JScript]  **public function Clyde(  *pacMan* :** [**PacMan**](#topic_000000000000004C)**,  *scatterTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *exitPoint* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *homeTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **);** |

## Parameters

*pacMan*

*scatterTarget*

*exitPoint*

*homeTarget*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Clyde](#topic_00000000000000C4)

#### Clyde.Name Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property Name() As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) |

|  |
| --- |
| [C#]  **public override** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( ); }** |

|  |
| --- |
| [JScript]  **public function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Clyde](#topic_00000000000000C4)

#### Clyde.HuntBehaviour Method

|  |
| --- |
| [Visual Basic]  **Protected Overrides Function HuntBehaviour( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005) **\_ ) As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **protected override** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005) ***currentCell* )** |

|  |
| --- |
| [C++]  **protected:** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005)**^ *currentCell* )** |

|  |
| --- |
| [JScript]  **protected function HuntBehaviour(  *currentCell* :** [**Cell**](#topic_0000000000000005) **) :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Parameters

*currentCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Clyde](#topic_00000000000000C4)

### GhostAi Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Controllers.AI.IndividualAI.GhostAi**

[PacManShared.Controllers.AI.IndividualAI.Blinky](#topic_00000000000000EB)

[PacManShared.Controllers.AI.IndividualAI.Clyde](#topic_00000000000000C4)

[PacManShared.Controllers.AI.IndividualAI.Inky](#topic_0000000000000035)

[PacManShared.Controllers.AI.IndividualAI.Pinky](#topic_0000000000000072)

|  |
| --- |
| [Visual Basic]  **Public MustInherit Class GhostAi  Implements** [**IGhostStateObserver**](#topic_00000000000000CF) |

|  |
| --- |
| [C#]  **public abstract class GhostAi :** [**IGhostStateObserver**](#topic_00000000000000CF) |

|  |
| --- |
| [C++]  **public ref class GhostAi abstract : public** [**IGhostStateObserver**](#topic_00000000000000CF)**^** |

|  |
| --- |
| [JScript]  **public abstract class GhostAi  implements** [**IGhostStateObserver**](#topic_00000000000000CF) |

## Requirements

**Namespace:** [PacManShared.Controllers.AI.IndividualAI](#topic_0000000000000034)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[GhostAi Constructor](#topic_000000000000003A)

## Properties

[MovObjType](#topic_000000000000003F), [Name](#topic_0000000000000040)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FrightBehaviour](#topic_000000000000003D), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [HuntBehaviour](#topic_000000000000003C), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [SetGhostState](#topic_000000000000003E), [TargetCell](#topic_000000000000003B), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### GhostAi Constructor

Initializes a new instance of the [GhostAi](#topic_0000000000000039) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *scatterTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *exitTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *homeTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *movObjType* As** [**MovObjType**](#topic_00000000000000AE) **\_ )** |

|  |
| --- |
| [C#]  **public GhostAi(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget*,** [**MovObjType**](#topic_00000000000000AE) ***movObjType* )** |

|  |
| --- |
| [C++]  **public:  GhostAi(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget*,** [**MovObjType**](#topic_00000000000000AE) ***movObjType* )** |

|  |
| --- |
| [JScript]  **public function GhostAi(  *scatterTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *exitTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *homeTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *movObjType* :** [**MovObjType**](#topic_00000000000000AE) **);** |

## Parameters

*scatterTarget*

*exitTarget*

*homeTarget*

*movObjType*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostAi](#topic_0000000000000039)

#### GhostAi.MovObjType Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property MovObjType() As** [**MovObjType**](#topic_00000000000000AE) |

|  |
| --- |
| [C#]  **public** [**MovObjType**](#topic_00000000000000AE) **MovObjType {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**MovObjType**](#topic_00000000000000AE) **MovObjType {** [**MovObjType**](#topic_00000000000000AE) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get MovObjType() :** [**MovObjType**](#topic_00000000000000AE)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostAi](#topic_0000000000000039)

#### GhostAi.Name Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly MustOverride Property Name() As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) |

|  |
| --- |
| [C#]  **public abstract** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get;}** |

|  |
| --- |
| [C++]  **public:  virtual property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( ); abstract }** |

|  |
| --- |
| [JScript]  **public abstract function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostAi](#topic_0000000000000039)

#### GhostAi.FrightBehaviour Method

|  |
| --- |
| [Visual Basic]  **Protected Function FrightBehaviour( \_  ByVal *curCell* As** [**Cell**](#topic_0000000000000005) **\_ ) As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **protected** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **FrightBehaviour(** [**Cell**](#topic_0000000000000005) ***curCell* )** |

|  |
| --- |
| [C++]  **protected:** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **FrightBehaviour(** [**Cell**](#topic_0000000000000005)**^ *curCell* )** |

|  |
| --- |
| [JScript]  **protected function FrightBehaviour(  *curCell* :** [**Cell**](#topic_0000000000000005) **) :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Parameters

*curCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostAi](#topic_0000000000000039)

#### GhostAi.HuntBehaviour Method

|  |
| --- |
| [Visual Basic]  **Protected MustOverride Function HuntBehaviour( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005) **\_ ) As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **protected abstract** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005) ***currentCell* )** |

|  |
| --- |
| [C++]  **protected:  virtual** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005)**^ *currentCell* ) abstract** |

|  |
| --- |
| [JScript]  **protected abstract function HuntBehaviour(  *currentCell* :** [**Cell**](#topic_0000000000000005) **) :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Parameters

*currentCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostAi](#topic_0000000000000039)

#### GhostAi.SetGhostState Method

Sets the state of the ghost

|  |
| --- |
| [Visual Basic]  **Public Sub SetGhostState( \_  ByVal *eGhostStateBehaviour* As** [**EGhostBehaviour**](#topic_0000000000000108) **\_ ) Implements \_** [**IGhostStateObserver.SetGhostState**](#topic_00000000000000D0) |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetGhostState(** [**EGhostBehaviour**](#topic_0000000000000108) ***eGhostStateBehaviour* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetGhostState(** [**EGhostBehaviour**](#topic_0000000000000108) ***eGhostStateBehaviour* )** |

|  |
| --- |
| [JScript]  **public function SetGhostState(  *eGhostStateBehaviour* :** [**EGhostBehaviour**](#topic_0000000000000108) **);** |

## Parameters

*eGhostStateBehaviour*

the new ghoststate

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostAi](#topic_0000000000000039)

#### GhostAi.TargetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function TargetCell( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005)**, \_  ByVal *behaviour* As** [**EGhostBehaviour**](#topic_0000000000000108) **\_ ) As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **public** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **TargetCell(** [**Cell**](#topic_0000000000000005) ***currentCell*,** [**EGhostBehaviour**](#topic_0000000000000108) ***behaviour* )** |

|  |
| --- |
| [C++]  **public:** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **TargetCell(** [**Cell**](#topic_0000000000000005)**^ *currentCell*,** [**EGhostBehaviour**](#topic_0000000000000108) ***behaviour* )** |

|  |
| --- |
| [JScript]  **public function TargetCell(  *currentCell* :** [**Cell**](#topic_0000000000000005)**,  *behaviour* :** [**EGhostBehaviour**](#topic_0000000000000108) **) :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Parameters

*currentCell*

*behaviour*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GhostAi](#topic_0000000000000039)

### Inky Class

|  |
| --- |
| [Visual Basic]  **Public Class Inky  Inherits** [**GhostAi**](#topic_0000000000000039) |

|  |
| --- |
| [C#]  **public class Inky :** [**GhostAi**](#topic_0000000000000039) |

|  |
| --- |
| [C++]  **public ref class Inky : public** [**GhostAi**](#topic_0000000000000039)**^** |

|  |
| --- |
| [JScript]  **public class Inky  extends** [**GhostAi**](#topic_0000000000000039) |

## Requirements

**Namespace:** [PacManShared.Controllers.AI.IndividualAI](#topic_0000000000000034)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Inky Constructor](#topic_0000000000000036)

## Properties

[MovObjType](#topic_000000000000003F) (inherited from [GhostAi](#topic_0000000000000039)), [Name](#topic_0000000000000038)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FrightBehaviour](#topic_000000000000003D) (inherited from [GhostAi](#topic_0000000000000039)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [HuntBehaviour](#topic_0000000000000037), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [SetGhostState](#topic_000000000000003E) (inherited from [GhostAi](#topic_0000000000000039)), [TargetCell](#topic_000000000000003B) (inherited from [GhostAi](#topic_0000000000000039)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### Inky Constructor

Initializes a new instance of the [Inky](#topic_0000000000000035) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *pacMan* As** [**PacMan**](#topic_000000000000004C)**, \_  ByVal *blinky* As** [**Ghost**](#topic_0000000000000068)**, \_  ByVal *scatterTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *exitPoint* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *homeTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Inky(** [**PacMan**](#topic_000000000000004C) ***pacMan*,** [**Ghost**](#topic_0000000000000068) ***blinky*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitPoint*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget* )** |

|  |
| --- |
| [C++]  **public:  Inky(** [**PacMan**](#topic_000000000000004C)**^ *pacMan*,** [**Ghost**](#topic_0000000000000068)**^ *blinky*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitPoint*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget* )** |

|  |
| --- |
| [JScript]  **public function Inky(  *pacMan* :** [**PacMan**](#topic_000000000000004C)**,  *blinky* :** [**Ghost**](#topic_0000000000000068)**,  *scatterTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *exitPoint* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *homeTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **);** |

## Parameters

*pacMan*

*blinky*

*scatterTarget*

*exitPoint*

*homeTarget*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Inky](#topic_0000000000000035)

#### Inky.Name Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property Name() As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) |

|  |
| --- |
| [C#]  **public override** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( ); }** |

|  |
| --- |
| [JScript]  **public function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Inky](#topic_0000000000000035)

#### Inky.HuntBehaviour Method

|  |
| --- |
| [Visual Basic]  **Protected Overrides Function HuntBehaviour( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005) **\_ ) As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **protected override** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005) ***currentCell* )** |

|  |
| --- |
| [C++]  **protected:** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005)**^ *currentCell* )** |

|  |
| --- |
| [JScript]  **protected function HuntBehaviour(  *currentCell* :** [**Cell**](#topic_0000000000000005) **) :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Parameters

*currentCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Inky](#topic_0000000000000035)

### Pinky Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

[PacManShared.Controllers.AI.IndividualAI.GhostAi](#topic_0000000000000039)

**PacManShared.Controllers.AI.IndividualAI.Pinky**

|  |
| --- |
| [Visual Basic]  **Public Class Pinky  Inherits** [**GhostAi**](#topic_0000000000000039) |

|  |
| --- |
| [C#]  **public class Pinky :** [**GhostAi**](#topic_0000000000000039) |

|  |
| --- |
| [C++]  **public ref class Pinky : public** [**GhostAi**](#topic_0000000000000039)**^** |

|  |
| --- |
| [JScript]  **public class Pinky  extends** [**GhostAi**](#topic_0000000000000039) |

## Requirements

**Namespace:** [PacManShared.Controllers.AI.IndividualAI](#topic_0000000000000034)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Pinky Constructor](#topic_0000000000000073)

## Properties

[MovObjType](#topic_000000000000003F) (inherited from [GhostAi](#topic_0000000000000039)), [Name](#topic_0000000000000075)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FrightBehaviour](#topic_000000000000003D) (inherited from [GhostAi](#topic_0000000000000039)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [HuntBehaviour](#topic_0000000000000074), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [SetGhostState](#topic_000000000000003E) (inherited from [GhostAi](#topic_0000000000000039)), [TargetCell](#topic_000000000000003B) (inherited from [GhostAi](#topic_0000000000000039)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### Pinky Constructor

Initializes a new instance of the [Pinky](#topic_0000000000000072) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *pacMan* As** [**PacMan**](#topic_000000000000004C)**, \_  ByVal *scatterTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *exitTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *homeTarget* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Pinky(** [**PacMan**](#topic_000000000000004C) ***pacMan*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget* )** |

|  |
| --- |
| [C++]  **public:  Pinky(** [**PacMan**](#topic_000000000000004C)**^ *pacMan*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***scatterTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***exitTarget*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***homeTarget* )** |

|  |
| --- |
| [JScript]  **public function Pinky(  *pacMan* :** [**PacMan**](#topic_000000000000004C)**,  *scatterTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *exitTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *homeTarget* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **);** |

## Parameters

*pacMan*

*scatterTarget*

*exitTarget*

*homeTarget*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Pinky](#topic_0000000000000072)

#### Pinky.Name Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property Name() As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) |

|  |
| --- |
| [C#]  **public override** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( ); }** |

|  |
| --- |
| [JScript]  **public function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Pinky](#topic_0000000000000072)

#### Pinky.HuntBehaviour Method

|  |
| --- |
| [Visual Basic]  **Protected Overrides Function HuntBehaviour( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005) **\_ ) As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **protected override** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005) ***currentCell* )** |

|  |
| --- |
| [C++]  **protected:** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **HuntBehaviour(** [**Cell**](#topic_0000000000000005)**^ *currentCell* )** |

|  |
| --- |
| [JScript]  **protected function HuntBehaviour(  *currentCell* :** [**Cell**](#topic_0000000000000005) **) :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Parameters

*currentCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Pinky](#topic_0000000000000072)

## PacManShared.Controllers.Network Namespace

## Classes

[NetworkController](#topic_00000000000000BB), [NetworkGhostController](#topic_0000000000000082)

## Interfaces

[INetworkController](#topic_00000000000000DE)

### NetworkController Class

|  |
| --- |
| [Visual Basic]  **Public Class NetworkController  Inherits** [**ControllerDecorator**](#topic_0000000000000109) **Implements** [**INetworkController**](#topic_00000000000000DE) |

|  |
| --- |
| [C#]  **public class NetworkController :** [**ControllerDecorator**](#topic_0000000000000109)**,** [**INetworkController**](#topic_00000000000000DE) |

|  |
| --- |
| [C++]  **public ref class NetworkController : public** [**ControllerDecorator**](#topic_0000000000000109)**^,  public** [**INetworkController**](#topic_00000000000000DE)**^** |

|  |
| --- |
| [JScript]  **public class NetworkController  extends** [**ControllerDecorator**](#topic_0000000000000109) **implements** [**INetworkController**](#topic_00000000000000DE) |

## Requirements

**Namespace:** [PacManShared.Controllers.Network](#topic_0000000000000081)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[NetworkController Constructor](#topic_00000000000000BC)

## Properties

[Direction](#topic_00000000000000C2), [ID](#topic_00000000000000CE) (inherited from [Controller](#topic_00000000000000C8)), [MovObjType](#topic_00000000000000C1), [Name](#topic_00000000000000C3)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Receive](#topic_00000000000000C0), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Send](#topic_00000000000000BF), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_00000000000000BD)

#### NetworkController Constructor

Constructs a new Networkcontroller

|  |
| --- |
| [C#]  **public NetworkController(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id*,** [**Controller**](#topic_00000000000000C8) ***controller*,  INetworkManager *networkManager* )** |

|  |
| --- |
| [C++]  **public:  NetworkController(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id*,** [**Controller**](#topic_00000000000000C8)**^ *controller*,  INetworkManager^ *networkManager* )** |

|  |
| --- |
| [JScript]  **public function NetworkController(  *id* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *controller* :** [**Controller**](#topic_00000000000000C8)**,  *networkManager* : INetworkManager );** |

## Parameters

*id*

*controller*

*networkManager*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkController](#topic_00000000000000BB)

#### NetworkController.Direction Property

Gets or sets the current direction

|  |
| --- |
| [C#]  **public override** [**Direction**](#topic_00000000000000F0) **Direction {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Direction**](#topic_00000000000000F0) **Direction {** [**Direction**](#topic_00000000000000F0) **get( );  void set(** [**Direction**](#topic_00000000000000F0) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Direction() :** [**Direction**](#topic_00000000000000F0)**; public function set Direction(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkController](#topic_00000000000000BB)

#### NetworkController.MovObjType Property

Gets .

|  |
| --- |
| [C#]  **public override** [**MovObjType**](#topic_00000000000000AE) **MovObjType {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**MovObjType**](#topic_00000000000000AE) **MovObjType {** [**MovObjType**](#topic_00000000000000AE) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get MovObjType() :** [**MovObjType**](#topic_00000000000000AE)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkController](#topic_00000000000000BB)

#### NetworkController.Name Property

Gets or sets .

|  |
| --- |
| [C#]  **public override** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( );  void set(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ value  ); }** |

|  |
| --- |
| [JScript]  **public function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**; public function set Name(value :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkController](#topic_00000000000000BB)

#### NetworkController.Receive Method

Handles receiving of messages

|  |
| --- |
| [Visual Basic]  **Public Sub Receive() Implements \_** [**INetworkController.Receive**](#topic_00000000000000E0) |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Receive()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Receive()** |

|  |
| --- |
| [JScript]  **public function Receive();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkController](#topic_00000000000000BB)

#### NetworkController.Send Method

Sends a message over the network

|  |
| --- |
| [Visual Basic]  **Public Sub Send() Implements \_** [**INetworkController.Send**](#topic_00000000000000DF) |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Send()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Send()** |

|  |
| --- |
| [JScript]  **public function Send();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkController](#topic_00000000000000BB)

#### NetworkController.Update (PacManShared.IGameTime) Method

**NOTE: This member is now obsolete.**

Use Update(Cell currentCell)

updates this controller

|  |
| --- |
| [Visual Basic]  **<Obsolete("Use Update(Cell currentCell)")> \_ Public Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ ) Implements \_** [**INetworkController.Update**](#topic_00000000000000E1) |

|  |
| --- |
| [C#]  **[Obsolete("Use Update(Cell currentCell)")] public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **[Obsolete("Use Update(Cell currentCell)")] public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public   Obsolete("Use Update(Cell currentCell)") function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

the current gametime

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkController](#topic_00000000000000BB)

#### NetworkController.Update (PacManShared.LevelClasses.Cells.Cell) Method

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Update( \_  ByVal *currentCell* As** [**Cell**](#topic_0000000000000005) **\_ ) Implements \_** [**INetworkController.Update**](#topic_00000000000000E1) |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005) ***currentCell* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005)**^ *currentCell* )** |

|  |
| --- |
| [JScript]  **public function Update(  *currentCell* :** [**Cell**](#topic_0000000000000005) **);** |

## Parameters

*currentCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkController](#topic_00000000000000BB)

### NetworkGhostController Class

|  |
| --- |
| [Visual Basic]  **Public Class NetworkGhostController  Inherits** [**ControllerDecorator**](#topic_0000000000000109) **Implements** [**IGhostStateObserver**](#topic_00000000000000CF)**, \_** [**INetworkController**](#topic_00000000000000DE) |

|  |
| --- |
| [C#]  **public class NetworkGhostController :** [**ControllerDecorator**](#topic_0000000000000109)**,** [**IGhostStateObserver**](#topic_00000000000000CF)**,** [**INetworkController**](#topic_00000000000000DE) |

|  |
| --- |
| [C++]  **public ref class NetworkGhostController : public** [**ControllerDecorator**](#topic_0000000000000109)**^,  public** [**IGhostStateObserver**](#topic_00000000000000CF)**^,  public** [**INetworkController**](#topic_00000000000000DE)**^** |

|  |
| --- |
| [JScript]  **public class NetworkGhostController  extends** [**ControllerDecorator**](#topic_0000000000000109) **implements** [**IGhostStateObserver**](#topic_00000000000000CF)**,** [**INetworkController**](#topic_00000000000000DE) |

## Requirements

**Namespace:** [PacManShared.Controllers.Network](#topic_0000000000000081)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[NetworkGhostController Constructor](#topic_0000000000000083)

## Properties

[Direction](#topic_0000000000000089), [ID](#topic_00000000000000CE) (inherited from [Controller](#topic_00000000000000C8)), [MovObjType](#topic_000000000000008B), [Name](#topic_000000000000008A)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Receive](#topic_0000000000000087), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Send](#topic_0000000000000086), [SetGhostState](#topic_0000000000000085), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_0000000000000084)

#### NetworkGhostController Constructor

Initializes a new instance of the [NetworkGhostController](#topic_0000000000000082) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *networkManager* As INetworkManager, \_  ByVal *controller* As** [**Controller**](#topic_00000000000000C8)**, \_  ByVal *id* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public NetworkGhostController(  INetworkManager *networkManager*,** [**Controller**](#topic_00000000000000C8) ***controller*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [C++]  **public:  NetworkGhostController(  INetworkManager^ *networkManager*,** [**Controller**](#topic_00000000000000C8)**^ *controller*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id* )** |

|  |
| --- |
| [JScript]  **public function NetworkGhostController(  *networkManager* : INetworkManager,  *controller* :** [**Controller**](#topic_00000000000000C8)**,  *id* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*networkManager*

*controller*

*id*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkGhostController](#topic_0000000000000082)

#### NetworkGhostController.Direction Property

Gets or sets .

