

# Namespace ZeroRedact

## Classes

### [Redactor](#)

Supports all classes in the .NET class hierarchy and provides low-level services to derived classes. This is the ultimate base class of all .NET classes; it is the root of the type hierarchy.

## Structs

### [CreditCardRedactorOptions](#)

Credit card redactor options.

### [DateRedactorOptions](#)

Date redactor options.

### [EmailAddressRedactorOptions](#)

Email address redactor options.

### [IPv4RedactorOptions](#)

IPV4 redactor options.

### [IPv6RedactorOptions](#)

IPv6 redactor options.

### [MACAddressRedactorOptions](#)

MAC address redactor options.

### [PhoneNumberRedactorOptions](#)

Phone number redactor options.

### [RedactorOptions](#)

Provides options to be used with [Redactor](#)

### [StringRedactorOptions](#)

String redactor options.

## Enums

### [CreditCardRedaction](#)

Defines the different types of redactions that can be applied to a credit card number.

### [DateRedaction](#)

Defines the different types of redactions that can be applied to a date.

### [EmailAddressRedaction](#)

Defines the different types of redactions that can be applied to an email address.

#### [IPv4Redaction](#)

Defines the different types of redactions that can be applied to an IPv4 address.

#### [IPv6Redaction](#)

Defines the different types of redactions that can be applied to an IPv6 address.

#### [MACAddressRedaction](#)

Defines the different types of redactions that can be applied to a MAC address.

#### [PhoneNumberRedaction](#)

Defines the different types of redactions that can be applied to a phone number.

#### [StringRedaction](#)

Defines the different types of redactions that can be applied to a string.

# Enum CreditCardRedaction

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Defines the different types of redactions that can be applied to a credit card number.

```
public enum CreditCardRedaction
```

## Fields

`All = 0`

The credit card number is redacted.

`FixedLength = 1`

The credit card number is redacted with a fixed length.

`Full = 2`

The credit card number is redacted, preserving symbols.

`ShowFirstSixLastFour = 4`

The first six digits and the last four digits of the credit card number are shown.

`ShowLastFour = 3`

The last four digits of the credit card number are shown.

# Struct CreditCardRedactorOptions

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Credit card redactor options.

```
public readonly struct CreditCardRedactorOptions
```

## Inherited Members

[ValueType.Equals\(object\)](#)[↗](#) , [ValueType.GetHashCode\(\)](#)[↗](#) , [ValueType.ToString\(\)](#)[↗](#) , [object.Equals\(object, object\)](#)[↗](#) , [object.GetType\(\)](#)[↗](#) , [object.ReferenceEquals\(object, object\)](#)[↗](#)

## Constructors

### CreditCardRedactorOptions()

Constructs a new [CreditCardRedactorOptions](#) instance.

```
public CreditCardRedactorOptions()
```

## Properties

### FixedLengthSize

The fixed length size of the redaction.

```
public int FixedLengthSize { get; init; }
```

### Property Value

[int](#)[↗](#)

### RedactionCharacter

The character used for the redaction.

```
public char RedactionCharacter { get; init; }
```

Property Value

[char](#)

## RedactorType

The type of redactor to apply.

```
public CreditCardRedaction RedactorType { get; init; }
```

Property Value

[CreditCardRedaction](#)

# Enum DateRedaction

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Defines the different types of redactions that can be applied to a date.

```
public enum DateRedaction
```

## Fields

**All = 0**

The date is redacted.

**Day = 3**

The day is redacted.

**DayAndMonth = 6**

The day and month are redacted.

**DayAndYear = 8**

The day and year are redacted.

**FixedLength = 1**

The date is redacted with a fixed length.

**Full = 2**

The date is redacted, showing the date separator.

**Month = 4**

The month is redacted.

**MonthAndYear = 7**

The month and year are redacted.

**Year = 5**

The year is redacted.

# Struct DateRedactorOptions







Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Date redactor options.

```
public readonly struct DateRedactorOptions
```

## Inherited Members

[ValueType.Equals\(object\)](#) , [ValueType.GetHashCode\(\)](#) , [ValueType.ToString\(\)](#) ,  
[object.Equals\(object, object\)](#) , [object.GetType\(\)](#) , [object.ReferenceEquals\(object, object\)](#)

## Constructors

### DateRedactorOptions()

Constructs a new [DateRedactorOptions](#) instance.

```
public DateRedactorOptions()
```

## Properties

### FixedLengthSize

The fixed length size of the redaction.

```
public int FixedLengthSize { get; init; }
```

Property Value

[int](#)

### RedactionCharacter



The character used for the redaction.

```
public char RedactionCharacter { get; init; }
```

Property Value

[char](#)

## RedactorType

The type of redactor to apply.

```
public DateRedaction RedactorType { get; init; }
```

Property Value

[DateRedaction](#)

# Enum EmailAddressRedaction

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Defines the different types of redactions that can be applied to an email address.

```
public enum EmailAddressRedaction
```

## Fields

`All = 0`

The email address is redacted.

`FirstHalfUsername = 4`

The first half of the username is redacted.

