

# System.Xml.XmlNameTable Class

```
[ILAsm]
.class public abstract XmlNameTable extends System.Object

[C#]
public abstract class XmlNameTable
```

## Assembly Info:

- *Name:* System.Xml
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- *Version:* 2.0.x.x
- *Attributes:*
  - CLSCompliantAttribute(true)

## Summary

Creates a table that stores unique instances of `System.String` objects.

## Inherits From: System.Object

**Library:** XML

**Thread Safety:** All public static members of this type are safe for multithreaded operations. No instance members are guaranteed to be thread safe.

## Description

Only a single instance of any given string is stored even if the string is added multiple times to the table.

Using this class provides an efficient means for an XML parser to use the same `System.String` object for all repeated element and attribute names in an XML document. If the same object is used for all repeated names, the efficiency of name comparisons is increased by allowing the names to be compared using object comparisons rather than string comparisons.

[*Note:* This class is abstract and is implemented in the `System.Xml.NameTable` class.

]

## Example

See the `System.Xml.NameTable` class for an example using this class.



# XmlNameTable() Constructor

```
[ILAsm]  
family rtspecialname specialname instance void .ctor()  
  
[C#]  
protected XmlNameTable()
```

## Summary

Constructs a new instance of the System.Xml.XmlNameTable class.

# XmlNameTable.Add(System.String) Method

```
[ILAsm]  
.method public hidebysig virtual abstract string Add(string array)  
  
[C#]  
public abstract string Add(string array)
```

## Summary

Adds the specified `System.String` to the table if a `System.String` instance with the same value does not already exist in the table.

## Parameters

Parameter	Description
<i>array</i>	The <code>System.String</code> to add.

## Return Value

*array*, if it did not exist in the table at the time of the call, or the `System.String` instance previously stored in the table with a value equal to *array*.

## Behaviors

Only a single instance of any given `System.String` is stored in the table. If the value of *array* is already stored in the table, the `System.String` instance with that value is returned.

## How and When to Override

This method must be overridden in order to provide the functionality described above, as there is no default implementation.

## Exceptions

Exception	Condition
<b>System.ArgumentNullException</b>	<i>array</i> is null.

1  
2  
3

# XmlNameTable.Add(System.Char[], System.Int32, System.Int32) Method

```
[ILAsm]  
.method public hidebysig virtual abstract string Add(char[] array, int32  
offset, int32 length)  
  
[C#]  
public abstract string Add(char[] array, int offset, int length)
```

## Summary

Adds the `System.String` equivalent of a specified subset of a `System.Char` array to the table if the string equivalent does not already exist in the table.

## Parameters

Parameter	Description
<i>array</i>	A <code>System.Char</code> array containing the string to add.
<i>offset</i>	A <code>System.Int32</code> specifying the zero-based index into the array of the first character of the string.
<i>length</i>	A <code>System.Int32</code> containing the number of characters in the string.

## Return Value

The `System.String` equivalent of the specified subset of the `System.Char` array that is stored in the table, or `System.String.Empty` if *length* is zero.

## Behaviors

Only a single instance of any given `System.String` is stored in the table. Calling this method with the same subset (containing the same characters) of any `System.Char` array, returns the same instance of the `System.String` equivalent.

## How and When to Override

This method must be overridden in order to provide the functionality described above, as there is no default implementation.

#### Exceptions

Exception	Condition
<b>System.IndexOutOfRangeException</b>	<i>offset</i> < 0.  - or -  <i>offset</i> >= <i>array.Length</i> .  - or -  <i>length</i> > <i>array.Length</i> - <i>offset</i> .  The above conditions do not cause an exception to be thrown if <i>length</i> = 0.
<b>System.ArgumentOutOfRangeException</b>	<i>length</i> < 0.

# XmlNameTable.Get(System.String) Method

```
[ILAsm]  
.method public hidebysig virtual abstract string Get(string array)  
  
[C#]  
public abstract string Get(string array)
```

## Summary

Looks up the value of the specified `System.String` in the table.

## Parameters

Parameter	Description
<i>array</i>	The <code>System.String</code> to look up.

## Return Value

The `System.String` instance previously stored in the table with a value equal to *array*, or `null` if it does not exist.

## Behaviors

Only a single instance of any given `System.String` is stored in the table. If the value of *array* is already stored in the table, the `System.String` instance with that value is returned.

## How and When to Override

This method must be overridden in order to provide the functionality described above, as there is no default implementation.

## Exceptions

Exception	Condition
<b>System.ArgumentNullException</b>	<i>array</i> is null.

1  
2  
3

# XmlNameTable.Get(System.Char[], System.Int32, System.Int32) Method

```
[ILAsm]  
.method public hidebysig virtual abstract string Get(char[] array, int32  
offset, int32 length)  
  
[C#]  
public abstract string Get(char[] array, int offset, int length)
```

## Summary

Looks up the `System.String` equivalent of a specified subset of a `System.Char` array in the table.

## Parameters

Parameter	Description
<i>array</i>	A <code>System.Char</code> array containing the string to look up.
<i>offset</i>	A <code>System.Int32</code> specifying the zero-based index into the array of the first character of the string.
<i>length</i>	A <code>System.Int32</code> containing the number of characters in the string.

## Return Value

The `System.String` equivalent of the specified subset of the `System.Char` array that is stored in the table, or `null` if the equivalent `System.String` is not in the table.

## Behaviors

Only a single instance of any given `System.String` is stored in the table. Calling this method with the same subset (containing the same characters) of any `System.Char` array, returns the same instance of the `System.String` equivalent, if it exists.

## How and When to Override

This method must be overridden in order to provide the functionality described above, as there is no default implementation.

#### Exceptions

Exception	Condition
<b>System.IndexOutOfRangeException</b>	<i>offset</i> < 0. - or - <i>offset</i> >= <i>array.Length</i> . - or - <i>length</i> > <i>array.Length</i> - <i>offset</i> .  The above conditions do not cause an exception to be thrown if <i>length</i> = 0.
<b>System.ArgumentOutOfRangeException</b>	<i>length</i> < 0.