|  |
| --- |
| [C#]  **public override** [**Direction**](#topic_00000000000000F0) **Direction {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Direction**](#topic_00000000000000F0) **Direction {** [**Direction**](#topic_00000000000000F0) **get( );  void set(** [**Direction**](#topic_00000000000000F0) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Direction() :** [**Direction**](#topic_00000000000000F0)**; public function set Direction(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkGhostController](#topic_0000000000000082)

#### NetworkGhostController.MovObjType Property

Gets .

|  |
| --- |
| [C#]  **public override** [**MovObjType**](#topic_00000000000000AE) **MovObjType {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**MovObjType**](#topic_00000000000000AE) **MovObjType {** [**MovObjType**](#topic_00000000000000AE) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get MovObjType() :** [**MovObjType**](#topic_00000000000000AE)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkGhostController](#topic_0000000000000082)

#### NetworkGhostController.Name Property

Gets or sets .

|  |
| --- |
| [C#]  **public override** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( );  void set(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ value  ); }** |

|  |
| --- |
| [JScript]  **public function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**; public function set Name(value :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkGhostController](#topic_0000000000000082)

#### NetworkGhostController.Receive Method

|  |
| --- |
| [Visual Basic]  **Public Sub Receive()** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Receive()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Receive()** |

|  |
| --- |
| [JScript]  **public function Receive();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkGhostController](#topic_0000000000000082)

#### NetworkGhostController.Send Method

|  |
| --- |
| [Visual Basic]  **Public Sub Send()** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Send()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Send()** |

|  |
| --- |
| [JScript]  **public function Send();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkGhostController](#topic_0000000000000082)

#### NetworkGhostController.SetGhostState Method

|  |
| --- |
| [Visual Basic]  **Public Sub SetGhostState( \_  ByVal *eGhostStateBehaviour* As** [**EGhostBehaviour**](#topic_0000000000000108) **\_ ) Implements \_** [**IGhostStateObserver.SetGhostState**](#topic_00000000000000D0) |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetGhostState(** [**EGhostBehaviour**](#topic_0000000000000108) ***eGhostStateBehaviour* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetGhostState(** [**EGhostBehaviour**](#topic_0000000000000108) ***eGhostStateBehaviour* )** |

|  |
| --- |
| [JScript]  **public function SetGhostState(  *eGhostStateBehaviour* :** [**EGhostBehaviour**](#topic_0000000000000108) **);** |

## Parameters

*eGhostStateBehaviour*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkGhostController](#topic_0000000000000082)

#### NetworkGhostController.Update (PacManShared.LevelClasses.Cells.Cell) Method

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005) ***currentCell* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**Cell**](#topic_0000000000000005)**^ *currentCell* )** |

|  |
| --- |
| [JScript]  **public function Update(  *currentCell* :** [**Cell**](#topic_0000000000000005) **);** |

## Parameters

*currentCell*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkGhostController](#topic_0000000000000082)

#### NetworkGhostController.Update (PacManShared.IGameTime) Method

|  |
| --- |
| [Visual Basic]  **Public Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NetworkGhostController](#topic_0000000000000082)

### INetworkController Interface

|  |
| --- |
| [Visual Basic]  **Public Interface INetworkController** |

|  |
| --- |
| [C#]  **public interface INetworkController** |

|  |
| --- |
| [C++]  **public interface class INetworkController** |

|  |
| --- |
| [JScript]  **public interface INetworkController** |

## Requirements

**Namespace:** [PacManShared.Controllers.Network](#topic_0000000000000081)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Receive](#topic_00000000000000E0), [Send](#topic_00000000000000DF), [Update](#topic_00000000000000E1)

#### INetworkController.Receive Method

|  |
| --- |
| [Visual Basic]  **Sub Receive()** |

|  |
| --- |
| [C#]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Receive()** |

|  |
| --- |
| [C++]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Receive()** |

|  |
| --- |
| [JScript]  **function Receive();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [INetworkController](#topic_00000000000000DE)

#### INetworkController.Send Method

|  |
| --- |
| [Visual Basic]  **Sub Send()** |

|  |
| --- |
| [C#]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Send()** |

|  |
| --- |
| [C++]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Send()** |

|  |
| --- |
| [JScript]  **function Send();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [INetworkController](#topic_00000000000000DE)

#### INetworkController.Update Method

|  |
| --- |
| [Visual Basic]  **Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [INetworkController](#topic_00000000000000DE)

## PacManShared.Entities Namespace

## Classes

[LoadObject](#topic_0000000000000042)

### LoadObject Class

|  |
| --- |
| [Visual Basic]  **Public Class LoadObject  Inherits** [**MovableObject**](#topic_000000000000010B) |

|  |
| --- |
| [C#]  **public class LoadObject :** [**MovableObject**](#topic_000000000000010B) |

|  |
| --- |
| [C++]  **public ref class LoadObject : public** [**MovableObject**](#topic_000000000000010B)**^** |

|  |
| --- |
| [JScript]  **public class LoadObject  extends** [**MovableObject**](#topic_000000000000010B) |

## Requirements

**Namespace:** [PacManShared.Entities](#topic_0000000000000041)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[LoadObject Constructor](#topic_0000000000000043)

## Properties

[CellsPerSecond](#topic_0000000000000123) (inherited from [MovableObject](#topic_000000000000010B)), [Center](#topic_0000000000000048), [CurrentCell](#topic_0000000000000120) (inherited from [MovableObject](#topic_000000000000010B)), [Direction](#topic_0000000000000049), [ID](#topic_000000000000011C) (inherited from [MovableObject](#topic_000000000000010B)), [IntersectRectangle](#topic_0000000000000126) (inherited from [MovableObject](#topic_000000000000010B)), [Name](#topic_000000000000011D) (inherited from [MovableObject](#topic_000000000000010B)), [Offset](#topic_000000000000011E) (inherited from [MovableObject](#topic_000000000000010B)), [Position](#topic_000000000000004A), [PowerUpTimer](#topic_0000000000000125) (inherited from [MovableObject](#topic_000000000000010B)), [Size](#topic_0000000000000121) (inherited from [MovableObject](#topic_000000000000010B)), [SpeedVector](#topic_000000000000011F) (inherited from [MovableObject](#topic_000000000000010B)), [Texture](#topic_000000000000007E) (inherited from [Sprite](#topic_0000000000000077)), [TextureAsset](#topic_000000000000007D) (inherited from [Sprite](#topic_0000000000000077))

## Methods

[ApplyStruct](#topic_000000000000011B) (inherited from [MovableObject](#topic_000000000000010B)), [CalculateSpeedFactor](#topic_0000000000000117) (inherited from [MovableObject](#topic_000000000000010B)), [Compare](#topic_0000000000000118) (inherited from [MovableObject](#topic_000000000000010B)), [Draw](#topic_0000000000000047), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FindAfterID](#topic_0000000000000119) (inherited from [MovableObject](#topic_000000000000010B)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetSpeedVector](#topic_0000000000000115) (inherited from [MovableObject](#topic_000000000000010B)), [GetStruct](#topic_0000000000000046), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [IsNextDirectionValid](#topic_000000000000010F) (inherited from [MovableObject](#topic_000000000000010B)), [LoadContent](#topic_0000000000000044), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [RefreshPosition](#topic_0000000000000110) (inherited from [MovableObject](#topic_000000000000010B)), [Reset](#topic_0000000000000113) (inherited from [MovableObject](#topic_000000000000010B)), [ResetSpeedVector](#topic_0000000000000114) (inherited from [MovableObject](#topic_000000000000010B)), [ResetToDefault](#topic_0000000000000116) (inherited from [MovableObject](#topic_000000000000010B)), [SetCurrentCell](#topic_0000000000000111) (inherited from [MovableObject](#topic_000000000000010B)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_0000000000000045), [calculateOffset](#topic_000000000000010D) (inherited from [MovableObject](#topic_000000000000010B)), [calculatePosition](#topic_000000000000010E) (inherited from [MovableObject](#topic_000000000000010B))

#### LoadObject Constructor

Initializes a new instance of the [LoadObject](#topic_0000000000000042) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**, \_  ByVal *frameSize* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public LoadObject(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize* )** |

|  |
| --- |
| [C++]  **public:  LoadObject(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize* )** |

|  |
| --- |
| [JScript]  **public function LoadObject(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**,  *frameSize* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **);** |

## Parameters

*textureAsset*

*frameSize*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LoadObject](#topic_0000000000000042)

#### LoadObject.Center Property

Gets the Center of this MO

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property Center() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public override** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get Center() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LoadObject](#topic_0000000000000042)

#### LoadObject.Direction Property

Gets or sets the current direction of this object

|  |
| --- |
| [Visual Basic]  **Public Overrides Property Direction() As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public override** [**Direction**](#topic_00000000000000F0) **Direction {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Direction**](#topic_00000000000000F0) **Direction {** [**Direction**](#topic_00000000000000F0) **get( );  void set(** [**Direction**](#topic_00000000000000F0) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Direction() :** [**Direction**](#topic_00000000000000F0)**; public function set Direction(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LoadObject](#topic_0000000000000042)

#### LoadObject.Position Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public Property Position() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Position {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Position {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( );  void set(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Position() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**; public function set Position(value :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LoadObject](#topic_0000000000000042)

#### LoadObject.Draw Method

Draws this sprite

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Draw( \_  ByVal *spriteBatch* As** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**, \_  ByVal *layer* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *levelPosition* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx) ***spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**^ *spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [JScript]  **public function Draw(  *spriteBatch* :** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**,  *layer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *levelPosition* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **);** |

## Parameters

*spriteBatch*

the spritebatch

*layer*

the layer we want to render into

*levelPosition*

The position of the level onscreen

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LoadObject](#topic_0000000000000042)

#### LoadObject.GetStruct Method

Creates a structure with information about his object

|  |
| --- |
| [Visual Basic]  **Public Overrides Function GetStruct() As** [**MovObjStruct**](#topic_00000000000000E2) |

|  |
| --- |
| [C#]  **public override** [**MovObjStruct**](#topic_00000000000000E2) **GetStruct()** |

|  |
| --- |
| [C++]  **public:** [**MovObjStruct**](#topic_00000000000000E2) **GetStruct()** |

|  |
| --- |
| [JScript]  **public function GetStruct() :** [**MovObjStruct**](#topic_00000000000000E2)**;** |

## Returns

A MovObjStruct

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LoadObject](#topic_0000000000000042)

#### LoadObject.LoadContent Method

Loads the content for this sprite

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub LoadContent( \_  ByVal *contentManager* As** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) ***contentManager* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx)**^ *contentManager* )** |

|  |
| --- |
| [JScript]  **public function LoadContent(  *contentManager* :** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **);** |

## Parameters

*contentManager*

The contentmangaer

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LoadObject](#topic_0000000000000042)

#### LoadObject.Update Method

Updates this movable object

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

the current gametime

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LoadObject](#topic_0000000000000042)

## PacManShared.Entities.PickUp Namespace

## Classes

[Crumb](#topic_0000000000000016), [PickUp](#topic_00000000000000D1), [PowerUp](#topic_000000000000002C)

### Crumb Class

|  |
| --- |
| [Visual Basic]  **Public Class Crumb  Inherits** [**PickUp**](#topic_00000000000000D1) **Implements** [**ICellEffect**](#topic_0000000000000001) |

|  |
| --- |
| [C#]  **public class Crumb :** [**PickUp**](#topic_00000000000000D1)**,** [**ICellEffect**](#topic_0000000000000001) |

|  |
| --- |
| [C++]  **public ref class Crumb : public** [**PickUp**](#topic_00000000000000D1)**^,  public** [**ICellEffect**](#topic_0000000000000001)**^** |

|  |
| --- |
| [JScript]  **public class Crumb  extends** [**PickUp**](#topic_00000000000000D1) **implements** [**ICellEffect**](#topic_0000000000000001) |

## Requirements

**Namespace:** [PacManShared.Entities.PickUp](#topic_0000000000000015)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Crumb Constructor](#topic_0000000000000017)

## Properties

[Center](#topic_000000000000001D), [IntersectRectangle](#topic_00000000000000D7) (inherited from [PickUp](#topic_00000000000000D1)), [IsActive](#topic_00000000000000DA) (inherited from [PickUp](#topic_00000000000000D1)), [Score](#topic_00000000000000D9) (inherited from [PickUp](#topic_00000000000000D1)), [Size](#topic_00000000000000D8) (inherited from [PickUp](#topic_00000000000000D1)), [Texture](#topic_000000000000007E) (inherited from [Sprite](#topic_0000000000000077)), [TextureAsset](#topic_000000000000007D) (inherited from [Sprite](#topic_0000000000000077))

## Methods

[ApplyEffect](#topic_0000000000000019), [Draw](#topic_000000000000001B), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [LoadContent](#topic_0000000000000079) (inherited from [Sprite](#topic_0000000000000077)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Reset](#topic_000000000000001C), [SetCenter](#topic_00000000000000D3) (inherited from [PickUp](#topic_00000000000000D1)), [SetIsActive](#topic_00000000000000D5) (inherited from [PickUp](#topic_00000000000000D1)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_000000000000001A)

#### Crumb Constructor (System.String)

Initializes a new instance of the [Crumb](#topic_0000000000000016) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Crumb(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset* )** |

|  |
| --- |
| [C++]  **public:  Crumb(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset* )** |

|  |
| --- |
| [JScript]  **public function Crumb(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **);** |

## Parameters

*textureAsset*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Crumb](#topic_0000000000000016)

#### Crumb Constructor (System.String, System.Int32)

Initializes a new instance of the [Crumb](#topic_0000000000000016) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**, \_  ByVal *score* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Crumb(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***score* )** |

|  |
| --- |
| [C++]  **public:  Crumb(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***score* )** |

|  |
| --- |
| [JScript]  **public function Crumb(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**,  *score* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*textureAsset*

*score*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Crumb](#topic_0000000000000016)

#### Crumb.Center Property

Gets .

|  |
| --- |
| [C#]  **public override** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get Center() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Crumb](#topic_0000000000000016)

#### Crumb.ApplyEffect Method

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub ApplyEffect( \_  ByVal *movObj* As** [**MovableObject**](#topic_000000000000010B) **\_ ) Implements \_** [**ICellEffect.ApplyEffect**](#topic_0000000000000002) |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B) ***movObj* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B)**^ *movObj* )** |

|  |
| --- |
| [JScript]  **public function ApplyEffect(  *movObj* :** [**MovableObject**](#topic_000000000000010B) **);** |

## Parameters

*movObj*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Crumb](#topic_0000000000000016)

#### Crumb.Draw Method

Draws this sprite

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx) ***spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**^ *spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [JScript]  **public function Draw(  *spriteBatch* :** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**,  *layer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *levelPosition* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **);** |

## Parameters

*spriteBatch*

the spritebatch

*layer*

the layer we want to render into

*levelPosition*

The position of the level onscreen

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Crumb](#topic_0000000000000016)

#### Crumb.Reset Method

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Reset() Implements \_** [**ICellEffect.Reset**](#topic_0000000000000003) |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [JScript]  **public function Reset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Crumb](#topic_0000000000000016)

#### Crumb.Update Method

Updates this sprite

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

the current gametime

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Crumb](#topic_0000000000000016)

### PickUp Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

[PacManShared.Sprite](#topic_0000000000000077)

**PacManShared.Entities.PickUp.PickUp**

[PacManShared.Entities.PickUp.Crumb](#topic_0000000000000016)

[PacManShared.Entities.PickUp.PowerUp](#topic_000000000000002C)

|  |
| --- |
| [Visual Basic]  **Public MustInherit Class PickUp  Inherits** [**Sprite**](#topic_0000000000000077) **Implements** [**ICellEffect**](#topic_0000000000000001) |

|  |
| --- |
| [C#]  **public abstract class PickUp :** [**Sprite**](#topic_0000000000000077)**,** [**ICellEffect**](#topic_0000000000000001) |

|  |
| --- |
| [C++]  **public ref class PickUp abstract : public** [**Sprite**](#topic_0000000000000077)**^,  public** [**ICellEffect**](#topic_0000000000000001)**^** |

|  |
| --- |
| [JScript]  **public abstract class PickUp  extends** [**Sprite**](#topic_0000000000000077) **implements** [**ICellEffect**](#topic_0000000000000001) |

## Requirements

**Namespace:** [PacManShared.Entities.PickUp](#topic_0000000000000015)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[PickUp Constructor](#topic_00000000000000D2)

## Properties

[Center](#topic_00000000000000DB), [IntersectRectangle](#topic_00000000000000D7), [IsActive](#topic_00000000000000DA), [Score](#topic_00000000000000D9), [Size](#topic_00000000000000D8), [Texture](#topic_000000000000007E) (inherited from [Sprite](#topic_0000000000000077)), [TextureAsset](#topic_000000000000007D) (inherited from [Sprite](#topic_0000000000000077))

## Methods

[ApplyEffect](#topic_00000000000000D4), [Draw](#topic_000000000000007B) (inherited from [Sprite](#topic_0000000000000077)), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [LoadContent](#topic_0000000000000079) (inherited from [Sprite](#topic_0000000000000077)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Reset](#topic_00000000000000D6), [SetCenter](#topic_00000000000000D3), [SetIsActive](#topic_00000000000000D5), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_000000000000007A) (inherited from [Sprite](#topic_0000000000000077))

#### PickUp Constructor

Creates an empty sprite

|  |
| --- |
| [C#]  **public PickUp(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset* )** |

|  |
| --- |
| [C++]  **public:  PickUp(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset* )** |

|  |
| --- |
| [JScript]  **public function PickUp(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **);** |

## Parameters

*textureAsset*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

#### PickUp.Center Property

Gets the center of a sprite

|  |
| --- |
| [C#]  **public override** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get Center() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

#### PickUp.IntersectRectangle Property

Generates an Intersect Rectangle

|  |
| --- |
| [C#]  **public override** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **IntersectRectangle {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **IntersectRectangle {** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get IntersectRectangle() :** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

#### PickUp.IsActive Property

Gets or sets a value indicating whether this instance .

|  |
| --- |
| [Visual Basic]  **Public Property IsActive() As** [**Boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) |

|  |
| --- |
| [C#]  **public** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsActive {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsActive {** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **get( );  void set(** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get IsActive() :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**; public function set IsActive(value :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**);** |

## Property Value

**true** if this instance ; otherwise, **false**.

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

#### PickUp.Score Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public Property Score() As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) |

|  |
| --- |
| [C#]  **public** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **Score {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **Score {** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **get( );  void set(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Score() :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**; public function set Score(value :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

#### PickUp.Size Property

Gets the size of a sprite

|  |
| --- |
| [C#]  **public override** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Size {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Size {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( );  void set(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Size() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**; public function set Size(value :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

#### PickUp.ApplyEffect Method

|  |
| --- |
| [Visual Basic]  **Public MustOverride Sub ApplyEffect( \_  ByVal *movObj* As** [**MovableObject**](#topic_000000000000010B) **\_ ) Implements \_** [**ICellEffect.ApplyEffect**](#topic_0000000000000002) |

|  |
| --- |
| [C#]  **public abstract** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B) ***movObj* )** |

|  |
| --- |
| [C++]  **public:  virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B)**^ *movObj* ) abstract** |

|  |
| --- |
| [JScript]  **public abstract function ApplyEffect(  *movObj* :** [**MovableObject**](#topic_000000000000010B) **);** |

## Parameters

*movObj*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

#### PickUp.Reset Method

|  |
| --- |
| [Visual Basic]  **Public MustOverride Sub Reset() Implements \_** [**ICellEffect.Reset**](#topic_0000000000000003) |

|  |
| --- |
| [C#]  **public abstract** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [C++]  **public:  virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset() abstract** |

|  |
| --- |
| [JScript]  **public abstract function Reset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

#### PickUp.SetCenter Method

|  |
| --- |
| [Visual Basic]  **Public Sub SetCenter( \_  ByVal *Position* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetCenter(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***Position* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetCenter(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***Position* )** |

|  |
| --- |
| [JScript]  **public function SetCenter(  *Position* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **);** |

## Parameters

*Position*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

#### PickUp.SetIsActive Method

|  |
| --- |
| [Visual Basic]  **Public Sub SetIsActive( \_  ByVal *isActive* As** [**Boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetIsActive(** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) ***isActive* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetIsActive(** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) ***isActive* )** |

|  |
| --- |
| [JScript]  **public function SetIsActive(  *isActive* :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **);** |

## Parameters

*isActive*

If set to **true**, then ; otherwise, .