`FixedLength = 1`

The email address is redacted with a fixed width.

`Full = 2`

Only the @ symbol and final dot is shown.

`Middle = 5`

The second half of the username and the first half of the domain are redacted.

`MostUsername = 6`

Only the first and last characters of the username are shown along with showing the full domain.

`ShowFirstCharacters = 7`

Only the first character of the username and host are shown along with showing the full domain.

`Username = 3`

The local-part/username is redacted.

# Struct EmailAddressRedactorOptions

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Email address redactor options.

```
public readonly struct EmailAddressRedactorOptions
```

## Inherited Members

[ValueType.Equals\(object\)](#)[☞](#) , [ValueType.GetHashCode\(\)](#)[☞](#) , [ValueType.ToString\(\)](#)[☞](#) , [object.Equals\(object, object\)](#)[☞](#) , [object.GetType\(\)](#)[☞](#) , [object.ReferenceEquals\(object, object\)](#)[☞](#)

## Constructors

### EmailAddressRedactorOptions()

Constructs a new [EmailAddressRedactorOptions](#) instance.

```
public EmailAddressRedactorOptions()
```

## Properties

### FixedLengthSize

The fixed length size of the redaction.

```
public int FixedLengthSize { get; init; }
```

### Property Value

[int](#)[☞](#)

### RedactionCharacter

The character used for the redaction.

```
public char RedactionCharacter { get; init; }
```

Property Value

[char](#)

## RedactorType

The type of redactor to apply.

```
public EmailAddressRedaction RedactorType { get; init; }
```

Property Value

[EmailAddressRedaction](#)

# Enum IPv4Redaction

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Defines the different types of redactions that can be applied to an IPv4 address.

```
public enum IPv4Redaction
```

## Fields

**All = 0**

The IPv4 address is redacted.

**FixedLength = 1**

The IPv4 address is redacted with a fixed length.

**Full = 2**

The IPv4 address is redacted, preserving symbols.

**ShowLastOctet = 3**

The last octet of the IPv4 address are shown.

# Struct IPv4RedactorOptions







Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

IPv4 redactor options.

```
public readonly struct IPv4RedactorOptions
```

## Inherited Members

[ValueType.Equals\(object\)](#) , [ValueType.GetHashCode\(\)](#) , [ValueType.ToString\(\)](#) ,  
[object.Equals\(object, object\)](#) , [object.GetType\(\)](#) , [object.ReferenceEquals\(object, object\)](#)

## Constructors

### IPv4RedactorOptions()

Constructs a new [IPv4RedactorOptions](#) instance.

```
public IPv4RedactorOptions()
```

## Properties

### FixedLengthSize

The fixed length size of the redaction.

```
public int FixedLengthSize { get; init; }
```

Property Value

[int](#)

### RedactionCharacter

The character used for the redaction.

```
public char RedactionCharacter { get; init; }
```

Property Value

[char](#)

## RedactorType

The type of redactor to apply.

```
public IPv4Redaction RedactorType { get; init; }
```

Property Value

[IPv4Redaction](#)

# Enum IPv6Redaction

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Defines the different types of redactions that can be applied to an IPv6 address.

```
public enum IPv6Redaction
```

## Fields

**All = 0**

The IPv6 address is redacted.

**FixedLength = 1**

The IPv4 address is redacted with a fixed length.

**Full = 2**

The IPv4 address is redacted, preserving symbols.

**ShowLastQuartet = 3**

The last quartet of the IPv6 address are shown.



# Struct IPv6RedactorOptions







Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

IPv6 redactor options.

```
public readonly struct IPv6RedactorOptions
```

## Inherited Members

[ValueType.Equals\(object\)](#) , [ValueType.GetHashCode\(\)](#) , [ValueType.ToString\(\)](#) ,  
[object.Equals\(object, object\)](#) , [object.GetType\(\)](#) , [object.ReferenceEquals\(object, object\)](#)

## Constructors

### IPv6RedactorOptions()

Constructs a new [IPv6RedactorOptions](#) instance.

```
public IPv6RedactorOptions()
```

## Properties

### FixedLengthSize

The fixed length size of the redaction.

```
public int FixedLengthSize { get; init; }
```

Property Value

[int](#)

### RedactionCharacter

The character used for the redaction.

```
public char RedactionCharacter { get; init; }
```

Property Value

[char](#)

## RedactorType

The type of redactor to apply.

```
public IPv6Redaction RedactorType { get; init; }
```

Property Value

[IPv6Redaction](#)

# Enum MACAddressRedaction

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Defines the different types of redactions that can be applied to a MAC address.

```
public enum MACAddressRedaction
```

## Fields

`All = 0`

The MAC address is redacted.

`FixedLength = 1`

The MAC address is redacted with a fixed length.

`Full = 2`

The MAC address is redacted, preserving symbols.

`ShowLastByte = 3`

The last byte of the MAC address is shown.

