System.Xml.NameTable Class

```
[ILASM]
.class public NameTable extends System.Xml.XmlNameTable


[C#]
public class NameTable: 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:* 1.0.x.x
- *Attributes:*
    - CLSCompliantAttribute(true)

Summary

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

Inherits From: System.Xml.XmlNameTable

Library: XML

Thread Safety: This class is multi-read threadsafe but not threadsafe for read/write.

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 implements a single-threaded **System.Xml.XmlNameTable**.

This class is used internally by the **System.Xml.XmlNamespaceManager**, **System.Xml.XmlParserContext**, and **System.Xml.XmlTextReader** classes to store element and attribute names.]

Example

The following example demonstrates the difference between equal string values and equal **System.String** objects using the **System.Xml.NameTable** class.

[C#]

```csharp
using System;
using System.Text;
using System.Xml;

class Ntable {

  public static void Main() {

    NameTable nameTable = new NameTable();

    string str1 = "sunny";
    StringBuilder strBuilder = new StringBuilder();
    string str2 =
      strBuilder.Append("sun").Append("ny").ToString();
    Console.WriteLine("{0}: {1}",
                      str1, str2);
    Console.WriteLine("{0}: {1}",
                      str1 == str2,
                      (Object)str1==(Object)str2);

    string str3 = nameTable.Add(str1);
    string str4 = nameTable.Add(str2);
    Console.WriteLine("{0}: {1}",
                      str3, str4);
    Console.WriteLine("{0}: {1}",
                      str3 == str4,
                      (Object)str3==(Object)str4);
  }
}
```

The output is

sunny: sunny

True: False

sunny: sunny

1
2   True: True

3

NameTable() Constructor

```
[ILASM]
public rtspecialname specialname instance void .ctor()


[C#]
public NameTable()
```

Summary

Constructs and initializes a new instance of the
System.Xml.NameTable class.

NameTable.Add(System.String) Method

```
[ILASM]
.method public hidebysig virtual string Add(string key)


[C#]
public override string Add(string key)
```

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
key	The **System.String** to add.

Return Value

key, 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 *key*.

Description

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

[*Note:* This method overrides **System.Xml.XmlNameTable.Add**(**String**).]

Exceptions

Exception	Condition
System.ArgumentNullException	*key* is **null**.

NameTable.Add(System.Char[], System.Int32, System.Int32) Method

```
[ILASM]
.method public hidebysig virtual string Add(class
System.Char[] key, int32 start, int32 len)

[C#]
public override string Add(char[] key, int start, int len)
```

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
key	A **System.Char** array containing the string to add.
start	A **System.Int32** specifying the zero-based index into the array of the first character of the string.
len	A **System.Int32** 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 *len* is zero.

Description

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.

[*Note:* This method overrides
System.Xml.XmlNameTable.Add(**Char**[], **Int32**, **Int32**).]

Exceptions

Exception	Condition

System.IndexOutOfRangeException	*start* < 0. - or - *start* >= *key*.Length. - or - *len* > *key*.Length - *start*. The above conditions do not cause an exception to be thrown if *len* = 0.
System.ArgumentOutOfRangeException	len < 0.

1
2
3

NameTable.Get(System.String) Method

```
[ILASM]
.method public hidebysig virtual string Get(string value)


[C#]
public override string Get(string value)
```

Summary

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

Parameters

Parameter	Description
value	The **System.String** to look up.

Return Value

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

Description

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

[*Note:* This method overrides **System.Xml.XmlNameTable.Get**(**String**).]

Exceptions

Exception	Condition
System.ArgumentNullException	*value* is **null**.

NameTable.Get(System.Char[], System.Int32, System.Int32) Method

```
[ILASM]
.method public hidebysig virtual string Get(class
System.Char[] key, int32 start, int32 len)

[C#]
public override string Get(char[] key, int start, int len)
```

Summary

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

Parameters

Parameter	Description
key	A **System.Char** array containing the string to look up.
start	A **System.Int32** specifying the zero-based index into the array of the first character of the string.
len	A **System.Int32** 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.

Description

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.

[*Note:* This method overrides **System.Xml.XmlNameTable.Get**(**Char**[], **Int32**, **Int32**).]

Exceptions

Exception	Condition
System.IndexOutOfRangeException	*start* < 0, - or -

	start >= *key*.Length. - or - *len* > *key*.Length - *start*. The above conditions do not cause an exception to be thrown if *len* = 0.
System.ArgumentOutOfRangeException	len < 0.

1
2