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PickUp](#topic_00000000000000D1)

### PowerUp Class

This class is a PowerUp that allows Pacman to move faster and eat the ghosts

|  |
| --- |
| [Visual Basic]  **Public Class PowerUp  Inherits** [**PickUp**](#topic_00000000000000D1) |

|  |
| --- |
| [C#]  **public class PowerUp :** [**PickUp**](#topic_00000000000000D1) |

|  |
| --- |
| [C++]  **public ref class PowerUp : public** [**PickUp**](#topic_00000000000000D1)**^** |

|  |
| --- |
| [JScript]  **public class PowerUp  extends** [**PickUp**](#topic_00000000000000D1) |

## Requirements

**Namespace:** [PacManShared.Entities.PickUp](#topic_0000000000000015)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[PowerUp Constructor](#topic_000000000000002E)

## Properties

[Center](#topic_00000000000000DB) (inherited from [PickUp](#topic_00000000000000D1)), [IntersectRectangle](#topic_00000000000000D7) (inherited from [PickUp](#topic_00000000000000D1)), [IsActive](#topic_00000000000000DA) (inherited from [PickUp](#topic_00000000000000D1)), [Score](#topic_00000000000000D9) (inherited from [PickUp](#topic_00000000000000D1)), [Size](#topic_00000000000000D8) (inherited from [PickUp](#topic_00000000000000D1)), [Texture](#topic_000000000000007E) (inherited from [Sprite](#topic_0000000000000077)), [TextureAsset](#topic_000000000000007D) (inherited from [Sprite](#topic_0000000000000077))

## Methods

[ApplyEffect](#topic_0000000000000031), [Draw](#topic_0000000000000030), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [InvokeOnPickedUp](#topic_0000000000000033), [LoadContent](#topic_0000000000000079) (inherited from [Sprite](#topic_0000000000000077)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Reset](#topic_0000000000000032), [SetCenter](#topic_00000000000000D3) (inherited from [PickUp](#topic_00000000000000D1)), [SetIsActive](#topic_00000000000000D5) (inherited from [PickUp](#topic_00000000000000D1)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_000000000000002F)

## Events

[OnPickedUp](#topic_000000000000002D)

#### PowerUp Constructor

Creates a new PowerUp

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public PowerUp(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset* )** |

|  |
| --- |
| [C++]  **public:  PowerUp(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset* )** |

|  |
| --- |
| [JScript]  **public function PowerUp(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **);** |

## Parameters

*textureAsset*

The path to the texture of this PowerUP

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PowerUp](#topic_000000000000002C)

#### PowerUp.ApplyEffect Method

Applys an effect to a MovableObject if that object is a PacMan

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub ApplyEffect( \_  ByVal *movObj* As** [**MovableObject**](#topic_000000000000010B) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B) ***movObj* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B)**^ *movObj* )** |

|  |
| --- |
| [JScript]  **public function ApplyEffect(  *movObj* :** [**MovableObject**](#topic_000000000000010B) **);** |

## Parameters

*movObj*

the movable object that hit this PowerUp

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PowerUp](#topic_000000000000002C)

#### PowerUp.Draw Method

Draws this PowerUp

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Draw( \_  ByVal *spriteBatch* As** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**, \_  ByVal *layer* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *levelPosition* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx) ***spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**^ *spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [JScript]  **public function Draw(  *spriteBatch* :** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**,  *layer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *levelPosition* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **);** |

## Parameters

*spriteBatch*

The spritebatch

*layer*

The layer we want to render into

*levelPosition*

The position of the level onscreen

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PowerUp](#topic_000000000000002C)

#### PowerUp.InvokeOnPickedUp Method

Fires an PwerUpEffectEvent when it is hit by a Pacman

|  |
| --- |
| [Visual Basic]  **Public Sub InvokeOnPickedUp( \_  ByVal *e* As** [**PowerUpEffectEventArgs**](#topic_00000000000000DC) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **InvokeOnPickedUp(** [**PowerUpEffectEventArgs**](#topic_00000000000000DC) ***e* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **InvokeOnPickedUp(** [**PowerUpEffectEventArgs**](#topic_00000000000000DC)**^ *e* )** |

|  |
| --- |
| [JScript]  **public function InvokeOnPickedUp(  *e* :** [**PowerUpEffectEventArgs**](#topic_00000000000000DC) **);** |

## Parameters

*e*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PowerUp](#topic_000000000000002C)

#### PowerUp.Reset Method

Sets IsActive to true

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Reset()** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [JScript]  **public function Reset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PowerUp](#topic_000000000000002C)

#### PowerUp.Update Method

Updates this PowerUp

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

the current gameTime

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PowerUp](#topic_000000000000002C)

#### OnPickedUp Event

Occurs when .

|  |
| --- |
| [Visual Basic]  **Public Event OnPickedUp() As PowerUpEffectEvent** |

|  |
| --- |
| [C#]  **public event PowerUpEffectEvent OnPickedUp** |

|  |
| --- |
| [C++]  **public:  event PowerUpEffectEvent^ OnPickedUp { }** |

|  |
| --- |
| [JScript]  **In JScript, you can handle the events defined by a class, but you cannot define your own.** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PowerUp](#topic_000000000000002C)

## PacManShared.Entities.Player Namespace

## Classes

[Ghost](#topic_0000000000000068), [MovableObject](#topic_000000000000010B), [PacMan](#topic_000000000000004C)

### Ghost Class

|  |
| --- |
| [Visual Basic]  **Public Class Ghost  Inherits** [**MovableObject**](#topic_000000000000010B) |

|  |
| --- |
| [C#]  **public class Ghost :** [**MovableObject**](#topic_000000000000010B) |

|  |
| --- |
| [C++]  **public ref class Ghost : public** [**MovableObject**](#topic_000000000000010B)**^** |

|  |
| --- |
| [JScript]  **public class Ghost  extends** [**MovableObject**](#topic_000000000000010B) |

## Requirements

**Namespace:** [PacManShared.Entities.Player](#topic_000000000000004B)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Ghost Constructor](#topic_0000000000000069)

## Properties

[CellsPerSecond](#topic_0000000000000123) (inherited from [MovableObject](#topic_000000000000010B)), [Center](#topic_0000000000000122) (inherited from [MovableObject](#topic_000000000000010B)), [CurrentCell](#topic_0000000000000120) (inherited from [MovableObject](#topic_000000000000010B)), [Direction](#topic_0000000000000070), [GhostBehaviour](#topic_0000000000000071), [ID](#topic_000000000000011C) (inherited from [MovableObject](#topic_000000000000010B)), [IntersectRectangle](#topic_0000000000000126) (inherited from [MovableObject](#topic_000000000000010B)), [Name](#topic_000000000000011D) (inherited from [MovableObject](#topic_000000000000010B)), [Offset](#topic_000000000000011E) (inherited from [MovableObject](#topic_000000000000010B)), [PowerUpTimer](#topic_0000000000000125) (inherited from [MovableObject](#topic_000000000000010B)), [Size](#topic_0000000000000121) (inherited from [MovableObject](#topic_000000000000010B)), [SpeedVector](#topic_000000000000011F) (inherited from [MovableObject](#topic_000000000000010B)), [Texture](#topic_000000000000007E) (inherited from [Sprite](#topic_0000000000000077)), [TextureAsset](#topic_000000000000007D) (inherited from [Sprite](#topic_0000000000000077))

## Methods

[ApplyStruct](#topic_000000000000011B) (inherited from [MovableObject](#topic_000000000000010B)), [CalculateSpeedFactor](#topic_0000000000000117) (inherited from [MovableObject](#topic_000000000000010B)), [Compare](#topic_0000000000000118) (inherited from [MovableObject](#topic_000000000000010B)), [Draw](#topic_000000000000006D), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FindAfterID](#topic_0000000000000119) (inherited from [MovableObject](#topic_000000000000010B)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetSpeedVector](#topic_0000000000000115) (inherited from [MovableObject](#topic_000000000000010B)), [GetStruct](#topic_000000000000006F), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [IsNextDirectionValid](#topic_000000000000010F) (inherited from [MovableObject](#topic_000000000000010B)), [LoadContent](#topic_000000000000006B), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [RefreshPosition](#topic_0000000000000110) (inherited from [MovableObject](#topic_000000000000010B)), [Reset](#topic_0000000000000113) (inherited from [MovableObject](#topic_000000000000010B)), [ResetSpeedVector](#topic_0000000000000114) (inherited from [MovableObject](#topic_000000000000010B)), [ResetToDefault](#topic_000000000000006E), [SetCurrentCell](#topic_0000000000000111) (inherited from [MovableObject](#topic_000000000000010B)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_000000000000006C), [calculateOffset](#topic_000000000000010D) (inherited from [MovableObject](#topic_000000000000010B)), [calculatePosition](#topic_000000000000010E) (inherited from [MovableObject](#topic_000000000000010B))

#### Ghost Constructor (System.String, PacManShared.LevelClasses.Cells.Cell, PacManShared.LevelClasses.Level, PacManShared.Enums.Direction, System.Single, Microsoft.Xna.Framework.Point, Microsoft.Xna.Framework.Color, PacManShared.Controllers.AI.IndividualAI.GhostAi)

Creates a new Ghost

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**, \_  ByVal *startCell* As** [**Cell**](#topic_0000000000000005)**, \_  ByVal *level* As** [**Level**](#topic_000000000000008D)**, \_  ByVal *startDirection* As** [**Direction**](#topic_00000000000000F0)**, \_  ByVal *speed* As** [**Single**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**, \_  ByVal *frameSize* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *color* As** [**Color**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.color.aspx)**, \_  ByVal *ghostAi* As** [**GhostAi**](#topic_0000000000000039) **\_ )** |

|  |
| --- |
| [C#]  **public Ghost(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset*,** [**Cell**](#topic_0000000000000005) ***startCell*,** [**Level**](#topic_000000000000008D) ***level*,** [**Direction**](#topic_00000000000000F0) ***startDirection*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***speed*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize*,** [**Color**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.color.aspx) ***color*,** [**GhostAi**](#topic_0000000000000039) ***ghostAi* )** |

|  |
| --- |
| [C++]  **public:  Ghost(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset*,** [**Cell**](#topic_0000000000000005)**^ *startCell*,** [**Level**](#topic_000000000000008D)**^ *level*,** [**Direction**](#topic_00000000000000F0) ***startDirection*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***speed*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize*,** [**Color**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.color.aspx) ***color*,** [**GhostAi**](#topic_0000000000000039)**^ *ghostAi* )** |

|  |
| --- |
| [JScript]  **public function Ghost(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**,  *startCell* :** [**Cell**](#topic_0000000000000005)**,  *level* :** [**Level**](#topic_000000000000008D)**,  *startDirection* :** [**Direction**](#topic_00000000000000F0)**,  *speed* :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**,  *frameSize* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *color* :** [**Color**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.color.aspx)**,  *ghostAi* :** [**GhostAi**](#topic_0000000000000039) **);** |

## Parameters

*textureAsset*

The path to the texture of this ghost

*startCell*

The starting cell for this ghost

*level*

The level

*startDirection*

The starting direction for this ghost

*speed*

The speed in cells per secon

*frameSize*

The framesize of a frame from the texture

*color*

The default color of this ghost

*ghostAi*

The ghostAi for this ghost

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Ghost](#topic_0000000000000068)

#### Ghost Constructor (System.String, PacManShared.LevelClasses.Cells.Cell, PacManShared.LevelClasses.Level, PacManShared.Enums.Direction, System.Single, Microsoft.Xna.Framework.Point, Microsoft.Xna.Framework.Color, PacManShared.Controllers.Controller)

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**, \_  ByVal *startCell* As** [**Cell**](#topic_0000000000000005)**, \_  ByVal *level* As** [**Level**](#topic_000000000000008D)**, \_  ByVal *startDirection* As** [**Direction**](#topic_00000000000000F0)**, \_  ByVal *speed* As** [**Single**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**, \_  ByVal *frameSize* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *color* As** [**Color**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.color.aspx)**, \_  ByVal *controller* As** [**Controller**](#topic_00000000000000C8) **\_ )** |

|  |
| --- |
| [C#]  **public Ghost(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset*,** [**Cell**](#topic_0000000000000005) ***startCell*,** [**Level**](#topic_000000000000008D) ***level*,** [**Direction**](#topic_00000000000000F0) ***startDirection*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***speed*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize*,** [**Color**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.color.aspx) ***color*,** [**Controller**](#topic_00000000000000C8) ***controller* )** |

|  |
| --- |
| [C++]  **public:  Ghost(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset*,** [**Cell**](#topic_0000000000000005)**^ *startCell*,** [**Level**](#topic_000000000000008D)**^ *level*,** [**Direction**](#topic_00000000000000F0) ***startDirection*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***speed*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize*,** [**Color**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.color.aspx) ***color*,** [**Controller**](#topic_00000000000000C8)**^ *controller* )** |

|  |
| --- |
| [JScript]  **public function Ghost(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**,  *startCell* :** [**Cell**](#topic_0000000000000005)**,  *level* :** [**Level**](#topic_000000000000008D)**,  *startDirection* :** [**Direction**](#topic_00000000000000F0)**,  *speed* :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**,  *frameSize* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *color* :** [**Color**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.color.aspx)**,  *controller* :** [**Controller**](#topic_00000000000000C8) **);** |

## Parameters

*textureAsset*

The path to the texture of this ghost

*startCell*

The starting cell for this ghost

*level*

The level

*startDirection*

The starting direction for this ghost

*speed*

The speed in cells per secon

*frameSize*

The framesize of a frame from the texture

*color*

The default color of this ghost

*controller*

A controller for this ghost

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Ghost](#topic_0000000000000068)

#### Ghost.Direction Property

Gets or sets the current direction

|  |
| --- |
| [Visual Basic]  **Public Overrides Property Direction() As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public override** [**Direction**](#topic_00000000000000F0) **Direction {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Direction**](#topic_00000000000000F0) **Direction {** [**Direction**](#topic_00000000000000F0) **get( );  void set(** [**Direction**](#topic_00000000000000F0) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Direction() :** [**Direction**](#topic_00000000000000F0)**; public function set Direction(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Ghost](#topic_0000000000000068)

#### Ghost.GhostBehaviour Property

Sets the current GhostBehaviour

|  |
| --- |
| [Visual Basic]  **Public WriteOnly Property GhostBehaviour() As** [**EGhostBehaviour**](#topic_0000000000000108) |

|  |
| --- |
| [C#]  **public** [**EGhostBehaviour**](#topic_0000000000000108) **GhostBehaviour {set;}** |

|  |
| --- |
| [C++]  **public:  property** [**EGhostBehaviour**](#topic_0000000000000108) **GhostBehaviour {  void set(** [**EGhostBehaviour**](#topic_0000000000000108) **value  ); }** |

|  |
| --- |
| [JScript]  **public function set GhostBehaviour(value :** [**EGhostBehaviour**](#topic_0000000000000108)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Ghost](#topic_0000000000000068)

#### Ghost.Draw Method

Draws this ghost

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Draw( \_  ByVal *spriteBatch* As** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**, \_  ByVal *layer* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *levelPosition* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx) ***spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**^ *spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [JScript]  **public function Draw(  *spriteBatch* :** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**,  *layer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *levelPosition* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **);** |

## Parameters

*spriteBatch*

the spritebatch

*layer*

the layer we want to render into

*levelPosition*

the levelposition onscreen

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Ghost](#topic_0000000000000068)

#### Ghost.GetStruct Method

Returns a MovObjStruct for this ghost

|  |
| --- |
| [Visual Basic]  **Public Overrides Function GetStruct() As** [**MovObjStruct**](#topic_00000000000000E2) |

|  |
| --- |
| [C#]  **public override** [**MovObjStruct**](#topic_00000000000000E2) **GetStruct()** |

|  |
| --- |
| [C++]  **public:** [**MovObjStruct**](#topic_00000000000000E2) **GetStruct()** |

|  |
| --- |
| [JScript]  **public function GetStruct() :** [**MovObjStruct**](#topic_00000000000000E2)**;** |

## Returns

A MovObjStruct for this ghost

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Ghost](#topic_0000000000000068)

#### Ghost.LoadContent Method

Loads the content for this Ghost

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub LoadContent( \_  ByVal *contentManager* As** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) ***contentManager* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx)**^ *contentManager* )** |

|  |
| --- |
| [JScript]  **public function LoadContent(  *contentManager* :** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **);** |

## Parameters

*contentManager*

A contentManager

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Ghost](#topic_0000000000000068)

#### Ghost.ResetToDefault Method

Resets this ghost to its default values

|  |
| --- |
| [Visual Basic]  **Protected Overrides Sub ResetToDefault()** |

|  |
| --- |
| [C#]  **protected override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ResetToDefault()** |

|  |
| --- |
| [C++]  **protected:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ResetToDefault()** |

|  |
| --- |
| [JScript]  **protected function ResetToDefault();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Ghost](#topic_0000000000000068)

#### Ghost.Update Method

Updates this ghost

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

the current gametime

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Ghost](#topic_0000000000000068)

### MovableObject Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

[PacManShared.Sprite](#topic_0000000000000077)

**PacManShared.Entities.Player.MovableObject**

[PacManShared.Entities.LoadObject](#topic_0000000000000042)

[PacManShared.Entities.Player.Ghost](#topic_0000000000000068)

[PacManShared.Entities.Player.PacMan](#topic_000000000000004C)

|  |
| --- |
| [Visual Basic]  **Public MustInherit Class MovableObject  Inherits** [**Sprite**](#topic_0000000000000077) |

|  |
| --- |
| [C#]  **public abstract class MovableObject :** [**Sprite**](#topic_0000000000000077) |

|  |
| --- |
| [C++]  **public ref class MovableObject abstract : public** [**Sprite**](#topic_0000000000000077)**^** |

|  |
| --- |
| [JScript]  **public abstract class MovableObject  extends** [**Sprite**](#topic_0000000000000077) |

## Requirements

**Namespace:** [PacManShared.Entities.Player](#topic_000000000000004B)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[MovableObject Constructor](#topic_000000000000010C)

## Properties

[CellsPerSecond](#topic_0000000000000123), [Center](#topic_0000000000000122), [CurrentCell](#topic_0000000000000120), [Direction](#topic_0000000000000124), [ID](#topic_000000000000011C), [IntersectRectangle](#topic_0000000000000126), [Name](#topic_000000000000011D), [Offset](#topic_000000000000011E), [PowerUpTimer](#topic_0000000000000125), [Size](#topic_0000000000000121), [SpeedVector](#topic_000000000000011F), [Texture](#topic_000000000000007E) (inherited from [Sprite](#topic_0000000000000077)), [TextureAsset](#topic_000000000000007D) (inherited from [Sprite](#topic_0000000000000077))

## Methods

[ApplyStruct](#topic_000000000000011B), [CalculateSpeedFactor](#topic_0000000000000117), [Compare](#topic_0000000000000118), [Draw](#topic_000000000000007B) (inherited from [Sprite](#topic_0000000000000077)), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FindAfterID](#topic_0000000000000119), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetSpeedVector](#topic_0000000000000115), [GetStruct](#topic_000000000000011A), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [IsNextDirectionValid](#topic_000000000000010F), [LoadContent](#topic_0000000000000079) (inherited from [Sprite](#topic_0000000000000077)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [RefreshPosition](#topic_0000000000000110), [Reset](#topic_0000000000000113), [ResetSpeedVector](#topic_0000000000000114), [ResetToDefault](#topic_0000000000000116), [SetCurrentCell](#topic_0000000000000111), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_0000000000000112), [calculateOffset](#topic_000000000000010D), [calculatePosition](#topic_000000000000010E)

#### MovableObject Constructor

Constructor for a movable object

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**, \_  ByVal *startCell* As** [**Cell**](#topic_0000000000000005)**, \_  ByVal *level* As** [**Level**](#topic_000000000000008D)**, \_  ByVal *startDirection* As** [**Direction**](#topic_00000000000000F0)**, \_  ByVal *cellsPerSecond* As** [**Single**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**, \_  ByVal *controller* As** [**Controller**](#topic_00000000000000C8)**, \_  ByVal *frameSize* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public MovableObject(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset*,** [**Cell**](#topic_0000000000000005) ***startCell*,** [**Level**](#topic_000000000000008D) ***level*,** [**Direction**](#topic_00000000000000F0) ***startDirection*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***cellsPerSecond*,** [**Controller**](#topic_00000000000000C8) ***controller*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize* )** |

|  |
| --- |
| [C++]  **public:  MovableObject(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset*,** [**Cell**](#topic_0000000000000005)**^ *startCell*,** [**Level**](#topic_000000000000008D)**^ *level*,** [**Direction**](#topic_00000000000000F0) ***startDirection*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***cellsPerSecond*,** [**Controller**](#topic_00000000000000C8)**^ *controller*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize* )** |

|  |
| --- |
| [JScript]  **public function MovableObject(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**,  *startCell* :** [**Cell**](#topic_0000000000000005)**,  *level* :** [**Level**](#topic_000000000000008D)**,  *startDirection* :** [**Direction**](#topic_00000000000000F0)**,  *cellsPerSecond* :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**,  *controller* :** [**Controller**](#topic_00000000000000C8)**,  *frameSize* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **);** |