# Struct MACAddressRedactorOptions

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

MAC address redactor options.

```
public readonly struct MACAddressRedactorOptions
```

## Inherited Members

[ValueType.Equals\(object\)](#)[↗](#) , [ValueType.GetHashCode\(\)](#)[↗](#) , [ValueType.ToString\(\)](#)[↗](#) ,  
[object.Equals\(object, object\)](#)[↗](#) , [object.GetType\(\)](#)[↗](#) , [object.ReferenceEquals\(object, object\)](#)[↗](#)

## Constructors

### MACAddressRedactorOptions()

Constructs a new [MACAddressRedactorOptions](#) instance.

```
public MACAddressRedactorOptions()
```

## Properties

### FixedLengthSize

The fixed length size of the redaction.

```
public int FixedLengthSize { get; init; }
```

### Property Value

[int](#)[↗](#)

### RedactionCharacter

The character used for the redaction.

```
public char RedactionCharacter { get; init; }
```

Property Value

[char](#)

## RedactorType

The type of redactor to apply.

```
public MACAddressRedaction RedactorType { get; init; }
```

Property Value

[MACAddressRedaction](#)

# Enum PhoneNumberRedaction

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Defines the different types of redactions that can be applied to a phone number.

```
public enum PhoneNumberRedaction
```

## Fields

**All = 0**

The phone number is redacted.

**FixedLength = 1**

The phone number is redacted with a fixed length.

**Full = 2**

The phone number is redacted, preserving symbols.

**ShowLastFour = 3**

The last four digits of the credit card number are shown.

# Struct PhoneNumberRedactorOptions

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Phone number redactor options.

```
public readonly struct PhoneNumberRedactorOptions
```

## Inherited Members

[ValueType.Equals\(object\)](#)[☞](#) , [ValueType.GetHashCode\(\)](#)[☞](#) , [ValueType.ToString\(\)](#)[☞](#) , [object.Equals\(object, object\)](#)[☞](#) , [object.GetType\(\)](#)[☞](#) , [object.ReferenceEquals\(object, object\)](#)[☞](#)

## Constructors

### PhoneNumberRedactorOptions()

Constructs a new [PhoneNumberRedactorOptions](#) instance.

```
public PhoneNumberRedactorOptions()
```

## Properties

### FixedLengthSize

The fixed length size of the redaction.

```
public int FixedLengthSize { get; init; }
```

### Property Value

[int](#)[☞](#)

### RedactionCharacter

The character used for the redaction.

```
public char RedactionCharacter { get; init; }
```

Property Value

[char](#)

## RedactorType

The type of redactor to apply.

```
public PhoneNumberRedaction RedactorType { get; init; }
```

Property Value

[PhoneNumberRedaction](#)



# Class Redactor


Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Supports all classes in the .NET class hierarchy and provides low-level services to derived classes. This is the ultimate base class of all .NET classes; it is the root of the type hierarchy.

```
public sealed class Redactor : IRedactor
```


## Inheritance

[object](#)  ← Redactor

## Implements

[IRedactor](#)

## Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

# Constructors

## Redactor()

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

```
public Redactor()
```

## Redactor(RedactorOptions)

Initializes a new instance of the [Redactor](#) class with the specified options.

```
public Redactor(RedactorOptions options)
```

## Parameters

`options` [RedactorOptions](#)

The options to configure the redactor.

## Exceptions

[ArgumentOutOfRangeException](#)

Thrown when `options` has a less than 0 [FixedLengthSize](#).

## Methods

### RedactCreditCard(ReadOnlySpan<char>)

Redacts the provided credit card number.

```
public ReadOnlySpan<char> RedactCreditCard(ReadOnlySpan<char> creditCardNumber)
```

#### Parameters

`creditCardNumber` [ReadOnlySpan](#) <[char](#)>

The credit card number to redact.

#### Returns

[ReadOnlySpan](#) <[char](#)>

### RedactCreditCard(ReadOnlySpan<char>, CreditCardRedactorOptions)

Redacts the provided credit card number.

```
public ReadOnlySpan<char> RedactCreditCard(ReadOnlySpan<char> creditCardNumber,  
CreditCardRedactorOptions redactorOptions)
```

#### Parameters

`creditCardNumber` [ReadOnlySpan](#) <[char](#)>

The credit card number to redact.

`redactorOptions` [CreditCardRedactorOptions](#)

The options to control redaction behavior.

Returns

[ReadOnlySpan](#) [<char>](#)

## RedactCreditCard(string)

Redacts the provided credit card number.

```
public string RedactCreditCard(string creditCardNumber)
```

Parameters

`creditCardNumber` [string](#)

The credit card number to redact.

Returns

[string](#)

## RedactCreditCard(string, CreditCardRedactorOptions)

Redacts the provided credit card number.

```
public string RedactCreditCard(string creditCardNumber, CreditCardRedactorOptions redactorOptions)
```

Parameters

`creditCardNumber` [string](#)

The credit card number to redact.

redactorOptions [CreditCardRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

## RedactDate(DateOnly)

Redacts the provided date.

```
public string RedactDate(DateOnly date)
```

Parameters

date [DateOnly](#)

The date to redact.

