

# Holiday

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Documentation and step-by-step guide

v1.0

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## Overview

This service lists national, regional and municipal holidays. Supports the calculation of holidays from 1582 to 2299.

## WSDL

The WSDL contract can be found at this address

`| http://services.sapo.pt/Metadata/Contract/Holiday?culture=EN`

## Operações

### ***GetAllHolidays***

Obtains all holidays from a year

#### Arguments

- **Integer** year - Year

#### Returns

- **GetAllHolidaysResult** - Holidays' list

### ***GetCarnival***

Obtains the carnival holiday's information, like a date from a year

#### Arguments

- **Integer** year - Year

#### Returns

- **GetCarnivalResult** - Carnival holiday's informations

### ***GetCorpusChristi***

Obtains the Corpus Christi holiday's information, like a date from a year

#### Arguments

- **Integer** year - Year

#### Returns

- **GetCorpusChirstiResult** - Corpus Christi holiday's information

### ***GetEaster***

Obtains easter holiday's information, like a date from a year

#### **Arguments**

- **Integer** year - Year

#### **Returns**

- **GetEasterResult** - Easter holiday's information

### ***GetGoodFriday***

Obtains Good Friday holiday's information, like a date from a year

#### **Arguments**

- **Integer** year - Year

#### **Returns**

- **GetGoodFridayResult** - Good Friday holiday's information

### ***GetHolidaysByMunicipalityId***

Obtains all municipal holidays

#### **Arguments**

- **Integer** year - Year
- **municipalityId** - Municipality identifier
- **includeNational** - Include national holidays

#### **Returns**

- **GetHolidaysByMunicipalityIdResult** - Municipal holidays' list

### ***GetLocalHolidays***

Obtains local holidays

#### **Arguments**

- **Integer** year - Year

#### **Returns**

- **GetLocalHolidaysResult** - Local holidays' list

### ***GetNationalHolidays***

Obtains national holidays

#### **Arguments**

- **Integer** year - Year

#### **Returns**

- **GetNationalHolidaysResult** - National holidays' list

### ***GetRegionalHolidays***

Obtains regional holidays

#### **Arguments**

- **Integer** year - Year

#### **Returns**

- **GetRegionalHolidaysResult** - Regional holidays' list

## **Examples**

### **Visual Basic .Net**

To consume this web service, a proxy client might be used. The following steps will guide you to import this proxy client:

1. Extract the content of downloaded file
2. Import extracted files into the project tree
3. If there is a ***app.config*** file already in the project, you can rather delete it or merge the content of ***output.config*** file with this one. Otherwise, just rename the file ***output.config*** to ***app.config***
4. Right click on your project, in the project explorer, and press **Add Reference....** Select **.NET** tab and choose the following components and press **OK**:
  - **System.Runtime.Serialization**
  - **System.ServiceModel**
5. To create an instance of this proxy client, just use the following code

```
Dim holiday As HolidaySoapClient
holiday = New HolidaySoapClient()
```

### **Preparing windows form**

On windows' form, put:

- NumericUpDown named **year**, with the following properties:

- Maximum = 2299
  - Minimum = 1852
- ListBox named **hlist**, that will be used to list holidays

## Obtain all holidays

### **GetAllHolidays**

```
Dim holidays() As Holiday
' Obtain all holidays of an year
holidays = holiday.GetAllHolidays(year.Value)

Dim holidaysDS As List(Of String)
holidaysDS = New List(Of String)

' Create a list of holidays
For Each item As Holiday In holidays
    holidaysDS.Add(item.Date & " (" & item.Name & ") " &
item.Description)
Next

' Use the list as the ListBox's data source
hlist.DataSource = holidaysDS
```

## Obtain Carnival holiday

### **GetCarnival**

```
Dim h As Holiday
' Obtain carnival holiday of an year
h = holiday.GetCarnival(year.Value)

' Shows when it will be
MsgBox("Carnival: " + h.Date)
```

## Obtain local holidays

### **GetLocalHolidays**

```
Dim holidays() As Holiday
' Obtain local holidays of an year
holidays = holiday.GetLocalHolidays(year.Value)

Dim holidaysDS As List(Of String)
holidaysDS = New List(Of String)

' Create a list of holidays
For Each item As Holiday In holidays
    holidaysDS.Add(item.Date & " (" & item.Name & ") " &
item.Description)
Next

' Use the list as the ListBox's data source
hlist.DataSource = holidaysDS
```

## Obtain municipal holidays

### **GetHolidaysByMunicipalityId**

```
Dim holidays() As Holiday

' Obtains municipal holidays of an year, using municipality identifier
(in this case 1030), including also national holidays
holidays = holiday.GetHolidaysByMunicipalityId(year.Value, "1030",
True)

Dim holidaysDS As List(Of String)
```

```

holidaysDS = New List(Of String)

' Create a list of holidays
For Each item As Holiday In holidays
    holidaysDS.Add(item.Date & " (" & item.Name & ") " &
item.Description)
Next

' Use the list as the ListBox's data source
hlist.DataSource = holidaysDS