## Parameters

*textureAsset*

The path to the texture that this object has to load

*startCell*

The starting cell of this MO

*level*

Reference to the level

*startDirection*

The direction this MO is facing at startup

*cellsPerSecond*

How many cells per second this MO should pass

*controller*

The controller for this object

*frameSize*

The size of the frame of this MO

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.CellsPerSecond Property

Gets and sets the current speed, in cells per second

|  |
| --- |
| [Visual Basic]  **Public Property CellsPerSecond() As** [**Single**](http://msdn.microsoft.com/en-us/library/system.single.aspx) |

|  |
| --- |
| [C#]  **public** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **CellsPerSecond {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **CellsPerSecond {** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **get( );  void set(** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get CellsPerSecond() :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**; public function set CellsPerSecond(value :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.Center Property

Gets the Center of this MO

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property Center() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public override** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get Center() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.CurrentCell Property

Gets or sets the current cell

|  |
| --- |
| [Visual Basic]  **Public Overridable Property CurrentCell() As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public virtual** [**Cell**](#topic_0000000000000005) **CurrentCell {get; set;}** |

|  |
| --- |
| [C++]  **public:  virtual property** [**Cell**](#topic_0000000000000005)**^ CurrentCell {** [**Cell**](#topic_0000000000000005)**^ get( );  void set(** [**Cell**](#topic_0000000000000005)**^ value  ); }** |

|  |
| --- |
| [JScript]  **public function get CurrentCell() :** [**Cell**](#topic_0000000000000005)**; public function set CurrentCell(value :** [**Cell**](#topic_0000000000000005)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.Direction Property

Gets or sets the current direction of this object

|  |
| --- |
| [Visual Basic]  **Public MustOverride Property Direction() As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public abstract** [**Direction**](#topic_00000000000000F0) **Direction {get; set;}** |

|  |
| --- |
| [C++]  **public:  virtual property** [**Direction**](#topic_00000000000000F0) **Direction {** [**Direction**](#topic_00000000000000F0) **get( ); abstract  void set(** [**Direction**](#topic_00000000000000F0) **value  ); abstract }** |

|  |
| --- |
| [JScript]  **public abstract function get Direction() :** [**Direction**](#topic_00000000000000F0)**; public abstract function set Direction(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.ID Property

The ID of this object, stored in the controller

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property ID() As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) |

|  |
| --- |
| [C#]  **public** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **ID {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **ID {** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get ID() :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.IntersectRectangle Property

Provides an Rectangle to check for intersections

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property IntersectRectangle() As** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) |

|  |
| --- |
| [C#]  **public override** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **IntersectRectangle {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **IntersectRectangle {** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get IntersectRectangle() :** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.Name Property

The name of this object, stored in the controller

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property Name() As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) |

|  |
| --- |
| [C#]  **public** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **Name {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ Name {** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ get( ); }** |

|  |
| --- |
| [JScript]  **public function get Name() :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.Offset Property

Returns the offset from the current cell (how many pixels this object is away from the center of its current cell

|  |
| --- |
| [Visual Basic]  **Public Property Offset() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Get  Protected Set(ByVal Value As As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**)** |

|  |
| --- |
| [C#]  **public** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Offset {get; protected set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Offset {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( );  protected: void set(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Offset() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**; protected function set Offset(value :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.PowerUpTimer Property

Gets and sets the Poweruptimer

|  |
| --- |
| [Visual Basic]  **Public Property PowerUpTimer() As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) |

|  |
| --- |
| [C#]  **public** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **PowerUpTimer {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **PowerUpTimer {** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **get( );  void set(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get PowerUpTimer() :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**; public function set PowerUpTimer(value :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.Size Property

Gets the size of a sprite

|  |
| --- |
| [Visual Basic]  **Public Overrides Property Size() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public override** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Size {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Size {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( );  void set(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Size() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**; public function set Size(value :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.SpeedVector Property

Gets or sets the current CellsPerSecond vector

|  |
| --- |
| [Visual Basic]  **Public Property SpeedVector() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **SpeedVector {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **SpeedVector {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( );  void set(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get SpeedVector() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**; public function set SpeedVector(value :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.ApplyStruct Method

Applys a MovObjStruct to this MovableObject

|  |
| --- |
| [Visual Basic]  **Public Sub ApplyStruct( \_  ByVal *movObjStruct* As** [**MovObjStruct**](#topic_00000000000000E2) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyStruct(** [**MovObjStruct**](#topic_00000000000000E2) ***movObjStruct* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyStruct(** [**MovObjStruct**](#topic_00000000000000E2) ***movObjStruct* )** |

|  |
| --- |
| [JScript]  **public function ApplyStruct(  *movObjStruct* :** [**MovObjStruct**](#topic_00000000000000E2) **);** |

## Parameters

*movObjStruct*

the MovObjStruct with the new information for this object

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.CalculateSpeedFactor Method

Calculates the speed per millisecond

|  |
| --- |
| [Visual Basic]  **Protected Function CalculateSpeedFactor( \_  ByVal *cells* As** [**Single**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **\_ ) As** [**Single**](http://msdn.microsoft.com/en-us/library/system.single.aspx) |

|  |
| --- |
| [C#]  **protected** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **CalculateSpeedFactor(** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***cells* )** |

|  |
| --- |
| [C++]  **protected:** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **CalculateSpeedFactor(** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***cells* )** |

|  |
| --- |
| [JScript]  **protected function CalculateSpeedFactor(  *cells* :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **) :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**;** |

## Parameters

*cells*

The speed in cells per second

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.Compare Method

Compares two MovableObjects, after the ID

|  |
| --- |
| [Visual Basic]  **Public Shared Function Compare( \_  ByVal *x* As** [**MovableObject**](#topic_000000000000010B)**, \_  ByVal *y* As** [**MovableObject**](#topic_000000000000010B) **\_ ) As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) |

|  |
| --- |
| [C#]  **public static** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **Compare(** [**MovableObject**](#topic_000000000000010B) ***x*,** [**MovableObject**](#topic_000000000000010B) ***y* )** |

|  |
| --- |
| [C++]  **public:  static** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **Compare(** [**MovableObject**](#topic_000000000000010B)**^ *x*,** [**MovableObject**](#topic_000000000000010B)**^ *y* )** |

|  |
| --- |
| [JScript]  **public static function Compare(  *x* :** [**MovableObject**](#topic_000000000000010B)**,  *y* :** [**MovableObject**](#topic_000000000000010B) **) :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**;** |

## Parameters

*x*

The first MovableObject

*y*

The second MovableObject

## Returns

0 if they are equall, -1 if the first is smaller and 1 if the first is bigger

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.FindAfterID Method

|  |
| --- |
| [Visual Basic]  **Public Shared Function FindAfterID( \_  ByVal *id* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *x* As** [**MovableObject**](#topic_000000000000010B) **\_ ) As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) |

|  |
| --- |
| [C#]  **public static** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **FindAfterID(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id*,** [**MovableObject**](#topic_000000000000010B) ***x* )** |

|  |
| --- |
| [C++]  **public:  static** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **FindAfterID(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***id*,** [**MovableObject**](#topic_000000000000010B)**^ *x* )** |

|  |
| --- |
| [JScript]  **public static function FindAfterID(  *id* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *x* :** [**MovableObject**](#topic_000000000000010B) **) :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**;** |

## Parameters

*id*

*x*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.GetSpeedVector Method

Retruns a Vector 2 according to the current Direction

|  |
| --- |
| [Visual Basic]  **Protected Function GetSpeedVector( \_  ByVal *Direction* As** [**Direction**](#topic_00000000000000F0)**, \_  ByVal *currentSpeedVector* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**, \_  ByVal *elapsedGameTime* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **protected** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **GetSpeedVector(** [**Direction**](#topic_00000000000000F0) ***Direction*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***currentSpeedVector*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***elapsedGameTime* )** |

|  |
| --- |
| [C++]  **protected:** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **GetSpeedVector(** [**Direction**](#topic_00000000000000F0) ***Direction*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***currentSpeedVector*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***elapsedGameTime* )** |

|  |
| --- |
| [JScript]  **protected function GetSpeedVector(  *Direction* :** [**Direction**](#topic_00000000000000F0)**,  *currentSpeedVector* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**,  *elapsedGameTime* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**;** |

## Parameters

*Direction*

The current heading

*currentSpeedVector*

The CellsPerSecond vector from the last iteration

*elapsedGameTime*

The elapsed game time since the last iteration

## Returns

A vector 2

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.GetStruct Method

Creates a structure with information about his object

|  |
| --- |
| [Visual Basic]  **Public MustOverride Function GetStruct() As** [**MovObjStruct**](#topic_00000000000000E2) |

|  |
| --- |
| [C#]  **public abstract** [**MovObjStruct**](#topic_00000000000000E2) **GetStruct()** |

|  |
| --- |
| [C++]  **public:  virtual** [**MovObjStruct**](#topic_00000000000000E2) **GetStruct() abstract** |

|  |
| --- |
| [JScript]  **public abstract function GetStruct() :** [**MovObjStruct**](#topic_00000000000000E2)**;** |

## Returns

A MovObjStruct

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.IsNextDirectionValid Method

Validates if we can move in the desired direction

|  |
| --- |
| [Visual Basic]  **Protected Function IsNextDirectionValid( \_  ByVal *getDirection* As** [**Direction**](#topic_00000000000000F0) **\_ ) As** [**Boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) |

|  |
| --- |
| [C#]  **protected** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsNextDirectionValid(** [**Direction**](#topic_00000000000000F0) ***getDirection* )** |

|  |
| --- |
| [C++]  **protected:** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsNextDirectionValid(** [**Direction**](#topic_00000000000000F0) ***getDirection* )** |

|  |
| --- |
| [JScript]  **protected function IsNextDirectionValid(  *getDirection* :** [**Direction**](#topic_00000000000000F0) **) :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**;** |

## Parameters

*getDirection*

The direction we want to move to

## Returns

Either the last direction or the new direction

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.RefreshPosition Method

Sets the position to the one of the current cell

|  |
| --- |
| [Visual Basic]  **Public Sub RefreshPosition()** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **RefreshPosition()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **RefreshPosition()** |

|  |
| --- |
| [JScript]  **public function RefreshPosition();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.Reset Method

Resets this Movable objects to its original state

|  |
| --- |
| [Visual Basic]  **Public Overridable Sub Reset()** |

|  |
| --- |
| [C#]  **public virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [C++]  **public:  virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [JScript]  **public function Reset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.ResetSpeedVector Method

Resets the speedvector to the last known speedvector

|  |
| --- |
| [Visual Basic]  **Public Overridable Sub ResetSpeedVector()** |

|  |
| --- |
| [C#]  **public virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ResetSpeedVector()** |

|  |
| --- |
| [C++]  **public:  virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ResetSpeedVector()** |

|  |
| --- |
| [JScript]  **public function ResetSpeedVector();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.ResetToDefault Method

Resets the speed and the poweruptimer to their defaultvalues

|  |
| --- |
| [Visual Basic]  **Protected Overridable Sub ResetToDefault()** |

|  |
| --- |
| [C#]  **protected virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ResetToDefault()** |

|  |
| --- |
| [C++]  **protected:  virtual** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ResetToDefault()** |

|  |
| --- |
| [JScript]  **protected function ResetToDefault();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.SetCurrentCell Method

Sets the current cell to a given target

|  |
| --- |
| [Visual Basic]  **Public Sub SetCurrentCell( \_  ByVal *target* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetCurrentCell(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***target* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetCurrentCell(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***target* )** |

|  |
| --- |
| [JScript]  **public function SetCurrentCell(  *target* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **);** |

## Parameters

*target*

The position of the cell in the grid

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.Update Method

Updates this movable object

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

the current gametime

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.calculateOffset Method

Calculates the offset from the current cell

|  |
| --- |
| [Visual Basic]  **Protected Sub calculateOffset()** |

|  |
| --- |
| [C#]  **protected** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **calculateOffset()** |

|  |
| --- |
| [C++]  **protected:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **calculateOffset()** |

|  |
| --- |
| [JScript]  **protected function calculateOffset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

#### MovableObject.calculatePosition Method

Calculates the positon onscreen, according to the current position and scale

|  |
| --- |
| [Visual Basic]  **Protected Function calculatePosition() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **protected** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **calculatePosition()** |

|  |
| --- |
| [C++]  **protected:** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **calculatePosition()** |

|  |
| --- |
| [JScript]  **protected function calculatePosition() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**;** |

## Returns

The new position

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovableObject](#topic_000000000000010B)

### PacMan Class

|  |
| --- |
| [Visual Basic]  **Public Class PacMan  Inherits** [**MovableObject**](#topic_000000000000010B) |

|  |
| --- |
| [C#]  **public class PacMan :** [**MovableObject**](#topic_000000000000010B) |

|  |
| --- |
| [C++]  **public ref class PacMan : public** [**MovableObject**](#topic_000000000000010B)**^** |

|  |
| --- |
| [JScript]  **public class PacMan  extends** [**MovableObject**](#topic_000000000000010B) |

## Requirements

**Namespace:** [PacManShared.Entities.Player](#topic_000000000000004B)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[PacMan Constructor](#topic_000000000000004D)

## Properties

[CellsPerSecond](#topic_0000000000000123) (inherited from [MovableObject](#topic_000000000000010B)), [Center](#topic_0000000000000122) (inherited from [MovableObject](#topic_000000000000010B)), [CurrentCell](#topic_0000000000000120) (inherited from [MovableObject](#topic_000000000000010B)), [Direction](#topic_0000000000000054), [ID](#topic_000000000000011C) (inherited from [MovableObject](#topic_000000000000010B)), [IntersectRectangle](#topic_0000000000000126) (inherited from [MovableObject](#topic_000000000000010B)), [Name](#topic_000000000000011D) (inherited from [MovableObject](#topic_000000000000010B)), [Offset](#topic_000000000000011E) (inherited from [MovableObject](#topic_000000000000010B)), [PowerUpTimer](#topic_0000000000000125) (inherited from [MovableObject](#topic_000000000000010B)), [Size](#topic_0000000000000121) (inherited from [MovableObject](#topic_000000000000010B)), [SpeedVector](#topic_000000000000011F) (inherited from [MovableObject](#topic_000000000000010B)), [Texture](#topic_000000000000007E) (inherited from [Sprite](#topic_0000000000000077)), [TextureAsset](#topic_000000000000007D) (inherited from [Sprite](#topic_0000000000000077))

## Methods

[ApplyStruct](#topic_000000000000011B) (inherited from [MovableObject](#topic_000000000000010B)), [CalculateSpeedFactor](#topic_0000000000000117) (inherited from [MovableObject](#topic_000000000000010B)), [Compare](#topic_0000000000000118) (inherited from [MovableObject](#topic_000000000000010B)), [Draw](#topic_0000000000000051), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FindAfterID](#topic_0000000000000119) (inherited from [MovableObject](#topic_000000000000010B)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetSpeedVector](#topic_0000000000000115) (inherited from [MovableObject](#topic_000000000000010B)), [GetStruct](#topic_0000000000000053), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [IsNextDirectionValid](#topic_000000000000010F) (inherited from [MovableObject](#topic_000000000000010B)), [LoadContent](#topic_000000000000004E), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [RefreshPosition](#topic_0000000000000110) (inherited from [MovableObject](#topic_000000000000010B)), [Reset](#topic_0000000000000052), [ResetSpeedVector](#topic_0000000000000114) (inherited from [MovableObject](#topic_000000000000010B)), [ResetToDefault](#topic_0000000000000116) (inherited from [MovableObject](#topic_000000000000010B)), [SetCurrentCell](#topic_0000000000000111) (inherited from [MovableObject](#topic_000000000000010B)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_0000000000000050), [calculateOffset](#topic_000000000000010D) (inherited from [MovableObject](#topic_000000000000010B)), [calculatePosition](#topic_000000000000010E) (inherited from [MovableObject](#topic_000000000000010B))

#### PacMan Constructor

Constructs a new PacMan

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**, \_  ByVal *startCell* As** [**Cell**](#topic_0000000000000005)**, \_  ByVal *level* As** [**Level**](#topic_000000000000008D)**, \_  ByVal *controller* As** [**Controller**](#topic_00000000000000C8)**, \_  ByVal *startDirection* As** [**Direction**](#topic_00000000000000F0)**, \_  ByVal *speed* As** [**Single**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**, \_  ByVal *frameSize* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public PacMan(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset*,** [**Cell**](#topic_0000000000000005) ***startCell*,** [**Level**](#topic_000000000000008D) ***level*,** [**Controller**](#topic_00000000000000C8) ***controller*,** [**Direction**](#topic_00000000000000F0) ***startDirection*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***speed*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize* )** |

|  |
| --- |
| [C++]  **public:  PacMan(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset*,** [**Cell**](#topic_0000000000000005)**^ *startCell*,** [**Level**](#topic_000000000000008D)**^ *level*,** [**Controller**](#topic_00000000000000C8)**^ *controller*,** [**Direction**](#topic_00000000000000F0) ***startDirection*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***speed*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***frameSize* )** |

|  |
| --- |
| [JScript]  **public function PacMan(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**,  *startCell* :** [**Cell**](#topic_0000000000000005)**,  *level* :** [**Level**](#topic_000000000000008D)**,  *controller* :** [**Controller**](#topic_00000000000000C8)**,  *startDirection* :** [**Direction**](#topic_00000000000000F0)**,  *speed* :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**,  *frameSize* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **);** |

## Parameters

*textureAsset*

The path to the texture of this pacman

*startCell*

the starting cell of this player

*level*

Reference to the level

*controller*

The controller for this player

*startDirection*

The start heading

*speed*

Defines how fast this player can move in cells per second

*frameSize*

Sets the framesize for the players texture

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PacMan](#topic_000000000000004C)

#### PacMan.Direction Property

Handles access to the Direction of Pacman

|  |
| --- |
| [Visual Basic]  **Public Overrides Property Direction() As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public override** [**Direction**](#topic_00000000000000F0) **Direction {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Direction**](#topic_00000000000000F0) **Direction {** [**Direction**](#topic_00000000000000F0) **get( );  void set(** [**Direction**](#topic_00000000000000F0) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Direction() :** [**Direction**](#topic_00000000000000F0)**; public function set Direction(value :** [**Direction**](#topic_00000000000000F0)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PacMan](#topic_000000000000004C)

#### PacMan.Draw Method

Draws Pacman

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Draw( \_  ByVal *spriteBatch* As** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**, \_  ByVal *layer* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *levelPosition* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx) ***spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**^ *spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [JScript]  **public function Draw(  *spriteBatch* :** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**,  *layer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *levelPosition* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **);** |

## Parameters

*spriteBatch*

Spritebatch from the GameObjectManager

*layer*

the layer

*levelPosition*

The position of the level onscreen

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PacMan](#topic_000000000000004C)

#### PacMan.GetStruct Method

Gets a structure for this Pacman

|  |
| --- |
| [Visual Basic]  **Public Overrides Function GetStruct() As** [**MovObjStruct**](#topic_00000000000000E2) |

|  |
| --- |
| [C#]  **public override** [**MovObjStruct**](#topic_00000000000000E2) **GetStruct()** |

|  |
| --- |
| [C++]  **public:** [**MovObjStruct**](#topic_00000000000000E2) **GetStruct()** |

|  |
| --- |
| [JScript]  **public function GetStruct() :** [**MovObjStruct**](#topic_00000000000000E2)**;** |

## Returns

A MovObjStruct according to this pacman

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PacMan](#topic_000000000000004C)

#### PacMan.LoadContent (Microsoft.Xna.Framework.Content.ContentManager, Microsoft.Xna.Framework.Audio.SoundBank) Method

Loads the content for this pacman

|  |
| --- |
| [Visual Basic]  **Public Sub LoadContent( \_  ByVal *contentManager* As** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx)**, \_  ByVal *soundBank* As** [**SoundBank**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.audio.soundbank.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) ***contentManager*,** [**SoundBank**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.audio.soundbank.aspx) ***soundBank* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx)**^ *contentManager*,** [**SoundBank**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.audio.soundbank.aspx)**^ *soundBank* )** |

|  |
| --- |
| [JScript]  **public function LoadContent(  *contentManager* :** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx)**,  *soundBank* :** [**SoundBank**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.audio.soundbank.aspx) **);** |

## Parameters

*contentManager*

the contentmanager

*soundBank*

the soundbank for this pacman

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PacMan](#topic_000000000000004C)

#### PacMan.LoadContent (Microsoft.Xna.Framework.Content.ContentManager) Method

loads the content for this pacman

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub LoadContent( \_  ByVal *contentManager* As** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) ***contentManager* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx)**^ *contentManager* )** |

|  |
| --- |
| [JScript]  **public function LoadContent(  *contentManager* :** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **);** |

## Parameters

*contentManager*

The contentmanager

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PacMan](#topic_000000000000004C)