Returns

[string](#)

Returns redacted short date formatted for the current [CultureInfo](#).

## RedactDate(DateOnly, DateRedactorOptions)

Redacts the provided date.

```
public string RedactDate(DateOnly date, DateRedactorOptions redactorOptions)
```

Parameters

date [DateOnly](#)

The date to redact.

redactorOptions [DateRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

Returns redacted short date formatted for the current [CultureInfo](#).

## RedactDate(DateTime)

Redacts the provided date.

```
public string RedactDate(DateTime date)
```

Parameters

date [DateTime](#)

The date to redact.

Returns

[string](#)

Returns redacted short date formatted for the current [CultureInfo](#).

## RedactDate(DateTime, DateRedactorOptions)

Redacts the provided date.

```
public string RedactDate(DateTime date, DateRedactorOptions redactorOptions)
```

Parameters

date [DateTime](#)

The date to redact.

redactorOptions [DateRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

Returns redacted short date formatted for the current [CultureInfo](#).

## RedactEmailAddress(MailAddress)

Redacts the provided email address.

```
public string RedactEmailAddress(MailAddress emailAddress)
```

Parameters

**emailAddress** [MailAddress](#)

The email address to redact.

Returns

[string](#)

## RedactEmailAddress(MailAddress, EmailAddressRedactorOptions)

Redacts the provided email address.

```
public string RedactEmailAddress(MailAddress emailAddress, EmailAddressRedactorOptions redactorOptions)
```

Parameters

**emailAddress** [MailAddress](#)

The email address to redact.

**redactorOptions** [EmailAddressRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

## RedactEmailAddress(ReadOnlySpan<char>)

Redacts the provided email address.

```
public ReadOnlySpan<char> RedactEmailAddress(ReadOnlySpan<char> emailAddress)
```

Parameters

**emailAddress** [ReadOnlySpan<char>](#)

The email address to redact.

Returns

[ReadOnlySpan<char>](#)

## RedactEmailAddress(ReadOnlySpan<char>, EmailAddressRedactorOptions)

Redacts the provided email address.

```
public ReadOnlySpan<char> RedactEmailAddress(ReadOnlySpan<char> emailAddress,  
EmailAddressRedactorOptions redactorOptions)
```

Parameters

**emailAddress** [ReadOnlySpan<char>](#)

The email address to redact.

**redactorOptions** [EmailAddressRedactorOptions](#)

The options to control redaction behavior.

Returns

[ReadOnlySpan](#) <[char](#)>

## RedactEmailAddress(string)

Redacts the provided email address.

```
public string RedactEmailAddress(string emailAddress)
```

Parameters

**emailAddress** [string](#)

The email address to redact.

Returns

[string](#)

## RedactEmailAddress(string, EmailAddressRedactorOptions)

Redacts the provided email address.

```
public string RedactEmailAddress(string emailAddress, EmailAddressRedactorOptions redactorOptions)
```

Parameters

**emailAddress** [string](#)

The email address to redact.

**redactorOptions** [EmailAddressRedactorOptions](#)

The options to control redaction behavior.

Returns



[string](#)

## RedactIPv4Address(ReadOnlySpan<char>)

Redacts the provided IPv4 address.

```
public ReadOnlySpan<char> RedactIPv4Address(ReadOnlySpan<char> ipAddress)
```

### Parameters

**ipAddress** [ReadOnlySpan](#) <[char](#)>

The IPv4 address to redact.

### Returns

[ReadOnlySpan](#) <[char](#)>

## RedactIPv4Address(ReadOnlySpan<char>, IPv4RedactorOptions)

Redacts the provided IPv4 address.

```
public ReadOnlySpan<char> RedactIPv4Address(ReadOnlySpan<char> ipAddress,  
IPv4RedactorOptions redactorOptions)
```

### Parameters

**ipAddress** [ReadOnlySpan](#) <[char](#)>

The IPv4 address to redact.

**redactorOptions** [IPv4RedactorOptions](#)

The options to control redaction behavior.

### Returns

[ReadOnlySpan](#) <[char](#)>

## RedactIPv4Address(string)

Redacts the provided IPv4 address.

```
public string RedactIPv4Address(string ipAddress)
```

### Parameters

**ipAddress** [string](#)

The IPv4 address to redact.

### Returns

[string](#)

## RedactIPv4Address(string, IPv4RedactorOptions)

Redacts the provided IPv4 address.

```
public string RedactIPv4Address(string ipAddress, IPv4RedactorOptions redactorOptions)
```

### Parameters

**ipAddress** [string](#)

The IPv4 address to redact.

**redactorOptions** [IPv4RedactorOptions](#)

The options to control redaction behavior.