```

## Visual C# .Net

To consume this web service, a proxy client might be used. The following steps will guide you to import this proxy client:

1. Extract the content of downloaded file
2. Import extracted files into the project tree
3. If there is a **app.config** file already in the project, you can rather delete it or merge the content of **output.config** file with this one. Otherwise, just rename the file **output.config** to **app.config**
4. Right click on your project, in the project explorer, and press **Add Reference....** Select **.NET** tab and choose the following components and press **OK**:
  - o **System.Runtime.Serialization**
  - o **System.ServiceModel**
5. To create an instance of this proxy client, just use the following code

```

HolidaySoapClient holiday = new HolidaySoapClient();

```

### Preparing windows form

On windows' form, put:

- NumericUpDown named **year**, with the following properties:
  - o Maximum = 2299
  - o Minimum = 1852
- ListBox named **hlist**, that will be used to list holidays

### Obtain all holidays

#### GetAllHolidays

```

Holiday[] holidays;
// Obtain all holidays of an year
holidays = holiday.GetAllHolidays((int)year.Value);

List<String> holidaysDS = new List<String>();

// Create a list of holidays
foreach(Holiday item in holidays){
    holidaysDS.Add(item.Date + " (" + item.Name + ") " +
item.Description);
}

// Use the list as the ListBox's data source
hlist.DataSource = holidaysDS;

```

### Obtain Carnival holiday

### GetCarnival

```
Holiday h;
// Obtain carnival holiday of an year
h = holiday.GetCarnival((int)year.Value);

// Shows when it will be
MessageBox.Show("Carnival: " + h.Date);
```

### Obtain local holidays

#### GetLocalHolidays

```
Holiday[] holidays;
// Obtain local holidays of an year
holidays = holiday.GetLocalHolidays((int)year.Value);

List<String> holidaysDS = new List<String>();

// Create a list of holidays
foreach (Holiday item in holidays)
{
    holidaysDS.Add(item.Date + " (" + item.Name + ") " +
item.Description);
}

// Use the list as the ListBox's data source
hlist.DataSource = holidaysDS;
```

### Obtain municipal holidays

#### GetHolidaysByMunicipalityId

```
Holiday[] holidays;

// Obtains municipal holidays of an year, using municipality
identifier (in this case 1030), including also national holidays
holidays = holiday.GetHolidaysByMunicipalityId((int)year.Value,
"1030", true);

List<String> holidaysDS = new List<String>();

// Create a list of holidays
foreach (Holiday item in holidays)
{
    holidaysDS.Add(item.Date + " (" + item.Name + ") " +
item.Description);
}

// Use the list as the ListBox's data source
hlist.DataSource = holidaysDS;
```

## Java

### Considerations

To consume this web service, a proxy client might be used. The following steps will guide you to import this proxy client:

1. Extract the content of downloaded file
2. Import extracted files into your project's **src** folder. If you are using an IDE (e.g.: Netbeans or Eclipse), move the files into **source** folder in the IDE project explorer.
3. **Clean and build** your project
4. To create an instance of this proxy client, just use the following code



```
HolidaySoap holiday = (new Holiday_Service()).getHolidaySoap();
```

## Obtain all holidays

### *GetAllHolidays*

```
// Obtain all holidays of 2011
List<Holiday> holidays = holiday.getAllHolidays(2011).getHoliday();

// For each holiday, shows a description
for(Holiday h : holidays){
    System.out.println(h.getName().getValue() + " (" + h.getDate() +
    ")");
    System.out.println(h.getType().value());
    System.out.println(h.getDescription().getValue());
    System.out.println();
}
```

## Obtain Carnival holiday

### *GetCarnival*

```
// Obtain carnival holiday of 2011
Holiday h = holiday.getCarnival(2011);

// Shows its description and date
System.out.println(h.getName().getValue() + " (" + h.getDate() + ")");
System.out.println(h.getType().value());
System.out.println(h.getDescription().getValue());
```

## Obtain local holidays

### *GetLocalHolidays*

```
// Obtain local holidays of 2011
List<Holiday> holidays = holiday.getLocalHolidays(2011).getHoliday();

// For each holiday, shows a description
for(Holiday h : holidays){
    System.out.println(h.getName().getValue() + " (" + h.getDate() +
    ")");
    System.out.println(h.getType().value());
    System.out.println("(" +
    h.getMunicipality().getValue().getId().getValue() + ") " +
    h.getMunicipality().getValue().getName().getValue());
    System.out.println(h.getDescription().getValue());
    System.out.println();
}
```

## Obtain municipal holidays

### *GetHolidaysByMunicipalityId*

```
// Obtains municipal holidays of 2011, using municipality identifier
(in this case 1030), including also national holidays
List<Holiday> holidays = holiday.getHolidaysByMunicipalityId(2011,
"1030", Boolean.TRUE).getHoliday();

// For each holiday, shows a description
for(Holiday h : holidays){
    System.out.println(h.getName().getValue() + " (" + h.getDate() +
    ")");
    System.out.println(h.getType().value());
    System.out.println(h.getDescription().getValue());
    System.out.println();
}
```