#### PacMan.Reset Method

Resets pacman and reduces his lives

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Reset()** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [JScript]  **public function Reset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PacMan](#topic_000000000000004C)

#### PacMan.Update Method

Updates pacman

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

the current gametime

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PacMan](#topic_000000000000004C)

## PacManShared.Enums Namespace

## Classes

[DirectionExtension](#topic_00000000000000F1)

## Enumerations

[Direction](#topic_00000000000000F0), [EGhostBehaviour](#topic_0000000000000108), [GameState](#topic_000000000000002B), [MovObjType](#topic_00000000000000AE)

### DirectionExtension Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Enums.DirectionExtension**

|  |
| --- |
| [Visual Basic]  **Public Class DirectionExtension** |

|  |
| --- |
| [C#]  **public static class DirectionExtension** |

|  |
| --- |
| [C++]  **public ref class DirectionExtension** |

|  |
| --- |
| [JScript]  **public class DirectionExtension** |

## Requirements

**Namespace:** [PacManShared.Enums](#topic_000000000000002A)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[DirectionFromPoint](#topic_00000000000000F4), [DirectionToAngle](#topic_00000000000000F3), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetOppositeDirection](#topic_00000000000000F5), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [PointFromDirection](#topic_00000000000000F2), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [StringToDirection](#topic_00000000000000F6), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### DirectionExtension.DirectionFromPoint Method

|  |
| --- |
| [Visual Basic]  **Public Shared Function DirectionFromPoint( \_  ByVal *point* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ ) As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public static** [**Direction**](#topic_00000000000000F0) **DirectionFromPoint(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***point* )** |

|  |
| --- |
| [C++]  **public:  static** [**Direction**](#topic_00000000000000F0) **DirectionFromPoint(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***point* )** |

|  |
| --- |
| [JScript]  **public static function DirectionFromPoint(  *point* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **) :** [**Direction**](#topic_00000000000000F0)**;** |

## Parameters

*point*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [DirectionExtension](#topic_00000000000000F1)

#### DirectionExtension.DirectionToAngle Method

|  |
| --- |
| [Visual Basic]  **Public Shared Function DirectionToAngle( \_  ByVal *direction* As** [**Direction**](#topic_00000000000000F0) **\_ ) As** [**Single**](http://msdn.microsoft.com/en-us/library/system.single.aspx) |

|  |
| --- |
| [C#]  **public static** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **DirectionToAngle(** [**Direction**](#topic_00000000000000F0) ***direction* )** |

|  |
| --- |
| [C++]  **public:  static** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) **DirectionToAngle(** [**Direction**](#topic_00000000000000F0) ***direction* )** |

|  |
| --- |
| [JScript]  **public static function DirectionToAngle(  *direction* :** [**Direction**](#topic_00000000000000F0) **) :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**;** |

## Parameters

*direction*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [DirectionExtension](#topic_00000000000000F1)

#### DirectionExtension.GetOppositeDirection Method

|  |
| --- |
| [Visual Basic]  **Public Shared Function GetOppositeDirection( \_  ByVal *direction* As** [**Direction**](#topic_00000000000000F0) **\_ ) As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public static** [**Direction**](#topic_00000000000000F0) **GetOppositeDirection(** [**Direction**](#topic_00000000000000F0) ***direction* )** |

|  |
| --- |
| [C++]  **public:  static** [**Direction**](#topic_00000000000000F0) **GetOppositeDirection(** [**Direction**](#topic_00000000000000F0) ***direction* )** |

|  |
| --- |
| [JScript]  **public static function GetOppositeDirection(  *direction* :** [**Direction**](#topic_00000000000000F0) **) :** [**Direction**](#topic_00000000000000F0)**;** |

## Parameters

*direction*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [DirectionExtension](#topic_00000000000000F1)

#### DirectionExtension.PointFromDirection Method

|  |
| --- |
| [Visual Basic]  **Public Shared Function PointFromDirection( \_  ByVal *direction* As** [**Direction**](#topic_00000000000000F0) **\_ ) As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **public static** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **PointFromDirection(** [**Direction**](#topic_00000000000000F0) ***direction* )** |

|  |
| --- |
| [C++]  **public:  static** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **PointFromDirection(** [**Direction**](#topic_00000000000000F0) ***direction* )** |

|  |
| --- |
| [JScript]  **public static function PointFromDirection(  *direction* :** [**Direction**](#topic_00000000000000F0) **) :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Parameters

*direction*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [DirectionExtension](#topic_00000000000000F1)

#### DirectionExtension.StringToDirection Method

|  |
| --- |
| [Visual Basic]  **Public Shared Function StringToDirection( \_  ByVal *directionString* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **\_ ) As** [**Direction**](#topic_00000000000000F0) |

|  |
| --- |
| [C#]  **public static** [**Direction**](#topic_00000000000000F0) **StringToDirection(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***directionString* )** |

|  |
| --- |
| [C++]  **public:  static** [**Direction**](#topic_00000000000000F0) **StringToDirection(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *directionString* )** |

|  |
| --- |
| [JScript]  **public static function StringToDirection(  *directionString* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **) :** [**Direction**](#topic_00000000000000F0)**;** |

## Parameters

*directionString*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [DirectionExtension](#topic_00000000000000F1)

### Direction Enumeration

## Requirements

**Namespace:** [PacManShared.Enums](#topic_000000000000002A)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

### EGhostBehaviour Enumeration

## Requirements

**Namespace:** [PacManShared.Enums](#topic_000000000000002A)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

### GameState Enumeration

## Requirements

**Namespace:** [PacManShared.Enums](#topic_000000000000002A)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

### MovObjType Enumeration

## Requirements

**Namespace:** [PacManShared.Enums](#topic_000000000000002A)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## PacManShared.GameplayBehaviour Namespace

## Classes

[DeathBehaviour](#topic_0000000000000028), [PlayBehaviour](#topic_00000000000000A3)

### DeathBehaviour Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.GameplayBehaviour.DeathBehaviour**

|  |
| --- |
| [Visual Basic]  **Public Class DeathBehaviour  Implements IGamePlayBehaviour** |

|  |
| --- |
| [C#]  **public class DeathBehaviour : IGamePlayBehaviour** |

|  |
| --- |
| [C++]  **public ref class DeathBehaviour : public IGamePlayBehaviour^** |

|  |
| --- |
| [JScript]  **public class DeathBehaviour  implements IGamePlayBehaviour** |

## Requirements

**Namespace:** [PacManShared.GameplayBehaviour](#topic_0000000000000027)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_0000000000000029)

#### DeathBehaviour.Update Method

|  |
| --- |
| [Visual Basic]  **Public Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127)**, \_  ByVal *gameStateManager* As** [**GameStateManager**](#topic_000000000000012B) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime*,** [**GameStateManager**](#topic_000000000000012B) ***gameStateManager* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime*,** [**GameStateManager**](#topic_000000000000012B)**^ *gameStateManager* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127)**,  *gameStateManager* :** [**GameStateManager**](#topic_000000000000012B) **);** |

## Parameters

*gameTime*

*gameStateManager*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [DeathBehaviour](#topic_0000000000000028)

### PlayBehaviour Class

The normal playbehaviour

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.GameplayBehaviour.PlayBehaviour**

|  |
| --- |
| [Visual Basic]  **Public Class PlayBehaviour  Implements IGamePlayBehaviour** |

|  |
| --- |
| [C#]  **public class PlayBehaviour : IGamePlayBehaviour** |

|  |
| --- |
| [C++]  **public ref class PlayBehaviour : public IGamePlayBehaviour^** |

|  |
| --- |
| [JScript]  **public class PlayBehaviour  implements IGamePlayBehaviour** |

## Requirements

**Namespace:** [PacManShared.GameplayBehaviour](#topic_0000000000000027)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_00000000000000A4)

#### PlayBehaviour.Update Method

Updates the game

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime*,** [**GameStateManager**](#topic_000000000000012B) ***gameStateManager* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime*,** [**GameStateManager**](#topic_000000000000012B)**^ *gameStateManager* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127)**,  *gameStateManager* :** [**GameStateManager**](#topic_000000000000012B) **);** |

## Parameters

*gameTime*

the current gametime

*gameStateManager*

a reference to the gamestateManager

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PlayBehaviour](#topic_00000000000000A3)

## PacManShared.Initialization Namespace

## Classes

[LevelParser](#topic_00000000000000AA)

### LevelParser Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.LevelParser**

|  |
| --- |
| [Visual Basic]  **Public Class LevelParser** |

|  |
| --- |
| [C#]  **public class LevelParser** |

|  |
| --- |
| [C++]  **public ref class LevelParser** |

|  |
| --- |
| [JScript]  **public class LevelParser** |

## Requirements

**Namespace:** [PacManShared.Initialization](#topic_00000000000000A9)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GenerateLevel](#topic_00000000000000AB), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [parseCSV](#topic_00000000000000AD)

#### LevelParser.GenerateLevel (System.String) Method

Creates a new level

|  |
| --- |
| [Visual Basic]  **Public Function GenerateLevel( \_  ByVal *path* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **\_ ) As** [**Level**](#topic_000000000000008D) |

|  |
| --- |
| [C#]  **public** [**Level**](#topic_000000000000008D) **GenerateLevel(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***path* )** |

|  |
| --- |
| [C++]  **public:** [**Level**](#topic_000000000000008D)**^ GenerateLevel(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *path* )** |

|  |
| --- |
| [JScript]  **public function GenerateLevel(  *path* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **) :** [**Level**](#topic_000000000000008D)**;** |

## Parameters

*path*

a path to a level file

## Returns

a generated level

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LevelParser](#topic_00000000000000AA)

#### LevelParser.GenerateLevel (System.Collections.Generic.List`1) Method

Creates a new level from a list of stringarrays

|  |
| --- |
| [Visual Basic]  **Public Function GenerateLevel( \_  ByVal *data* As** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**(Of** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**[]) \_ ) As** [**Level**](#topic_000000000000008D) |

|  |
| --- |
| [C#]  **public** [**Level**](#topic_000000000000008D) **GenerateLevel(** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<**[**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**[]> *data* )** |

|  |
| --- |
| [C++]  **public:** [**Level**](#topic_000000000000008D)**^ GenerateLevel(** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<array<** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ >^>^ *data* )** |

|  |
| --- |
| [JScript]  **JScript does not support generic types and methods.** |

## Parameters

*data*

The stringarrays

## Returns

A generated level

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LevelParser](#topic_00000000000000AA)

#### LevelParser.parseCSV Method

Parses a csv into a List of stringarrays

|  |
| --- |
| [Visual Basic]  **Public Function parseCSV( \_  ByVal *path* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **\_ ) As** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**(Of** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**[])** |

|  |
| --- |
| [C#]  **public** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<**[**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**[]> parseCSV(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***path* )** |

|  |
| --- |
| [C++]  **public:** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<array<** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ >^>^ parseCSV(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *path* )** |

|  |
| --- |
| [JScript]  **JScript does not support generic types and methods.** |

## Parameters

*path*

The path to the csv file

## Returns

A pares list of stringarrays

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LevelParser](#topic_00000000000000AA)

## PacManShared.Initialization.CellFactory Namespace

## Classes

[CellFactory](#topic_00000000000000A7)

### CellFactory Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.CellFactory**

|  |
| --- |
| [Visual Basic]  **Public Class CellFactory** |

|  |
| --- |
| [C#]  **public class CellFactory** |

|  |
| --- |
| [C++]  **public ref class CellFactory** |

|  |
| --- |
| [JScript]  **public class CellFactory** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory](#topic_000000000000008C)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[CreateCell](#topic_00000000000000A8), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### CellFactory.CreateCell Method

Creates a new cell

|  |
| --- |
| [Visual Basic]  **Public Function CreateCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *element* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **CreateCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y*,** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***element* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ CreateCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y*,** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *element* )** |

|  |
| --- |
| [JScript]  **public function CreateCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *element* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

the x position in the grid

*y*

the y position in the grid

*element*

the arguments for this cell

## Returns

The finished cell

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [CellFactory](#topic_00000000000000A7)

## PacManShared.Initialization.CellFactory.Creators Namespace

## Classes

[CrumbCellCreator](#topic_0000000000000021), [GoodyCellCreator](#topic_0000000000000025), [HorizontalCellCreator](#topic_00000000000000FF), [LeftDownCellCreator](#topic_00000000000000FB), [LeftUpCellCreator](#topic_00000000000000FD), [PowerUpCellCreator](#topic_0000000000000023), [RightDownCellCreator](#topic_00000000000000F7), [RightUpCellCreator](#topic_00000000000000F9), [VerticalCellCreator](#topic_0000000000000101)

### CrumbCellCreator Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.Creators.CrumbCellCreator**

|  |
| --- |
| [Visual Basic]  **Public Class CrumbCellCreator  Implements ICellCreator** |

|  |
| --- |
| [C#]  **public class CrumbCellCreator : ICellCreator** |

|  |
| --- |
| [C++]  **public ref class CrumbCellCreator : public ICellCreator^** |

|  |
| --- |
| [JScript]  **public class CrumbCellCreator  implements ICellCreator** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory.Creators](#topic_0000000000000020)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetCell](#topic_0000000000000022), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### CrumbCellCreator.GetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function GetCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function GetCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [CrumbCellCreator](#topic_0000000000000021)

### GoodyCellCreator Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.Creators.GoodyCellCreator**

|  |
| --- |
| [Visual Basic]  **Public Class GoodyCellCreator  Implements ICellCreator** |

|  |
| --- |
| [C#]  **public class GoodyCellCreator : ICellCreator** |

|  |
| --- |
| [C++]  **public ref class GoodyCellCreator : public ICellCreator^** |

|  |
| --- |
| [JScript]  **public class GoodyCellCreator  implements ICellCreator** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory.Creators](#topic_0000000000000020)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetCell](#topic_0000000000000026), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### GoodyCellCreator.GetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function GetCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function GetCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GoodyCellCreator](#topic_0000000000000025)

### HorizontalCellCreator Class

Creates a new cell, facing horizontal

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.Creators.HorizontalCellCreator**

|  |
| --- |
| [Visual Basic]  **Public Class HorizontalCellCreator  Implements ICellCreator** |

|  |
| --- |
| [C#]  **public class HorizontalCellCreator : ICellCreator** |

|  |
| --- |
| [C++]  **public ref class HorizontalCellCreator : public ICellCreator^** |

|  |
| --- |
| [JScript]  **public class HorizontalCellCreator  implements ICellCreator** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory.Creators](#topic_0000000000000020)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetCell](#topic_0000000000000100), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### HorizontalCellCreator.GetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function GetCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function GetCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [HorizontalCellCreator](#topic_00000000000000FF)

### LeftDownCellCreator Class

Creates a new cell, facing leftdown

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.Creators.LeftDownCellCreator**

|  |
| --- |
| [Visual Basic]  **Public Class LeftDownCellCreator  Implements ICellCreator** |

|  |
| --- |
| [C#]  **public class LeftDownCellCreator : ICellCreator** |

|  |
| --- |
| [C++]  **public ref class LeftDownCellCreator : public ICellCreator^** |

|  |
| --- |
| [JScript]  **public class LeftDownCellCreator  implements ICellCreator** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory.Creators](#topic_0000000000000020)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetCell](#topic_00000000000000FC), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### LeftDownCellCreator.GetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function GetCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function GetCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LeftDownCellCreator](#topic_00000000000000FB)

### LeftUpCellCreator Class

Creates a new cell, facing leftup

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.Creators.LeftUpCellCreator**

|  |
| --- |
| [Visual Basic]  **Public Class LeftUpCellCreator  Implements ICellCreator** |

|  |
| --- |
| [C#]  **public class LeftUpCellCreator : ICellCreator** |

|  |
| --- |
| [C++]  **public ref class LeftUpCellCreator : public ICellCreator^** |

|  |
| --- |
| [JScript]  **public class LeftUpCellCreator  implements ICellCreator** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory.Creators](#topic_0000000000000020)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetCell](#topic_00000000000000FE), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### LeftUpCellCreator.GetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function GetCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function GetCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LeftUpCellCreator](#topic_00000000000000FD)

### PowerUpCellCreator Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.Creators.PowerUpCellCreator**

|  |
| --- |
| [Visual Basic]  **Public Class PowerUpCellCreator  Implements ICellCreator** |

|  |
| --- |
| [C#]  **public class PowerUpCellCreator : ICellCreator** |

|  |
| --- |
| [C++]  **public ref class PowerUpCellCreator : public ICellCreator^** |

|  |
| --- |
| [JScript]  **public class PowerUpCellCreator  implements ICellCreator** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory.Creators](#topic_0000000000000020)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetCell](#topic_0000000000000024), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### PowerUpCellCreator.GetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function GetCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function GetCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PowerUpCellCreator](#topic_0000000000000023)

### RightDownCellCreator Class

Creates a new Cell, facing rightdown

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.Creators.RightDownCellCreator**

|  |
| --- |
| [Visual Basic]  **Public Class RightDownCellCreator  Implements ICellCreator** |

|  |
| --- |
| [C#]  **public class RightDownCellCreator : ICellCreator** |

|  |
| --- |
| [C++]  **public ref class RightDownCellCreator : public ICellCreator^** |

|  |
| --- |
| [JScript]  **public class RightDownCellCreator  implements ICellCreator** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory.Creators](#topic_0000000000000020)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetCell](#topic_00000000000000F8), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### RightDownCellCreator.GetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function GetCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function GetCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [RightDownCellCreator](#topic_00000000000000F7)

### RightUpCellCreator Class

Creates a new Cell, facing rightup

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.Creators.RightUpCellCreator**

|  |
| --- |
| [Visual Basic]  **Public Class RightUpCellCreator  Implements ICellCreator** |

|  |
| --- |
| [C#]  **public class RightUpCellCreator : ICellCreator** |

|  |
| --- |
| [C++]  **public ref class RightUpCellCreator : public ICellCreator^** |

|  |
| --- |
| [JScript]  **public class RightUpCellCreator  implements ICellCreator** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory.Creators](#topic_0000000000000020)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetCell](#topic_00000000000000FA), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### RightUpCellCreator.GetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function GetCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function GetCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [RightUpCellCreator](#topic_00000000000000F9)

### VerticalCellCreator Class

Creates a new cell, facing vertical

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Initialization.CellFactory.Creators.VerticalCellCreator**

|  |
| --- |
| [Visual Basic]  **Public Class VerticalCellCreator  Implements ICellCreator** |

|  |
| --- |
| [C#]  **public class VerticalCellCreator : ICellCreator** |

|  |
| --- |
| [C++]  **public ref class VerticalCellCreator : public ICellCreator^** |

|  |
| --- |
| [JScript]  **public class VerticalCellCreator  implements ICellCreator** |

## Requirements

**Namespace:** [PacManShared.Initialization.CellFactory.Creators](#topic_0000000000000020)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetCell](#topic_0000000000000102), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### VerticalCellCreator.GetCell Method

|  |
| --- |
| [Visual Basic]  **Public Function GetCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ GetCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function GetCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [VerticalCellCreator](#topic_0000000000000101)

## PacManShared.LevelClasses Namespace

## Classes

[Level](#topic_000000000000008D), [NullEffect](#topic_0000000000000103)

## Interfaces

[ICellEffect](#topic_0000000000000001)

### Level Class

This class hold the current level

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.LevelClasses.Level**

|  |
| --- |
| [Visual Basic]  **Public Class Level** |

|  |
| --- |
| [C#]  **public class Level** |

|  |
| --- |
| [C++]  **public ref class Level** |

|  |
| --- |
| [JScript]  **public class Level** |

## Requirements

**Namespace:** [PacManShared.LevelClasses](#topic_0000000000000000)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Level Constructor](#topic_000000000000008E)

## Properties

[Grid](#topic_0000000000000099), [LevelPosition](#topic_000000000000009B), [Size](#topic_000000000000009A)

## Methods

[ApplyStructure](#topic_0000000000000097), [Draw](#topic_0000000000000094), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetLevelStruct](#topic_0000000000000098), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [LoadContent](#topic_0000000000000093), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Reset](#topic_0000000000000096), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_0000000000000095), [getCell](#topic_000000000000008F), [setCell](#topic_0000000000000092)

#### Level Constructor

Constructs a new Level

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *width* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *height* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *levelPosition* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Level(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***width*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***height*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [C++]  **public:  Level(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***width*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***height*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [JScript]  **public function Level(  *width* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *height* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *levelPosition* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **);** |

## Parameters

*width*

How many cells wide the level is

*height*

How high the level is

*levelPosition*

The offsett of the level

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.Grid Property

Returns the whole grid

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property Grid() As** [**Cell**](#topic_0000000000000005)**(,)** |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005)**[,] Grid {get;}** |

|  |
| --- |
| [C++]  **public:  property array<** [**Cell**](#topic_0000000000000005)**^, 2 >^ Grid {  array<** [**Cell**](#topic_0000000000000005)**^, 2 >^ get( ); }** |

|  |
| --- |
| [JScript]  **public function get Grid() :** [**Cell**](#topic_0000000000000005)**[,];** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.LevelPosition Property