### Returns

[string](#)

## RedactIPv6Address(ReadOnlySpan<char>)

Redacts the provided IPv6 address.

```
public ReadOnlySpan<char> RedactIPv6Address(ReadOnlySpan<char> ipAddress)
```

## Parameters

**ipAddress** [ReadOnlySpan](#) <[char](#)>

The IPv6 address to redact

## Returns

[ReadOnlySpan](#) <[char](#)>

## RedactIPv6Address(ReadOnlySpan<char>, IPv6RedactorOptions)

Redacts the provided IPv6 address.

```
public ReadOnlySpan<char> RedactIPv6Address(ReadOnlySpan<char> ipAddress,  
IPv6RedactorOptions redactorOptions)
```

## Parameters

**ipAddress** [ReadOnlySpan](#) <[char](#)>

The IPv6 address to redact.

**redactorOptions** [IPv6RedactorOptions](#)

The options to control redaction behavior.

## Returns

[ReadOnlySpan](#) <[char](#)>

## RedactIPv6Address(string)

Redacts the provided IPv6 address.

```
public string RedactIPv6Address(string ipAddress)
```

## Parameters

**ipAddress** [string](#)

The IPv6 address to redact

## Returns

[string](#)

# RedactIPv6Address(string, IPv6RedactorOptions)

Redacts the provided IPv6 address.

```
public string RedactIPv6Address(string ipAddress, IPv6RedactorOptions redactorOptions)
```

## Parameters

**ipAddress** [string](#)

The IPv6 address to redact.

**redactorOptions** [IPv6RedactorOptions](#)

The options to control redaction behavior.

## Returns

[string](#)

# RedactMACAddress(ReadOnlySpan<char>)

Redacts the provided MAC address.

```
public ReadOnlySpan<char> RedactMACAddress(ReadOnlySpan<char> macAddress)
```

## Parameters

**macAddress** [ReadOnlySpan<char>](#)

The MAC address to redact.

## Returns

[ReadOnlySpan<char>](#)

## RedactMACAddress(ReadOnlySpan<char>, MACAddressRedactorOptions)

Redacts the provided MAC address.

```
public ReadOnlySpan<char> RedactMACAddress(ReadOnlySpan<char> macAddress,  
MACAddressRedactorOptions redactorOptions)
```

## Parameters

**macAddress** [ReadOnlySpan<char>](#)

The MAC address to redact.

**redactorOptions** [MACAddressRedactorOptions](#)

The options to control redaction behavior.

## Returns

[ReadOnlySpan<char>](#)

## RedactMACAddress(string)

Redacts the provided MAC address.

```
public string RedactMACAddress(string macAddress)
```

## Parameters

macAddress [string](#)

The MAC address to redact.

Returns

[string](#)

## RedactMACAddress(string, MACAddressRedactorOptions)

Redacts the provided MAC address.

```
public string RedactMACAddress(string macAddress, MACAddressRedactorOptions redactorOptions)
```

Parameters

macAddress [string](#)

The MAC address to redact.

redactorOptions [MACAddressRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

## RedactPhoneNumber(ReadOnlySpan<char>)

Redacts the provided phone number.

```
public ReadOnlySpan<char> RedactPhoneNumber(ReadOnlySpan<char> phoneNumber)
```

Parameters

phoneNumber [ReadOnlySpan](#) <[char](#)>

The phone number to redact.

## Returns

[ReadOnlySpan](#) <[char](#)>

## RedactPhoneNumber(ReadOnlySpan<char>, PhoneNumberRedactorOptions)

Redacts the provided phone number.

```
public ReadOnlySpan<char> RedactPhoneNumber(ReadOnlySpan<char> phoneNumber,  
PhoneNumberRedactorOptions redactorOptions)
```

## Parameters

**phoneNumber** [ReadOnlySpan](#) <[char](#)>

The phone number to redact.

**redactorOptions** [PhoneNumberRedactorOptions](#)

The options to control redaction behavior.

## Returns

[ReadOnlySpan](#) <[char](#)>

## RedactPhoneNumber(string)

Redacts the provided phone number.

```
public string RedactPhoneNumber(string phoneNumber)
```

## Parameters

**phoneNumber** [string](#)

The phone number to redact.

## Returns

[string](#)

## RedactPhoneNumber(string, PhoneNumberRedactorOptions)

Redacts the provided phone number.

```
public string RedactPhoneNumber(string phoneNumber, PhoneNumberRedactorOptions redactorOptions)
```

### Parameters

phoneNumber [string](#)

The phone number to redact.

redactorOptions [PhoneNumberRedactorOptions](#)

The options to control redaction behavior.

### Returns

[string](#)

## RedactString(ReadOnlySpan<char>)

Redacts the provided string.

```
public ReadOnlySpan<char> RedactString(ReadOnlySpan<char> value)
```

### Parameters

value [ReadOnlySpan](#) <[char](#)>

The string to redact.

### Returns

[ReadOnlySpan](#) <[char](#)>



# RedactString(ReadOnlySpan<char>, StringRedactorOptions)

Redacts the provided string.

```
public ReadOnlySpan<char> RedactString(ReadOnlySpan<char> value,  
StringRedactorOptions redactorOptions)
```

## Parameters

**value** [ReadOnlySpan](#) <[char](#)>

The string to redact.

**redactorOptions** [StringRedactorOptions](#)

The redactorOptions to control redaction behavior.