Gets or sets the position of the level onscreen

|  |
| --- |
| [Visual Basic]  **Public Property LevelPosition() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **LevelPosition {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **LevelPosition {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( );  void set(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get LevelPosition() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**; public function set LevelPosition(value :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.Size Property

Gets the Size of the level (how many cells it's containing)

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property Size() As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **public** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **Size {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **Size {** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get Size() :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.ApplyStructure Method

Applys a structure (from a timestamp for example) to the level

|  |
| --- |
| [Visual Basic]  **Public Sub ApplyStructure( \_  ByVal *levelStruct* As** [**LevelStruct**](#topic_00000000000000E5) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyStructure(** [**LevelStruct**](#topic_00000000000000E5) ***levelStruct* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyStructure(** [**LevelStruct**](#topic_00000000000000E5) ***levelStruct* )** |

|  |
| --- |
| [JScript]  **public function ApplyStructure(  *levelStruct* :** [**LevelStruct**](#topic_00000000000000E5) **);** |

## Parameters

*levelStruct*

The LevelStruct to apply

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.Draw Method

Draws the level

|  |
| --- |
| [Visual Basic]  **Public Sub Draw( \_  ByVal *spriteBatch* As** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**, \_  ByVal *layer* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx) ***spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**^ *spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer* )** |

|  |
| --- |
| [JScript]  **public function Draw(  *spriteBatch* :** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**,  *layer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*spriteBatch*

spritebatch from the game class

*layer*

The layer of the level

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.GetLevelStruct Method

Gets a structure according to the current status of the level

|  |
| --- |
| [Visual Basic]  **Public Function GetLevelStruct() As** [**LevelStruct**](#topic_00000000000000E5) |

|  |
| --- |
| [C#]  **public** [**LevelStruct**](#topic_00000000000000E5) **GetLevelStruct()** |

|  |
| --- |
| [C++]  **public:** [**LevelStruct**](#topic_00000000000000E5) **GetLevelStruct()** |

|  |
| --- |
| [JScript]  **public function GetLevelStruct() :** [**LevelStruct**](#topic_00000000000000E5)**;** |

## Returns

The levelStruct

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.LoadContent Method

Loads the content (textures, sounds, whatever) for the level

|  |
| --- |
| [Visual Basic]  **Public Sub LoadContent( \_  ByVal *contentManager* As** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) ***contentManager* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx)**^ *contentManager* )** |

|  |
| --- |
| [JScript]  **public function LoadContent(  *contentManager* :** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **);** |

## Parameters

*contentManager*

Content manager from the game class

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.Reset Method

Resets the level to it's starting state

|  |
| --- |
| [Visual Basic]  **Public Sub Reset()** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [JScript]  **public function Reset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.Update Method

Updates the level

|  |
| --- |
| [Visual Basic]  **Public Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

Game time from the game class

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.getCell (Microsoft.Xna.Framework.Vector2) Method

Gets a cell from the level. The vector 2 will be rounded to the nearest integer value

|  |
| --- |
| [Visual Basic]  **Public Function getCell( \_  ByVal *position* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **getCell(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***position* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ getCell(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***position* )** |

|  |
| --- |
| [JScript]  **public function getCell(  *position* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*position*

A vector2 from where to get the cell

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.getCell (System.Int32, System.Int32) Method

Gets the cell at the specified position

|  |
| --- |
| [Visual Basic]  **Public Function getCell( \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **getCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ getCell(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function getCell(  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*x*

The x coordinate of the cell

*y*

The y coordinate of the cell

## Returns

The cell at the given coordinates or a emptycell at the requested position

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.getCell (Microsoft.Xna.Framework.Point) Method

Gets a cell from the level

|  |
| --- |
| [Visual Basic]  **Public Function getCell( \_  ByVal *point* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **\_ ) As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public** [**Cell**](#topic_0000000000000005) **getCell(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***point* )** |

|  |
| --- |
| [C++]  **public:** [**Cell**](#topic_0000000000000005)**^ getCell(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***point* )** |

|  |
| --- |
| [JScript]  **public function getCell(  *point* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **) :** [**Cell**](#topic_0000000000000005)**;** |

## Parameters

*point*

A point

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

#### Level.setCell Method

Replaces a cell at the specified coordinates

|  |
| --- |
| [Visual Basic]  **Public Sub setCell( \_  ByVal *cell* As** [**Cell**](#topic_0000000000000005)**, \_  ByVal *x* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *y* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **setCell(** [**Cell**](#topic_0000000000000005) ***cell*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **setCell(** [**Cell**](#topic_0000000000000005)**^ *cell*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***x*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***y* )** |

|  |
| --- |
| [JScript]  **public function setCell(  *cell* :** [**Cell**](#topic_0000000000000005)**,  *x* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *y* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*cell*

The replacement cell

*x*

The x coordinate of the cell

*y*

The y coordinate of the cell

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Level](#topic_000000000000008D)

### NullEffect Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.LevelClasses.NullEffect**

|  |
| --- |
| [Visual Basic]  **Public Class NullEffect  Implements** [**ICellEffect**](#topic_0000000000000001) |

|  |
| --- |
| [C#]  **public class NullEffect :** [**ICellEffect**](#topic_0000000000000001) |

|  |
| --- |
| [C++]  **public ref class NullEffect : public** [**ICellEffect**](#topic_0000000000000001)**^** |

|  |
| --- |
| [JScript]  **public class NullEffect  implements** [**ICellEffect**](#topic_0000000000000001) |

## Requirements

**Namespace:** [PacManShared.LevelClasses](#topic_0000000000000000)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[NullEffect Constructor](#topic_0000000000000104)

## Methods

[ApplyEffect](#topic_0000000000000105), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [LoadEffect](#topic_0000000000000107), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Reset](#topic_0000000000000106), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### NullEffect Constructor

Initializes a new instance of the [NullEffect](#topic_0000000000000103) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New()** |

|  |
| --- |
| [C#]  **public NullEffect()** |

|  |
| --- |
| [C++]  **public:  NullEffect()** |

|  |
| --- |
| [JScript]  **public function NullEffect();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NullEffect](#topic_0000000000000103)

#### NullEffect.ApplyEffect Method

|  |
| --- |
| [Visual Basic]  **Public Sub ApplyEffect( \_  ByVal *movObj* As** [**MovableObject**](#topic_000000000000010B) **\_ ) Implements \_** [**ICellEffect.ApplyEffect**](#topic_0000000000000002) |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B) ***movObj* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B)**^ *movObj* )** |

|  |
| --- |
| [JScript]  **public function ApplyEffect(  *movObj* :** [**MovableObject**](#topic_000000000000010B) **);** |

## Parameters

*movObj*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NullEffect](#topic_0000000000000103)

#### NullEffect.LoadEffect Method

|  |
| --- |
| [Visual Basic]  **Public Sub LoadEffect( \_  ByVal *level* As** [**Level**](#topic_000000000000008D) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadEffect(** [**Level**](#topic_000000000000008D) ***level* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadEffect(** [**Level**](#topic_000000000000008D)**^ *level* )** |

|  |
| --- |
| [JScript]  **public function LoadEffect(  *level* :** [**Level**](#topic_000000000000008D) **);** |

## Parameters

*level*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NullEffect](#topic_0000000000000103)

#### NullEffect.Reset Method

|  |
| --- |
| [Visual Basic]  **Public Sub Reset() Implements \_** [**ICellEffect.Reset**](#topic_0000000000000003) |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [JScript]  **public function Reset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [NullEffect](#topic_0000000000000103)

### ICellEffect Interface

|  |
| --- |
| [Visual Basic]  **Public Interface ICellEffect** |

|  |
| --- |
| [C#]  **public interface ICellEffect** |

|  |
| --- |
| [C++]  **public interface class ICellEffect** |

|  |
| --- |
| [JScript]  **public interface ICellEffect** |

## Requirements

**Namespace:** [PacManShared.LevelClasses](#topic_0000000000000000)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[ApplyEffect](#topic_0000000000000002), [Reset](#topic_0000000000000003)

#### ICellEffect.ApplyEffect Method

|  |
| --- |
| [Visual Basic]  **Sub ApplyEffect( \_  ByVal *movObj* As** [**MovableObject**](#topic_000000000000010B) **\_ )** |

|  |
| --- |
| [C#]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B) ***movObj* )** |

|  |
| --- |
| [C++]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **ApplyEffect(** [**MovableObject**](#topic_000000000000010B)**^ *movObj* )** |

|  |
| --- |
| [JScript]  **function ApplyEffect(  *movObj* :** [**MovableObject**](#topic_000000000000010B) **);** |

## Parameters

*movObj*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [ICellEffect](#topic_0000000000000001)

#### ICellEffect.Reset Method

|  |
| --- |
| [Visual Basic]  **Sub Reset()** |

|  |
| --- |
| [C#]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [C++]  [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [JScript]  **function Reset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [ICellEffect](#topic_0000000000000001)

## PacManShared.LevelClasses.Cells Namespace

## Classes

[Cell](#topic_0000000000000005)

### Cell Class

A cell of a level that can be either a way or a wall for the player objects

|  |
| --- |
| [Visual Basic]  **Public Class Cell  Inherits** [**Sprite**](#topic_0000000000000077) |

|  |
| --- |
| [C#]  **public class Cell :** [**Sprite**](#topic_0000000000000077) |

|  |
| --- |
| [C++]  **public ref class Cell : public** [**Sprite**](#topic_0000000000000077)**^** |

|  |
| --- |
| [JScript]  **public class Cell  extends** [**Sprite**](#topic_0000000000000077) |

## Requirements

**Namespace:** [PacManShared.LevelClasses.Cells](#topic_0000000000000004)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Cell Constructor](#topic_0000000000000006)

## Properties

[CellEffect](#topic_0000000000000014), [Center](#topic_0000000000000010), [Empty](#topic_0000000000000012), [GridPosition](#topic_000000000000000F), [IntersectRectangle](#topic_000000000000000E), [IsWall](#topic_000000000000000D), [Position](#topic_0000000000000011), [Size](#topic_0000000000000013), [Texture](#topic_000000000000007E) (inherited from [Sprite](#topic_0000000000000077)), [TextureAsset](#topic_000000000000007D) (inherited from [Sprite](#topic_0000000000000077))

## Methods

[Draw](#topic_000000000000000B), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [LoadContent](#topic_0000000000000009), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Reset](#topic_000000000000000C), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_000000000000000A)

#### Cell Constructor

Generates an empty cell.

|  |
| --- |
| [Visual Basic]  **Public Sub New()** |

|  |
| --- |
| [C#]  **public Cell()** |

|  |
| --- |
| [C++]  **public:  Cell()** |

|  |
| --- |
| [JScript]  **public function Cell();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell Constructor (System.String, Microsoft.Xna.Framework.Point, System.Boolean)

Creates a new cell with the specified parameters

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *textureAsset* As** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**, \_  ByVal *gridPosition* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *isWall* As** [**Boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Cell(** [**string**](http://msdn.microsoft.com/en-us/library/system.string.aspx) ***textureAsset*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***gridPosition*,** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) ***isWall* )** |

|  |
| --- |
| [C++]  **public:  Cell(** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**^ *textureAsset*,** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***gridPosition*,** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) ***isWall* )** |

|  |
| --- |
| [JScript]  **public function Cell(  *textureAsset* :** [**String**](http://msdn.microsoft.com/en-us/library/system.string.aspx)**,  *gridPosition* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *isWall* :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **);** |

## Parameters

*textureAsset*

The path to the texture of this Cell

*gridPosition*

Which position this cell will be placed at

*isWall*

Defines if this cell is unpassable

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell Constructor (Microsoft.Xna.Framework.Point, System.Boolean)

Creates a new cell

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *gridPosition* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *isWall* As** [**Boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Cell(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***gridPosition*,** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) ***isWall* )** |

|  |
| --- |
| [C++]  **public:  Cell(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***gridPosition*,** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) ***isWall* )** |

|  |
| --- |
| [JScript]  **public function Cell(  *gridPosition* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *isWall* :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **);** |

## Parameters

*gridPosition*

the position inside the grid

*isWall*

if this cell is a wall

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.CellEffect Property

Returns the effect this cell has on an object

|  |
| --- |
| [Visual Basic]  **Public Property CellEffect() As** [**ICellEffect**](#topic_0000000000000001) |

|  |
| --- |
| [C#]  **public** [**ICellEffect**](#topic_0000000000000001) **CellEffect {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**ICellEffect**](#topic_0000000000000001)**^ CellEffect {** [**ICellEffect**](#topic_0000000000000001)**^ get( );  void set(** [**ICellEffect**](#topic_0000000000000001)**^ value  ); }** |

|  |
| --- |
| [JScript]  **public function get CellEffect() :** [**ICellEffect**](#topic_0000000000000001)**; public function set CellEffect(value :** [**ICellEffect**](#topic_0000000000000001)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.Center Property

Returns the position of the center of this cell

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property Center() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public override** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Center {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get Center() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.Empty Property

Returns an empty Cell

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Shared Property Empty() As** [**Cell**](#topic_0000000000000005) |

|  |
| --- |
| [C#]  **public static** [**Cell**](#topic_0000000000000005) **Empty {get;}** |

|  |
| --- |
| [C++]  **public:  static property** [**Cell**](#topic_0000000000000005)**^ Empty {** [**Cell**](#topic_0000000000000005)**^ get( ); }** |

|  |
| --- |
| [JScript]  **public static function get Empty() :** [**Cell**](#topic_0000000000000005)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.GridPosition Property

Returns the position this cell has within the grid

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property GridPosition() As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) |

|  |
| --- |
| [C#]  **public** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **GridPosition {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **GridPosition {** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get GridPosition() :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.IntersectRectangle Property

Returns a rectangle to check intersections with

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Overrides Property IntersectRectangle() As** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) |

|  |
| --- |
| [C#]  **public override** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **IntersectRectangle {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **IntersectRectangle {** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get IntersectRectangle() :** [**Rectangle**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.rectangle.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.IsWall Property

Returns wether this cell is a wall

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property IsWall() As** [**Boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) |

|  |
| --- |
| [C#]  **public** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsWall {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsWall {** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get IsWall() :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.Position Property

Returns the position on-screen

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property Position() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Position {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Position {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get Position() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.Size Property

Gets the size of a sprite

|  |
| --- |
| [Visual Basic]  **Public Overrides Property Size() As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) |

|  |
| --- |
| [C#]  **public override** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Size {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **Size {** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **get( );  void set(** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get Size() :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**; public function set Size(value :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.Draw Method

Draws this cell at its position

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Draw( \_  ByVal *spriteBatch* As** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**, \_  ByVal *layer* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *levelPosition* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx) ***spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Draw(** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**^ *spriteBatch*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***layer*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***levelPosition* )** |

|  |
| --- |
| [JScript]  **public function Draw(  *spriteBatch* :** [**SpriteBatch**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.graphics.spritebatch.aspx)**,  *layer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *levelPosition* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) **);** |

## Parameters

*spriteBatch*

The spritebatch from the game class

*layer*

How deep this cell is

*levelPosition*

The offset of the level on-screen

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.LoadContent Method

Loads the texture of this cell

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub LoadContent( \_  ByVal *contentManager* As** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) ***contentManager* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **LoadContent(** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx)**^ *contentManager* )** |

|  |
| --- |
| [JScript]  **public function LoadContent(  *contentManager* :** [**ContentManager**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.content.contentmanager.aspx) **);** |

## Parameters

*contentManager*

The content manager of the game class

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.Reset Method

Resets the celleffect of this cell

|  |
| --- |
| [Visual Basic]  **Public Sub Reset()** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Reset()** |

|  |
| --- |
| [JScript]  **public function Reset();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

#### Cell.Update Method

Updates the cell

|  |
| --- |
| [Visual Basic]  **Public Overrides Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127) **\_ )** |

|  |
| --- |
| [C#]  **public override** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127) **);** |

## Parameters

*gameTime*

GameTime from the game class

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Cell](#topic_0000000000000005)

## PacManShared.LevelClasses.Effects Namespace

## Classes

[PowerUpEffectEventArgs](#topic_00000000000000DC)

### PowerUpEffectEventArgs Class

Contains arguments for this event

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

[System.EventArgs](http://msdn.microsoft.com/en-us/library/system.eventargs.aspx)

**PacManShared.LevelClasses.Effects.PowerUpEffectEventArgs**

|  |
| --- |
| [Visual Basic]  **Public Class PowerUpEffectEventArgs  Inherits** [**EventArgs**](http://msdn.microsoft.com/en-us/library/system.eventargs.aspx) |

|  |
| --- |
| [C#]  **public class PowerUpEffectEventArgs :** [**EventArgs**](http://msdn.microsoft.com/en-us/library/system.eventargs.aspx) |

|  |
| --- |
| [C++]  **public ref class PowerUpEffectEventArgs : public** [**EventArgs**](http://msdn.microsoft.com/en-us/library/system::eventargs.aspx)**^** |

|  |
| --- |
| [JScript]  **public class PowerUpEffectEventArgs  extends** [**EventArgs**](http://msdn.microsoft.com/en-us/library/system.eventargs.aspx) |

## Requirements

**Namespace:** [PacManShared.LevelClasses.Effects](#topic_000000000000001E)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[PowerUpEffectEventArgs Constructor](#topic_00000000000000DD)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### PowerUpEffectEventArgs Constructor

Creates a new PowerUpEffectEventArgs

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *timer* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *speed* As** [**Single**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**, \_  ByVal *ghostBehaviour* As** [**EGhostBehaviour**](#topic_0000000000000108) **\_ )** |

|  |
| --- |
| [C#]  **public PowerUpEffectEventArgs(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***timer*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***speed*,** [**EGhostBehaviour**](#topic_0000000000000108) ***ghostBehaviour* )** |

|  |
| --- |
| [C++]  **public:  PowerUpEffectEventArgs(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***timer*,** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx) ***speed*,** [**EGhostBehaviour**](#topic_0000000000000108) ***ghostBehaviour* )** |

|  |
| --- |
| [JScript]  **public function PowerUpEffectEventArgs(  *timer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *speed* :** [**float**](http://msdn.microsoft.com/en-us/library/system.single.aspx)**,  *ghostBehaviour* :** [**EGhostBehaviour**](#topic_0000000000000108) **);** |

## Parameters

*timer*

How long the powerup will have an effect

*speed*

How much the speed will be altered

*ghostBehaviour*

The behaviour ghosts have after this effect

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [PowerUpEffectEventArgs](#topic_00000000000000DC)

## PacManShared.Simulation Namespace

## Classes

[GameLoop](#topic_0000000000000056), [SimulationGameTime](#topic_000000000000009C)

### GameLoop Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Simulation.GameLoop**

|  |
| --- |
| [Visual Basic]  **Public Class GameLoop** |

|  |
| --- |
| [C#]  **public class GameLoop** |

|  |
| --- |
| [C++]  **public ref class GameLoop** |

|  |
| --- |
| [JScript]  **public class GameLoop** |

## Requirements

**Namespace:** [PacManShared.Simulation](#topic_0000000000000055)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[GameLoop Constructor](#topic_0000000000000059)

## Properties

[InputQueue](#topic_000000000000005E)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [NextSimulationStep](#topic_000000000000005D), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [SimulationLoop](#topic_000000000000005C), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Update](#topic_000000000000005B)

## Events

[FinishedSimulation](#topic_0000000000000058), [StartingSimulation](#topic_0000000000000057)

#### GameLoop Constructor

Initializes a new instance of the [GameLoop](#topic_0000000000000056) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New()** |

|  |
| --- |
| [C#]  **public GameLoop()** |

|  |
| --- |
| [C++]  **public:  GameLoop()** |

|  |
| --- |
| [JScript]  **public function GameLoop();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameLoop](#topic_0000000000000056)

#### GameLoop Constructor (System.Int32)

Initializes a new instance of the [GameLoop](#topic_0000000000000056) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *idleTimer* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public GameLoop(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***idleTimer* )** |

|  |
| --- |
| [C++]  **public:  GameLoop(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***idleTimer* )** |

|  |
| --- |
| [JScript]  **public function GameLoop(  *idleTimer* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*idleTimer*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameLoop](#topic_0000000000000056)