## Returns

[ReadOnlySpan](#) <[char](#)>

# RedactString(string)

Redacts the provided string.

```
public string RedactString(string value)
```

## Parameters

**value** [string](#)

The string to redact.

## Returns

[string](#)

# RedactString(string, StringRedactorOptions)

Redacts the provided string.

```
public string RedactString(string value, StringRedactorOptions redactorOptions)
```

## Parameters

value [string](#) 

The string to redact.

redactorOptions [StringRedactorOptions](#)

The redactorOptions to control redaction behavior.

## Returns

[string](#) 

# Struct RedactorOptions







Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Provides options to be used with [Redactor](#)

```
public readonly struct RedactorOptions
```

## Inherited Members

[ValueType.Equals\(object\)](#) , [ValueType.GetHashCode\(\)](#) , [ValueType.ToString\(\)](#) ,  
[object.Equals\(object, object\)](#) , [object.GetType\(\)](#) , [object.ReferenceEquals\(object, object\)](#)

## Constructors

### RedactorOptions()

Constructs a new [RedactorOptions](#) instance.

```
public RedactorOptions()
```

## Properties

### CreditCardRedactorOptions

The options for redacting credit card numbers.

```
public CreditCardRedactorOptions CreditCardRedactorOptions { get; init; }
```

### Property Value

[CreditCardRedactorOptions](#)

### DateRedactorOptions

The options for redacting dates.

```
public DateRedactorOptions DateRedactorOptions { get; init; }
```

Property Value

[DateRedactorOptions](#)

## EmailAddressRedactorOptions

The options for redacting email addresses.

```
public EmailAddressRedactorOptions EmailAddressRedactorOptions { get; init; }
```

Property Value

[EmailAddressRedactorOptions](#)

## FixedLengthSize

The fixed length size of the redaction.

```
public int FixedLengthSize { get; init; }
```

Property Value

[int](#)

## IPv4RedactorOptions

The options for redacting IPv4 addresses.

```
public IPv4RedactorOptions IPv4RedactorOptions { get; init; }
```

Property Value

[IPv4RedactorOptions](#)

## IPv6RedactorOptions

The options for redacting IPv6 addresses.

```
public IPv6RedactorOptions IPv6RedactorOptions { get; init; }
```

Property Value

[IPv6RedactorOptions](#)

## MACAddressRedactorOptions

The MAC address redactor options.

```
public MACAddressRedactorOptions MACAddressRedactorOptions { get; init; }
```

Property Value

[MACAddressRedactorOptions](#)

## PhoneNumberRedactorOptions

The options for redacting phone numbers.

```
public PhoneNumberRedactorOptions PhoneNumberRedactorOptions { get; init; }
```

Property Value

[PhoneNumberRedactorOptions](#)

## RedactionCharacter

The character used for the redaction.

```
public char RedactionCharacter { get; init; }
```

Property Value

[char](#)

## StringRedactorOptions

The options for redacting strings.

```
public StringRedactorOptions StringRedactorOptions { get; init; }
```

Property Value

[StringRedactorOptions](#)

# Enum StringRedaction

Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

Defines the different types of redactions that can be applied to a string.

```
public enum StringRedaction
```

## Fields

`All = 0`

The string is redacted.

`FirstHalf = 2`

The first half of the string is redacted.

`FixedLength = 1`

The string is redacted with a fixed length.

`IgnoreSymbols = 4`

All characters are redacted except symbols.

`SecondHalf = 3`

The second half of the string is redacted.

# Struct StringRedactorOptions







Namespace: [ZeroRedact](#)

Assembly: ZeroRedact.dll

String redactor options.

```
public readonly struct StringRedactorOptions
```

## Inherited Members

[ValueType.Equals\(object\)](#), [ValueType.GetHashCode\(\)](#), [ValueType.ToString\(\)](#),  
[object.Equals\(object, object\)](#), [object.GetType\(\)](#), [object.ReferenceEquals\(object, object\)](#)

## Constructors

### StringRedactorOptions()

Constructs a new [StringRedactorOptions](#) instance.

```
public StringRedactorOptions()
```

## Properties

### FixedLengthSize

The fixed length size of the redaction.

```
public int FixedLengthSize { get; init; }
```

### Property Value

[int](#)

### RedactionCharacter



The character used for the redaction.

```
public char RedactionCharacter { get; init; }
```

Property Value

[char](#)

## RedactorType

The type of redactor to apply.

```
public StringRedaction RedactorType { get; init; }
```

Property Value

[StringRedaction](#)

# Namespace ZeroRedact.Redactors

## Interfaces

### [IRedactor](#)

Implements redaction capabilities.

# Interface IRedactor

Namespace: [ZeroRedact.Redactors](#)

Assembly: ZeroRedact.dll

Implements redaction capabilities.

```
public interface IRedactor
```

## Methods

### RedactCreditCard(ReadOnlySpan<char>)

Redacts the provided credit card number.

```
ReadOnlySpan<char> RedactCreditCard(ReadOnlySpan<char> creditCardNumber)
```

#### Parameters

**creditCardNumber** [ReadOnlySpan](#) <char>

The credit card number to redact.

#### Returns

[ReadOnlySpan](#) <char>

### RedactCreditCard(ReadOnlySpan<char>, CreditCardRedactorOptions)

Redacts the provided credit card number.

```
ReadOnlySpan<char> RedactCreditCard(ReadOnlySpan<char> creditCardNumber,  
CreditCardRedactorOptions redactorOptions)
```

#### Parameters

`creditCardNumber` [ReadOnlySpan](#) `<char>`

The credit card number to redact.

`redactorOptions` [CreditCardRedactorOptions](#)

The options to control redaction behavior.

Returns

[ReadOnlySpan](#) `<char>`

## RedactCreditCard(string)

Redacts the provided credit card number.

```
string RedactCreditCard(string creditCardNumber)
```

Parameters

`creditCardNumber` [string](#)

The credit card number to redact.

Returns

[string](#)

## RedactCreditCard(string, CreditCardRedactorOptions)

Redacts the provided credit card number.

```
string RedactCreditCard(string creditCardNumber, CreditCardRedactorOptions redactorOptions)
```

Parameters

`creditCardNumber` [string](#)

The credit card number to redact.

redactorOptions [CreditCardRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

## RedactDate(DateOnly)

Redacts the provided date.

```
string RedactDate(DateOnly date)
```

Parameters

date [DateOnly](#)

The date to redact.

Returns

[string](#)

Returns redacted short date formatted for the current [CultureInfo](#).

## RedactDate(DateOnly, DateRedactorOptions)

Redacts the provided date.

```
string RedactDate(DateOnly date, DateRedactorOptions redactorOptions)
```

Parameters

date [DateOnly](#)

The date to redact.

redactorOptions [DateRedactorOptions](#)

The options to control redaction behavior.

## Returns

[string](#)

Returns redacted short date formatted for the current [CultureInfo](#).

## RedactDate(DateTime)

Redacts the provided date.

```
string RedactDate(DateTime date)
```

## Parameters

date [DateTime](#)

The date to redact.

## Returns

[string](#)

Returns redacted short date formatted for the current [CultureInfo](#).

## RedactDate(DateTime, DateRedactorOptions)

Redacts the provided date.

```
string RedactDate(DateTime date, DateRedactorOptions redactorOptions)
```

## Parameters

date [DateTime](#)

The date to redact.

redactorOptions [DateRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

Returns redacted short date formatted for the current [CultureInfo](#).

## RedactEmailAddress(MailAddress)

Redacts the provided email address.

```
string RedactEmailAddress(MailAddress emailAddress)
```

Parameters

**emailAddress** [MailAddress](#)

The email address to redact.

Returns

[string](#)

## RedactEmailAddress(MailAddress, EmailAddressRedactorOptions)

Redacts the provided email address.

```
string RedactEmailAddress(MailAddress emailAddress, EmailAddressRedactorOptions redactorOptions)
```

Parameters

**emailAddress** [MailAddress](#)

The email address to redact.

**redactorOptions** [EmailAddressRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

## RedactEmailAddress(ReadOnlySpan<char>)

Redacts the provided email address.

```
ReadOnlySpan<char> RedactEmailAddress(ReadOnlySpan<char> emailAddress)
```

Parameters

**emailAddress** [ReadOnlySpan](#) <[char](#)>

The email address to redact.

Returns

[ReadOnlySpan](#) <[char](#)>

## RedactEmailAddress(ReadOnlySpan<char>, EmailAddressRedactorOptions)

Redacts the provided email address.

```
ReadOnlySpan<char> RedactEmailAddress(ReadOnlySpan<char> emailAddress,  
EmailAddressRedactorOptions redactorOptions)
```

Parameters

**emailAddress** [ReadOnlySpan](#) <[char](#)>

The email address to redact.

**redactorOptions** [EmailAddressRedactorOptions](#)

The options to control redaction behavior.



Returns

[ReadOnlySpan](#) <[char](#)>

## RedactEmailAddress(string)

Redacts the provided email address.

```
string RedactEmailAddress(string emailAddress)
```

Parameters

**emailAddress** [string](#)

The email address to redact.

Returns

[string](#)

## RedactEmailAddress(string, EmailAddressRedactorOptions)

Redacts the provided email address.

```
string RedactEmailAddress(string emailAddress, EmailAddressRedactorOptions redactorOptions)
```

Parameters

**emailAddress** [string](#)

The email address to redact.

**redactorOptions** [EmailAddressRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

# RedactIPv4Address(ReadOnlySpan<char>)

Redacts the provided IPv4 address.

```
ReadOnlySpan<char> RedactIPv4Address(ReadOnlySpan<char> ipAddress)
```

## Parameters

**ipAddress** [ReadOnlySpan](#) <[char](#)>

The IPv4 address to redact.

## Returns

[ReadOnlySpan](#) <[char](#)>

# RedactIPv4Address(ReadOnlySpan<char>, IPv4RedactorOptions)

Redacts the provided IPv4 address.

```
ReadOnlySpan<char> RedactIPv4Address(ReadOnlySpan<char> ipAddress,  
IPv4RedactorOptions redactorOptions)
```

## Parameters

**ipAddress** [ReadOnlySpan](#) <[char](#)>

The IPv4 address to redact.