#### GameLoop.InputQueue Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public Property InputQueue() As** [**Queue**](http://msdn.microsoft.com/en-us/library/7977ey2c.aspx)**(Of** [**Command**](#topic_00000000000000E9)**)** |

|  |
| --- |
| [C#]  **public** [**Queue**](http://msdn.microsoft.com/en-us/library/7977ey2c.aspx)**<**[**Command**](#topic_00000000000000E9)**> InputQueue {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**Queue**](http://msdn.microsoft.com/en-us/library/7977ey2c.aspx)**<**[**Command**](#topic_00000000000000E9)**>^ InputQueue {** [**Queue**](http://msdn.microsoft.com/en-us/library/7977ey2c.aspx)**<**[**Command**](#topic_00000000000000E9)**>^ get( );  void set(** [**Queue**](http://msdn.microsoft.com/en-us/library/7977ey2c.aspx)**<**[**Command**](#topic_00000000000000E9)**>^ value  ); }** |

|  |
| --- |
| [JScript]  **JScript does not support generic types and methods.** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameLoop](#topic_0000000000000056)

#### GameLoop.NextSimulationStep Method

|  |
| --- |
| [Visual Basic]  **Public Function NextSimulationStep( \_  ByVal *x* As** [**Command**](#topic_00000000000000E9)**, \_  ByVal *y* As** [**Command**](#topic_00000000000000E9) **\_ ) As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) |

|  |
| --- |
| [C#]  **public** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **NextSimulationStep(** [**Command**](#topic_00000000000000E9) ***x*,** [**Command**](#topic_00000000000000E9) ***y* )** |

|  |
| --- |
| [C++]  **public:** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **NextSimulationStep(** [**Command**](#topic_00000000000000E9) ***x*,** [**Command**](#topic_00000000000000E9) ***y* )** |

|  |
| --- |
| [JScript]  **public function NextSimulationStep(  *x* :** [**Command**](#topic_00000000000000E9)**,  *y* :** [**Command**](#topic_00000000000000E9) **) :** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameLoop](#topic_0000000000000056)

#### GameLoop.SimulationLoop Method

|  |
| --- |
| [Visual Basic]  **Public Sub SimulationLoop( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127)**, \_  ByVal *gameStateManager* As** [**GameStateManager**](#topic_000000000000012B) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SimulationLoop(** [**IGameTime**](#topic_0000000000000127) ***gameTime*,** [**GameStateManager**](#topic_000000000000012B) ***gameStateManager* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SimulationLoop(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime*,** [**GameStateManager**](#topic_000000000000012B)**^ *gameStateManager* )** |

|  |
| --- |
| [JScript]  **public function SimulationLoop(  *gameTime* :** [**IGameTime**](#topic_0000000000000127)**,  *gameStateManager* :** [**GameStateManager**](#topic_000000000000012B) **);** |

## Parameters

*gameTime*

*gameStateManager*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameLoop](#topic_0000000000000056)

#### GameLoop.Update Method

|  |
| --- |
| [Visual Basic]  **Public Sub Update( \_  ByVal *gameTime* As** [**IGameTime**](#topic_0000000000000127)**, \_  ByVal *gameStateManager* As** [**GameStateManager**](#topic_000000000000012B) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127) ***gameTime*,** [**GameStateManager**](#topic_000000000000012B) ***gameStateManager* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Update(** [**IGameTime**](#topic_0000000000000127)**^ *gameTime*,** [**GameStateManager**](#topic_000000000000012B)**^ *gameStateManager* )** |

|  |
| --- |
| [JScript]  **public function Update(  *gameTime* :** [**IGameTime**](#topic_0000000000000127)**,  *gameStateManager* :** [**GameStateManager**](#topic_000000000000012B) **);** |

## Parameters

*gameTime*

*gameStateManager*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameLoop](#topic_0000000000000056)

#### FinishedSimulation Event

Occurs when .

|  |
| --- |
| [Visual Basic]  **Public Event FinishedSimulation() As FinishedSimulationEvent** |

|  |
| --- |
| [C#]  **public event FinishedSimulationEvent FinishedSimulation** |

|  |
| --- |
| [C++]  **public:  event FinishedSimulationEvent^ FinishedSimulation { }** |

|  |
| --- |
| [JScript]  **In JScript, you can handle the events defined by a class, but you cannot define your own.** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameLoop](#topic_0000000000000056)

#### StartingSimulation Event

Occurs when .

|  |
| --- |
| [Visual Basic]  **Public Event StartingSimulation() As StartingSimulationEvent** |

|  |
| --- |
| [C#]  **public event StartingSimulationEvent StartingSimulation** |

|  |
| --- |
| [C++]  **public:  event StartingSimulationEvent^ StartingSimulation { }** |

|  |
| --- |
| [JScript]  **In JScript, you can handle the events defined by a class, but you cannot define your own.** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [GameLoop](#topic_0000000000000056)

### SimulationGameTime Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Simulation.SimulationGameTime**

|  |
| --- |
| [Visual Basic]  **Public Class SimulationGameTime  Implements** [**IGameTime**](#topic_0000000000000127) |

|  |
| --- |
| [C#]  **public class SimulationGameTime :** [**IGameTime**](#topic_0000000000000127) |

|  |
| --- |
| [C++]  **public ref class SimulationGameTime : public** [**IGameTime**](#topic_0000000000000127)**^** |

|  |
| --- |
| [JScript]  **public class SimulationGameTime  implements** [**IGameTime**](#topic_0000000000000127) |

## Requirements

**Namespace:** [PacManShared.Simulation](#topic_0000000000000055)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[SimulationGameTime Constructor](#topic_000000000000009D)

## Properties

[ElapsedGameTime](#topic_000000000000009F), [IsRunningSlowly](#topic_00000000000000A2), [SimulationTime](#topic_00000000000000A1), [TotalGameTime](#topic_00000000000000A0)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [SetElapsedMilliseconds](#topic_000000000000009E), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### SimulationGameTime Constructor

Initializes a new instance of the [SimulationGameTime](#topic_000000000000009C) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *totalGameTime* As** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx)**, \_  ByVal *simulationTime* As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public SimulationGameTime(** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) ***totalGameTime*,** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***simulationTime* )** |

|  |
| --- |
| [C++]  **public:  SimulationGameTime(** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) ***totalGameTime*,** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***simulationTime* )** |

|  |
| --- |
| [JScript]  **public function SimulationGameTime(  *totalGameTime* :** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx)**,  *simulationTime* :** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **);** |

## Parameters

*totalGameTime*

*simulationTime*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [SimulationGameTime](#topic_000000000000009C)

#### SimulationGameTime.ElapsedGameTime Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property ElapsedGameTime() As** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **Implements \_** [**IGameTime.ElapsedGameTime**](#topic_000000000000012A) |

|  |
| --- |
| [C#]  **public** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **ElapsedGameTime {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **ElapsedGameTime {** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get ElapsedGameTime() :** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [SimulationGameTime](#topic_000000000000009C)

#### SimulationGameTime.IsRunningSlowly Property

Gets a value indicating whether this instance .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property IsRunningSlowly() As** [**Boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **Implements \_** [**IGameTime.IsRunningSlowly**](#topic_0000000000000128) |

|  |
| --- |
| [C#]  **public** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsRunningSlowly {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **IsRunningSlowly {** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get IsRunningSlowly() :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**;** |

## Property Value

**true** if this instance ; otherwise, **false**.

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [SimulationGameTime](#topic_000000000000009C)

#### SimulationGameTime.SimulationTime Property

Gets or sets .

|  |
| --- |
| [Visual Basic]  **Public Property SimulationTime() As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) |

|  |
| --- |
| [C#]  **public** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **SimulationTime {get; set;}** |

|  |
| --- |
| [C++]  **public:  property** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **SimulationTime {** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **get( );  void set(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **value  ); }** |

|  |
| --- |
| [JScript]  **public function get SimulationTime() :** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx)**; public function set SimulationTime(value :** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx)**);** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [SimulationGameTime](#topic_000000000000009C)

#### SimulationGameTime.TotalGameTime Property

Gets .

|  |
| --- |
| [Visual Basic]  **Public ReadOnly Property TotalGameTime() As** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **Implements \_** [**IGameTime.TotalGameTime**](#topic_0000000000000129) |

|  |
| --- |
| [C#]  **public** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **TotalGameTime {get;}** |

|  |
| --- |
| [C++]  **public:  property** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **TotalGameTime {** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx) **get( ); }** |

|  |
| --- |
| [JScript]  **public function get TotalGameTime() :** [**TimeSpan**](http://msdn.microsoft.com/en-us/library/system.timespan.aspx)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [SimulationGameTime](#topic_000000000000009C)

#### SimulationGameTime.SetElapsedMilliseconds Method

|  |
| --- |
| [Visual Basic]  **Public Sub SetElapsedMilliseconds( \_  ByVal *milliseconds* As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetElapsedMilliseconds(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***milliseconds* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SetElapsedMilliseconds(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***milliseconds* )** |

|  |
| --- |
| [JScript]  **public function SetElapsedMilliseconds(  *milliseconds* :** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **);** |

## Parameters

*milliseconds*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [SimulationGameTime](#topic_000000000000009C)

## PacManShared.Util.TimeStamps Namespace

## Classes

[TimeStampEventArgs](#topic_00000000000000A6), [TimeStampManager](#topic_000000000000013D)

## Structures

[Command](#topic_00000000000000E9), [LevelStruct](#topic_00000000000000E5), [MovObjStruct](#topic_00000000000000E2), [TimeStamp](#topic_00000000000000E7)

### TimeStampEventArgs Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

[System.EventArgs](http://msdn.microsoft.com/en-us/library/system.eventargs.aspx)

**PacManShared.Util.TimeStamps.TimeStampEventArgs**

|  |
| --- |
| [Visual Basic]  **Public Class TimeStampEventArgs  Inherits** [**EventArgs**](http://msdn.microsoft.com/en-us/library/system.eventargs.aspx) |

|  |
| --- |
| [C#]  **public class TimeStampEventArgs :** [**EventArgs**](http://msdn.microsoft.com/en-us/library/system.eventargs.aspx) |

|  |
| --- |
| [C++]  **public ref class TimeStampEventArgs : public** [**EventArgs**](http://msdn.microsoft.com/en-us/library/system::eventargs.aspx)**^** |

|  |
| --- |
| [JScript]  **public class TimeStampEventArgs  extends** [**EventArgs**](http://msdn.microsoft.com/en-us/library/system.eventargs.aspx) |

## Requirements

**Namespace:** [PacManShared.Util.TimeStamps](#topic_00000000000000A5)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Methods

[Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

### TimeStampManager Class

[System.Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)

**PacManShared.Util.TimeStamps.TimeStampManager**

|  |
| --- |
| [Visual Basic]  **Public Class TimeStampManager** |

|  |
| --- |
| [C#]  **public class TimeStampManager** |

|  |
| --- |
| [C++]  **public ref class TimeStampManager** |

|  |
| --- |
| [JScript]  **public class TimeStampManager** |

## Requirements

**Namespace:** [PacManShared.Util.TimeStamps](#topic_00000000000000A5)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[TimeStampManager Constructor](#topic_000000000000013E)

## Methods

[AddFirstBefore](#topic_0000000000000143), [BatchPop](#topic_0000000000000144), [ElementAt](#topic_0000000000000145), [Equals](http://msdn.microsoft.com/en-us/library/system.object.equals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Finalize](http://msdn.microsoft.com/en-us/library/system.object.finalize.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [FindTimeStamp](#topic_0000000000000147), [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [MemberwiseClone](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [Peek](#topic_0000000000000142), [Pop](#topic_0000000000000141), [Push](#topic_0000000000000140), [ReferenceEquals](http://msdn.microsoft.com/en-us/library/system.object.referenceequals.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx)), [ReplaceTimeStamp](#topic_0000000000000146), [SwapFirstTimeStamp](#topic_0000000000000148), [ToString](http://msdn.microsoft.com/en-us/library/system.object.tostring.aspx) (inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx))

#### TimeStampManager Constructor

Initializes a new instance of the [TimeStampManager](#topic_000000000000013D) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New()** |

|  |
| --- |
| [C#]  **public TimeStampManager()** |

|  |
| --- |
| [C++]  **public:  TimeStampManager()** |

|  |
| --- |
| [JScript]  **public function TimeStampManager();** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager Constructor (System.Int32)

Initializes a new instance of the [TimeStampManager](#topic_000000000000013D) class.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *max* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public TimeStampManager(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***max* )** |

|  |
| --- |
| [C++]  **public:  TimeStampManager(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***max* )** |

|  |
| --- |
| [JScript]  **public function TimeStampManager(  *max* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*max*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager.AddFirstBefore Method

|  |
| --- |
| [Visual Basic]  **Public Sub AddFirstBefore( \_  ByVal *timeStamp* As** [**TimeStamp**](#topic_00000000000000E7)**, \_  ByVal *time* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **AddFirstBefore(** [**TimeStamp**](#topic_00000000000000E7) ***timeStamp*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **AddFirstBefore(** [**TimeStamp**](#topic_00000000000000E7) ***timeStamp*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time* )** |

|  |
| --- |
| [JScript]  **public function AddFirstBefore(  *timeStamp* :** [**TimeStamp**](#topic_00000000000000E7)**,  *time* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **);** |

## Parameters

*timeStamp*

*time*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager.BatchPop Method

|  |
| --- |
| [Visual Basic]  **Public Function BatchPop( \_  ByVal *time* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**TimeStamp**](#topic_00000000000000E7) |

|  |
| --- |
| [C#]  **public** [**TimeStamp**](#topic_00000000000000E7) **BatchPop(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time* )** |

|  |
| --- |
| [C++]  **public:** [**TimeStamp**](#topic_00000000000000E7) **BatchPop(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time* )** |

|  |
| --- |
| [JScript]  **public function BatchPop(  *time* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**TimeStamp**](#topic_00000000000000E7)**;** |

## Parameters

*time*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager.ElementAt Method

|  |
| --- |
| [Visual Basic]  **Public Function ElementAt( \_  ByVal *index* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**TimeStamp**](#topic_00000000000000E7) |

|  |
| --- |
| [C#]  **public** [**TimeStamp**](#topic_00000000000000E7) **ElementAt(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***index* )** |

|  |
| --- |
| [C++]  **public:** [**TimeStamp**](#topic_00000000000000E7) **ElementAt(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***index* )** |

|  |
| --- |
| [JScript]  **public function ElementAt(  *index* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**TimeStamp**](#topic_00000000000000E7)**;** |

## Parameters

*index*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager.FindTimeStamp Method

|  |
| --- |
| [Visual Basic]  **Public Function FindTimeStamp( \_  ByVal *time* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**LinkedListNode**](http://msdn.microsoft.com/en-us/library/ahf4c754.aspx)**(Of** [**TimeStamp**](#topic_00000000000000E7)**)** |

|  |
| --- |
| [C#]  **public** [**LinkedListNode**](http://msdn.microsoft.com/en-us/library/ahf4c754.aspx)**<**[**TimeStamp**](#topic_00000000000000E7)**> FindTimeStamp(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time* )** |

|  |
| --- |
| [C++]  **public:** [**LinkedListNode**](http://msdn.microsoft.com/en-us/library/ahf4c754.aspx)**<**[**TimeStamp**](#topic_00000000000000E7)**>^ FindTimeStamp(** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time* )** |

|  |
| --- |
| [JScript]  **JScript does not support generic types and methods.** |

## Parameters

*time*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager.Peek Method

|  |
| --- |
| [Visual Basic]  **Public Function Peek() As** [**TimeStamp**](#topic_00000000000000E7) |

|  |
| --- |
| [C#]  **public** [**TimeStamp**](#topic_00000000000000E7) **Peek()** |

|  |
| --- |
| [C++]  **public:** [**TimeStamp**](#topic_00000000000000E7) **Peek()** |

|  |
| --- |
| [JScript]  **public function Peek() :** [**TimeStamp**](#topic_00000000000000E7)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager.Pop Method

|  |
| --- |
| [Visual Basic]  **Public Function Pop() As** [**TimeStamp**](#topic_00000000000000E7) |

|  |
| --- |
| [C#]  **public** [**TimeStamp**](#topic_00000000000000E7) **Pop()** |

|  |
| --- |
| [C++]  **public:** [**TimeStamp**](#topic_00000000000000E7) **Pop()** |

|  |
| --- |
| [JScript]  **public function Pop() :** [**TimeStamp**](#topic_00000000000000E7)**;** |

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager.Push Method

|  |
| --- |
| [Visual Basic]  **Public Sub Push( \_  ByVal *timeStamp* As** [**TimeStamp**](#topic_00000000000000E7) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Push(** [**TimeStamp**](#topic_00000000000000E7) ***timeStamp* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **Push(** [**TimeStamp**](#topic_00000000000000E7) ***timeStamp* )** |

|  |
| --- |
| [JScript]  **public function Push(  *timeStamp* :** [**TimeStamp**](#topic_00000000000000E7) **);** |

## Parameters

*timeStamp*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager.ReplaceTimeStamp Method

|  |
| --- |
| [Visual Basic]  **Public Function ReplaceTimeStamp( \_  ByVal *timeStamp* As** [**TimeStamp**](#topic_00000000000000E7)**, \_  ByVal *time* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **\_ ) As** [**TimeStamp**](#topic_00000000000000E7) |

|  |
| --- |
| [C#]  **public** [**TimeStamp**](#topic_00000000000000E7) **ReplaceTimeStamp(** [**TimeStamp**](#topic_00000000000000E7) ***timeStamp*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time* )** |

|  |
| --- |
| [C++]  **public:** [**TimeStamp**](#topic_00000000000000E7) **ReplaceTimeStamp(** [**TimeStamp**](#topic_00000000000000E7) ***timeStamp*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***time* )** |

|  |
| --- |
| [JScript]  **public function ReplaceTimeStamp(  *timeStamp* :** [**TimeStamp**](#topic_00000000000000E7)**,  *time* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **) :** [**TimeStamp**](#topic_00000000000000E7)**;** |

## Parameters

*timeStamp*

*time*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

#### TimeStampManager.SwapFirstTimeStamp Method

|  |
| --- |
| [Visual Basic]  **Public Sub SwapFirstTimeStamp( \_  ByVal *timeStamp* As** [**TimeStamp**](#topic_00000000000000E7) **\_ )** |

|  |
| --- |
| [C#]  **public** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SwapFirstTimeStamp(** [**TimeStamp**](#topic_00000000000000E7) ***timeStamp* )** |

|  |
| --- |
| [C++]  **public:** [**void**](http://msdn.microsoft.com/en-us/library/system.void.aspx) **SwapFirstTimeStamp(** [**TimeStamp**](#topic_00000000000000E7) ***timeStamp* )** |

|  |
| --- |
| [JScript]  **public function SwapFirstTimeStamp(  *timeStamp* :** [**TimeStamp**](#topic_00000000000000E7) **);** |

## Parameters

*timeStamp*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStampManager](#topic_000000000000013D)

### Command Structure

|  |
| --- |
| [Visual Basic]  **Public Structure Command** |

|  |
| --- |
| [C#]  **public struct Command** |

|  |
| --- |
| [C++]  **public value struct Command** |

|  |
| --- |
| [JScript]  **In JScript, you can use the structures in the .NET Framework, but you cannot define your own.** |

## Requirements

**Namespace:** [PacManShared.Util.TimeStamps](#topic_00000000000000A5)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[Command Constructor](#topic_00000000000000EA)

#### Command Constructor

Initializes a new instance of the [Command](#topic_00000000000000E9) structure.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *direction* As** [**Direction**](#topic_00000000000000F0)**, \_  ByVal *ID* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *time* As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **\_ )** |

|  |
| --- |
| [C#]  **public Command(** [**Direction**](#topic_00000000000000F0) ***direction*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***ID*,** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time* )** |

|  |
| --- |
| [C++]  **public:  Command(** [**Direction**](#topic_00000000000000F0) ***direction*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***ID*,** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time* )** |

|  |
| --- |
| [JScript]  **public function Command(  *direction* :** [**Direction**](#topic_00000000000000F0)**,  *ID* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *time* :** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) **);** |

## Parameters

*direction*

*ID*

*time*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [Command](#topic_00000000000000E9)

### LevelStruct Structure

|  |
| --- |
| [Visual Basic]  **<Serializable()> \_ Public Structure LevelStruct** |

|  |
| --- |
| [C#]  **[Serializable()] public struct LevelStruct** |

|  |
| --- |
| [C++]  **[Serializable()] public value struct LevelStruct** |

|  |
| --- |
| [JScript]  **In JScript, you can use the structures in the .NET Framework, but you cannot define your own.** |

## Requirements

**Namespace:** [PacManShared.Util.TimeStamps](#topic_00000000000000A5)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[LevelStruct Constructor](#topic_00000000000000E6)

#### LevelStruct Constructor

Initializes a new instance of the [LevelStruct](#topic_00000000000000E5) structure.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *grid* As** [**Boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**(,) \_ )** |

|  |
| --- |
| [C#]  **public LevelStruct(** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**[,] *grid* )** |

|  |
| --- |
| [C++]  **public:  LevelStruct(  array<** [**bool**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**, 2 >^ *grid* )** |

|  |
| --- |
| [JScript]  **public function LevelStruct(  *grid* :** [**boolean**](http://msdn.microsoft.com/en-us/library/system.boolean.aspx)**[,] );** |

## Parameters

*grid*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [LevelStruct](#topic_00000000000000E5)

### MovObjStruct Structure

|  |
| --- |
| [Visual Basic]  **<Serializable()> \_ Public Structure MovObjStruct** |

|  |
| --- |
| [C#]  **[Serializable()] public struct MovObjStruct** |

|  |
| --- |
| [C++]  **[Serializable()] public value struct MovObjStruct** |

|  |
| --- |
| [JScript]  **In JScript, you can use the structures in the .NET Framework, but you cannot define your own.** |

## Requirements

**Namespace:** [PacManShared.Util.TimeStamps](#topic_00000000000000A5)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[MovObjStruct Constructor](#topic_00000000000000E3)

## Methods

[Compare](#topic_00000000000000E4)

#### MovObjStruct Constructor

Initializes a new instance of the [MovObjStruct](#topic_00000000000000E2) structure.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *currentCell* As** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**, \_  ByVal *offset* As** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**, \_  ByVal *direction* As** [**Direction**](#topic_00000000000000F0)**, \_  ByVal *ID* As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**, \_  ByVal *movObjType* As** [**MovObjType**](#topic_00000000000000AE) **\_ )** |

|  |
| --- |
| [C#]  **public MovObjStruct(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***currentCell*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***offset*,** [**Direction**](#topic_00000000000000F0) ***direction*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***ID*,** [**MovObjType**](#topic_00000000000000AE) ***movObjType* )** |

|  |
| --- |
| [C++]  **public:  MovObjStruct(** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx) ***currentCell*,** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx) ***offset*,** [**Direction**](#topic_00000000000000F0) ***direction*,** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) ***ID*,** [**MovObjType**](#topic_00000000000000AE) ***movObjType* )** |

|  |
| --- |
| [JScript]  **public function MovObjStruct(  *currentCell* :** [**Point**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.point.aspx)**,  *offset* :** [**Vector2**](http://msdn.microsoft.com/en-us/library/microsoft.xna.framework.vector2.aspx)**,  *direction* :** [**Direction**](#topic_00000000000000F0)**,  *ID* :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**,  *movObjType* :** [**MovObjType**](#topic_00000000000000AE) **);** |

## Parameters

*currentCell*

*offset*

*direction*

*ID*

*movObjType*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovObjStruct](#topic_00000000000000E2)

#### MovObjStruct.Compare Method

|  |
| --- |
| [Visual Basic]  **Public Shared Function Compare( \_  ByVal *x* As** [**MovObjStruct**](#topic_00000000000000E2)**, \_  ByVal *y* As** [**MovObjStruct**](#topic_00000000000000E2) **\_ ) As** [**Integer**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) |

|  |
| --- |
| [C#]  **public static** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **Compare(** [**MovObjStruct**](#topic_00000000000000E2) ***x*,** [**MovObjStruct**](#topic_00000000000000E2) ***y* )** |

|  |
| --- |
| [C++]  **public:  static** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx) **Compare(** [**MovObjStruct**](#topic_00000000000000E2) ***x*,** [**MovObjStruct**](#topic_00000000000000E2) ***y* )** |

|  |
| --- |
| [JScript]  **public static function Compare(  *x* :** [**MovObjStruct**](#topic_00000000000000E2)**,  *y* :** [**MovObjStruct**](#topic_00000000000000E2) **) :** [**int**](http://msdn.microsoft.com/en-us/library/system.int32.aspx)**;** |

## Parameters

*x*

*y*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [MovObjStruct](#topic_00000000000000E2)

### TimeStamp Structure

|  |
| --- |
| [Visual Basic]  **<Serializable()> \_ Public Structure TimeStamp** |

|  |
| --- |
| [C#]  **[Serializable()] public struct TimeStamp** |

|  |
| --- |
| [C++]  **[Serializable()] public value struct TimeStamp** |

|  |
| --- |
| [JScript]  **In JScript, you can use the structures in the .NET Framework, but you cannot define your own.** |

## Requirements

**Namespace:** [PacManShared.Util.TimeStamps](#topic_00000000000000A5)

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

**Assembly:** PacManLibrary (in PacManLibrary.dll)

## Constructors

[TimeStamp Constructor](#topic_00000000000000E8)

#### TimeStamp Constructor

Initializes a new instance of the [TimeStamp](#topic_00000000000000E7) structure.

|  |
| --- |
| [Visual Basic]  **Public Sub New( \_  ByVal *time* As** [**Double**](http://msdn.microsoft.com/en-us/library/system.double.aspx)**, \_  ByVal *levelStruct* As** [**LevelStruct**](#topic_00000000000000E5)**, \_  ByVal *movObjStructs* As** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**(Of** [**MovObjStruct**](#topic_00000000000000E2)**), \_  ByVal *gameState* As** [**GameState**](#topic_000000000000002B) **\_ )** |

|  |
| --- |
| [C#]  **public TimeStamp(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time*,** [**LevelStruct**](#topic_00000000000000E5) ***levelStruct*,** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<**[**MovObjStruct**](#topic_00000000000000E2)**> *movObjStructs*,** [**GameState**](#topic_000000000000002B) ***gameState* )** |

|  |
| --- |
| [C++]  **public:  TimeStamp(** [**double**](http://msdn.microsoft.com/en-us/library/system.double.aspx) ***time*,** [**LevelStruct**](#topic_00000000000000E5) ***levelStruct*,** [**List**](http://msdn.microsoft.com/en-us/library/6sh2ey19.aspx)**<**[**MovObjStruct**](#topic_00000000000000E2)**>^ *movObjStructs*,** [**GameState**](#topic_000000000000002B) ***gameState* )** |

|  |
| --- |
| [JScript]  **JScript does not support generic types and methods.** |

## Parameters

*time*

*levelStruct*

*movObjStructs*

*gameState*

## Requirements

**Platforms:** Windows XP Professional x64 Edition, Windows XP SP2, Windows XP Starter Edition, Windows Vista x64 Edition, Windows Vista, Windows 7 x64 Edition, Windows 7

## See Also

Applies to: [TimeStamp](#topic_00000000000000E7)

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[**AddFirstBefore Method**](#topic_0000000000000143),

[**AddPlayers Method**](#topic_000000000000012D),

[**ApplyEffect Method {PacManShared.Entities.PickUp.Crumb}**](#topic_0000000000000019),

[**ApplyEffect Method {PacManShared.Entities.PickUp.PickUp}**](#topic_00000000000000D4),

[**ApplyEffect Method {PacManShared.Entities.PickUp.PowerUp}**](#topic_0000000000000031),

[**ApplyEffect Method {PacManShared.LevelClasses.ICellEffect}**](#topic_0000000000000002),

[**ApplyEffect Method {PacManShared.LevelClasses.NullEffect}**](#topic_0000000000000105),

[**ApplyStruct Method**](#topic_000000000000011B),

[**ApplyStructure Method**](#topic_0000000000000097),

[**BatchPop Method**](#topic_0000000000000144),

[**Blinky Class**](#topic_00000000000000EB),

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[**Cell (Microsoft.Xna.Framework.Point, System.Boolean) Constructor**](#topic_0000000000000008),

[**Cell (System.String, Microsoft.Xna.Framework.Point, System.Boolean) Constructor**](#topic_0000000000000007),

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[**CellFactory Class**](#topic_00000000000000A7),

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[**Center Property {PacManShared.Entities.PickUp.Crumb}**](#topic_000000000000001D),

[**Center Property {PacManShared.Entities.PickUp.PickUp}**](#topic_00000000000000DB),

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[**Compare Method {PacManShared.Util.TimeStamps.MovObjStruct}**](#topic_00000000000000E4),

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[**Crumb (System.String, System.Int32) Constructor**](#topic_0000000000000017),

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[**Direction Property {PacManShared.Controllers.Controller}**](#topic_00000000000000CC),

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[**Direction Property {PacManShared.Controllers.Network.NetworkController}**](#topic_00000000000000C2),

[**Direction Property {PacManShared.Controllers.Network.NetworkGhostController}**](#topic_0000000000000089),

[**Direction Property {PacManShared.Entities.LoadObject}**](#topic_0000000000000049),

[**Direction Property {PacManShared.Entities.Player.Ghost}**](#topic_0000000000000070),

[**Direction Property {PacManShared.Entities.Player.MovableObject}**](#topic_0000000000000124),

[**Direction Property {PacManShared.Entities.Player.PacMan}**](#topic_0000000000000054),

[**DirectionExtension Class**](#topic_00000000000000F1),

[**DirectionFromPoint Method**](#topic_00000000000000F4),

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[**Draw Method {PacManShared.Entities.PickUp.PowerUp}**](#topic_0000000000000030),

[**Draw Method {PacManShared.Entities.Player.Ghost}**](#topic_000000000000006D),

[**Draw Method {PacManShared.Entities.Player.PacMan}**](#topic_0000000000000051),

[**Draw Method {PacManShared.LevelClasses.Cells.Cell}**](#topic_000000000000000B),

[**Draw Method {PacManShared.LevelClasses.Level}**](#topic_0000000000000094),

[**Draw Method {PacManShared.Sprite}**](#topic_000000000000007B),

[**EGhostBehaviour Enumeration**](#topic_0000000000000108),

[**ElapsedGameTime Property {PacManShared.IGameTime}**](#topic_000000000000012A),

[**ElapsedGameTime Property {PacManShared.Simulation.SimulationGameTime}**](#topic_000000000000009F),

[**ElementAt Method**](#topic_0000000000000145),

[**Empty Method**](#topic_0000000000000063),

[**Empty Property**](#topic_0000000000000012),

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[**EmptyController (System.Int32) Constructor**](#topic_0000000000000061),

[**EmptyController Class**](#topic_0000000000000060),

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[**GetCell Method {PacManShared.Initialization.CellFactory.Creators.LeftUpCellCreator}**](#topic_00000000000000FE),

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[**GetCell Method {PacManShared.Initialization.CellFactory.Creators.RightUpCellCreator}**](#topic_00000000000000FA),

[**GetCell Method {PacManShared.Initialization.CellFactory.Creators.VerticalCellCreator}**](#topic_0000000000000102),

[**GetLevelStruct Method**](#topic_0000000000000098),

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[**GetSpeedVector Method**](#topic_0000000000000115),

[**GetStruct Method {PacManShared.Entities.LoadObject}**](#topic_0000000000000046),

[**GetStruct Method {PacManShared.Entities.Player.Ghost}**](#topic_000000000000006F),

[**GetStruct Method {PacManShared.Entities.Player.MovableObject}**](#topic_000000000000011A),

[**GetStruct Method {PacManShared.Entities.Player.PacMan}**](#topic_0000000000000053),

[**GetTimeStamp Method**](#topic_0000000000000134),

[**Ghost (System.String, PacManShared.LevelClasses.Cells.Cell, PacManShared.LevelClasses.Level, PacManShared.Enums.Direction, System.Single, Microsoft.Xna.Framework.Point, Microsoft.Xna.Framework.Color, PacManShared.Controllers.AI.IndividualAI.GhostAi) Constructor**](#topic_0000000000000069),

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[**IsRunningSlowly Property {PacManShared.IGameTime}**](#topic_0000000000000128),

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[**LeftDownCellCreator Class**](#topic_00000000000000FB),

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[**Level Class**](#topic_000000000000008D),

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[**Level Property**](#topic_0000000000000139),

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[**LevelPosition Property**](#topic_000000000000009B),

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[**LoadContent (Microsoft.Xna.Framework.Content.ContentManager) Method {PacManShared.Entities.Player.PacMan}**](#topic_000000000000004E),

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[**LoadContent Method {PacManShared.Entities.Player.Ghost}**](#topic_000000000000006B),

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[**LoadContent Method {PacManShared.LevelClasses.Level}**](#topic_0000000000000093),

[**LoadContent Method {PacManShared.Sprite}**](#topic_0000000000000079),

[**LoadEffect Method**](#topic_0000000000000107),

[**LoadObject Class**](#topic_0000000000000042),

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[**MovObjStruct Constructor**](#topic_00000000000000E3),

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[**MovObjType Property {PacManShared.Controllers.AI.GhostController}**](#topic_00000000000000B7),

[**MovObjType Property {PacManShared.Controllers.AI.IndividualAI.GhostAi}**](#topic_000000000000003F),

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[**MovableObject Class**](#topic_000000000000010B),

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[**PacManShared.Controllers.AI.IndividualAI Namespace**](#topic_0000000000000034),

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[**PacManShared.Entities Namespace**](#topic_0000000000000041),

[**PacManShared.Entities.PickUp Namespace**](#topic_0000000000000015),

[**PacManShared.Entities.Player Namespace**](#topic_000000000000004B),

[**PacManShared.Enums Namespace**](#topic_000000000000002A),

[**PacManShared.GameplayBehaviour Namespace**](#topic_0000000000000027),

[**PacManShared.Initialization Namespace**](#topic_00000000000000A9),

[**PacManShared.Initialization.CellFactory Namespace**](#topic_000000000000008C),

[**PacManShared.Initialization.CellFactory.Creators Namespace**](#topic_0000000000000020),

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[**PacManShared.LevelClasses.Effects Namespace**](#topic_000000000000001E),

[**PacManShared.Simulation Namespace**](#topic_0000000000000055),

[**PacManShared.Util.TimeStamps Namespace**](#topic_00000000000000A5),

[**Peek Method**](#topic_0000000000000142),

[**PickUp Class**](#topic_00000000000000D1),

[**PickUp Constructor**](#topic_00000000000000D2),

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[**PlayBehaviour Class**](#topic_00000000000000A3),

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[**Pop Method**](#topic_0000000000000141),

[**Position Property {PacManShared.Entities.LoadObject}**](#topic_000000000000004A),

[**Position Property {PacManShared.LevelClasses.Cells.Cell}**](#topic_0000000000000011),

[**PowerUp Class**](#topic_000000000000002C),

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[**PowerUpCellCreator Class**](#topic_0000000000000023),

[**PowerUpEffectEventArgs Class**](#topic_00000000000000DC),

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[**PowerUpTimer Property**](#topic_0000000000000125),

[**Push Method**](#topic_0000000000000140),

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[**Receive Method {PacManShared.Controllers.Network.NetworkController}**](#topic_00000000000000C0),

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[**Reset Method {PacManShared.Entities.PickUp.PickUp}**](#topic_00000000000000D6),

[**Reset Method {PacManShared.Entities.PickUp.PowerUp}**](#topic_0000000000000032),

[**Reset Method {PacManShared.Entities.Player.MovableObject}**](#topic_0000000000000113),

[**Reset Method {PacManShared.Entities.Player.PacMan}**](#topic_0000000000000052),

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[**Reset Method {PacManShared.LevelClasses.ICellEffect}**](#topic_0000000000000003),

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[**Reset Method {PacManShared.LevelClasses.NullEffect}**](#topic_0000000000000106),

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[**SetCurrentCell Method**](#topic_0000000000000111),

[**SetElapsedMilliseconds Method**](#topic_000000000000009E),

[**SetGhostState Method {PacManShared.Controllers.AI.GhostController}**](#topic_00000000000000B5),

[**SetGhostState Method {PacManShared.Controllers.AI.IGhostStateObserver}**](#topic_00000000000000D0),

[**SetGhostState Method {PacManShared.Controllers.AI.IndividualAI.GhostAi}**](#topic_000000000000003E),

[**SetGhostState Method {PacManShared.Controllers.Network.NetworkGhostController}**](#topic_0000000000000085),

[**SetIsActive Method**](#topic_00000000000000D5),

[**SetToFormerTimeStamp Method**](#topic_0000000000000133),

[**SimulationGameTime Class**](#topic_000000000000009C),

[**SimulationGameTime Constructor**](#topic_000000000000009D),

[**SimulationLoop Method**](#topic_000000000000005C),

[**SimulationTime Property**](#topic_00000000000000A1),

[**Size Property {PacManShared.Entities.PickUp.PickUp}**](#topic_00000000000000D8),

[**Size Property {PacManShared.Entities.Player.MovableObject}**](#topic_0000000000000121),

[**Size Property {PacManShared.LevelClasses.Cells.Cell}**](#topic_0000000000000013),

[**Size Property {PacManShared.LevelClasses.Level}**](#topic_000000000000009A),

[**Size Property {PacManShared.Sprite}**](#topic_000000000000007C),

[**SpeedVector Property**](#topic_000000000000011F),

[**Sprite Class**](#topic_0000000000000077),

[**Sprite Constructor**](#topic_0000000000000078),

[**StartingSimulation Event**](#topic_0000000000000057),

[**StringToDirection Method**](#topic_00000000000000F6),

[**SwapFirstTimeStamp Method**](#topic_0000000000000148),

[**TargetCell Method {PacManShared.Controllers.AI.IndividualAI.Blinky}**](#topic_00000000000000ED),

[**TargetCell Method {PacManShared.Controllers.AI.IndividualAI.GhostAi}**](#topic_000000000000003B),

[**Texture Property**](#topic_000000000000007E),

[**TextureAsset Property**](#topic_000000000000007D),

[**TimeStamp Constructor**](#topic_00000000000000E8),

[**TimeStamp Structure**](#topic_00000000000000E7),

[**TimeStampEventArgs Class**](#topic_00000000000000A6),

[**TimeStampManager Constructor**](#topic_000000000000013F),

[**TimeStampManager (System.Int32) Constructor**](#topic_000000000000013E),

[**TimeStampManager Class**](#topic_000000000000013D),

[**TimeStampManager Property**](#topic_000000000000013B),

[**TimeStamps Property**](#topic_000000000000013A),

[**TotalGameTime Property {PacManShared.IGameTime}**](#topic_0000000000000129),

[**TotalGameTime Property {PacManShared.Simulation.SimulationGameTime}**](#topic_00000000000000A0),

[**Update Method {PacManShared.Controllers.AI.GhostController}**](#topic_00000000000000B2),

[**Update (PacManShared.IGameTime) Method {PacManShared.Controllers.Network.NetworkController}**](#topic_00000000000000BE),

[**Update (PacManShared.IGameTime) Method {PacManShared.Controllers.Network.NetworkGhostController}**](#topic_0000000000000088),

[**Update (PacManShared.LevelClasses.Cells.Cell) Method {PacManShared.Controllers.AI.GhostController}**](#topic_00000000000000B3),

[**Update (PacManShared.LevelClasses.Cells.Cell) Method {PacManShared.Controllers.Network.NetworkController}**](#topic_00000000000000BD),

[**Update (PacManShared.LevelClasses.Cells.Cell) Method {PacManShared.Controllers.Network.NetworkGhostController}**](#topic_0000000000000084),

[**Update (PacManShared.LevelClasses.Cells.Cell, PacManShared.Enums.EGhostBehaviour) Method {PacManShared.Controllers.AI.GhostController}**](#topic_00000000000000B4),

[**Update Method {PacManShared.Controllers.Controller}**](#topic_00000000000000CA),

[**Update Method {PacManShared.Controllers.EmptyController}**](#topic_0000000000000064),

[**Update Method {PacManShared.Controllers.Network.INetworkController}**](#topic_00000000000000E1),

[**Update Method {PacManShared.Entities.LoadObject}**](#topic_0000000000000045),

[**Update Method {PacManShared.Entities.PickUp.Crumb}**](#topic_000000000000001A),

[**Update Method {PacManShared.Entities.PickUp.PowerUp}**](#topic_000000000000002F),

[**Update Method {PacManShared.Entities.Player.Ghost}**](#topic_000000000000006C),

[**Update Method {PacManShared.Entities.Player.MovableObject}**](#topic_0000000000000112),

[**Update Method {PacManShared.Entities.Player.PacMan}**](#topic_0000000000000050),

[**Update Method {PacManShared.GameplayBehaviour.DeathBehaviour}**](#topic_0000000000000029),

[**Update Method {PacManShared.GameplayBehaviour.PlayBehaviour}**](#topic_00000000000000A4),

[**Update Method {PacManShared.LevelClasses.Cells.Cell}**](#topic_000000000000000A),

[**Update Method {PacManShared.LevelClasses.Level}**](#topic_0000000000000095),

[**Update Method {PacManShared.Simulation.GameLoop}**](#topic_000000000000005B),

[**Update Method {PacManShared.Sprite}**](#topic_000000000000007A),

[**VerticalCellCreator Class**](#topic_0000000000000101),

[**calculateOffset Method**](#topic_000000000000010D),

[**calculatePosition Method**](#topic_000000000000010E),

[**getCell (Microsoft.Xna.Framework.Point) Method**](#topic_0000000000000091),

[**getCell (Microsoft.Xna.Framework.Vector2) Method**](#topic_0000000000000090),

[**getCell (System.Int32, System.Int32) Method**](#topic_000000000000008F),

[**getFromId Method**](#topic_0000000000000136),

[**parseCSV Method**](#topic_00000000000000AD),

[**setCell Method**](#topic_0000000000000092),