**redactorOptions** [IPv4RedactorOptions](#)

The options to control redaction behavior.

## Returns

[ReadOnlySpan](#) <[char](#)>

## RedactIPv4Address(string)

Redacts the provided IPv4 address.

```
string RedactIPv4Address(string ipAddress)
```

### Parameters

**ipAddress** [string](#)

The IPv4 address to redact.

### Returns

[string](#)

## RedactIPv4Address(string, IPv4RedactorOptions)

Redacts the provided IPv4 address.

```
string RedactIPv4Address(string ipAddress, IPv4RedactorOptions redactorOptions)
```

### Parameters

**ipAddress** [string](#)

The IPv4 address to redact.

**redactorOptions** [IPv4RedactorOptions](#)

The options to control redaction behavior.

### Returns

[string](#)

## RedactIPv6Address(ReadOnlySpan<char>)

Redacts the provided IPv6 address.

```
ReadOnlySpan<char> RedactIPv6Address(ReadOnlySpan<char> ipAddress)
```

## Parameters

**ipAddress** [ReadOnlySpan](#) <[char](#)>

The IPv6 address to redact

## Returns

[ReadOnlySpan](#) <[char](#)>

## RedactIPv6Address(ReadOnlySpan<char>, IPv6RedactorOptions)

Redacts the provided IPv6 address.

```
ReadOnlySpan<char> RedactIPv6Address(ReadOnlySpan<char> ipAddress,  
IPv6RedactorOptions redactorOptions)
```

## Parameters

**ipAddress** [ReadOnlySpan](#) <[char](#)>

The IPv6 address to redact.

**redactorOptions** [IPv6RedactorOptions](#)

The options to control redaction behavior.

## Returns

[ReadOnlySpan](#) <[char](#)>

## RedactIPv6Address(string)

Redacts the provided IPv6 address.

```
string RedactIPv6Address(string ipAddress)
```

## Parameters

**ipAddress** [string](#)

The IPv6 address to redact

## Returns

[string](#)

# RedactIPv6Address(string, IPv6RedactorOptions)

Redacts the provided IPv6 address.

```
string RedactIPv6Address(string ipAddress, IPv6RedactorOptions redactorOptions)
```

## Parameters

**ipAddress** [string](#)

The IPv6 address to redact.

**redactorOptions** [IPv6RedactorOptions](#)

The options to control redaction behavior.

## Returns

[string](#)

# RedactMACAddress(ReadOnlySpan<char>)

Redacts the provided MAC address.

```
ReadOnlySpan<char> RedactMACAddress(ReadOnlySpan<char> macAddress)
```

## Parameters

**macAddress** [ReadOnlySpan<char>](#)

The MAC address to redact.

## Returns

[ReadOnlySpan<char>](#)

# RedactMACAddress(ReadOnlySpan<char>, MACAddressRedactorOptions)

Redacts the provided MAC address.

```
ReadOnlySpan<char> RedactMACAddress(ReadOnlySpan<char> macAddress,  
MACAddressRedactorOptions redactorOptions)
```

## Parameters

**macAddress** [ReadOnlySpan<char>](#)

The MAC address to redact.

**redactorOptions** [MACAddressRedactorOptions](#)

The options to control redaction behavior.

## Returns

[ReadOnlySpan<char>](#)

# RedactMACAddress(string)

Redacts the provided MAC address.

```
string RedactMACAddress(string macAddress)
```

## Parameters

macAddress [string](#)

The MAC address to redact.

Returns

[string](#)

## RedactMACAddress(string, MACAddressRedactorOptions)

Redacts the provided MAC address.

```
string RedactMACAddress(string macAddress, MACAddressRedactorOptions redactorOptions)
```

Parameters

macAddress [string](#)

The MAC address to redact.

redactorOptions [MACAddressRedactorOptions](#)

The options to control redaction behavior.

Returns

[string](#)

## RedactPhoneNumber(ReadOnlySpan<char>)

Redacts the provided phone number.

```
ReadOnlySpan<char> RedactPhoneNumber(ReadOnlySpan<char> phoneNumber)
```

Parameters

phoneNumber [ReadOnlySpan](#) <[char](#)>

The phone number to redact.

## Returns

[ReadOnlySpan](#) <[char](#)>

## RedactPhoneNumber(ReadOnlySpan<char>, PhoneNumberRedactorOptions)

Redacts the provided phone number.

```
ReadOnlySpan<char> RedactPhoneNumber(ReadOnlySpan<char> phoneNumber,  
PhoneNumberRedactorOptions redactorOptions)
```

## Parameters

**phoneNumber** [ReadOnlySpan](#) <[char](#)>

The phone number to redact.

**redactorOptions** [PhoneNumberRedactorOptions](#)

The options to control redaction behavior.

## Returns

[ReadOnlySpan](#) <[char](#)>

## RedactPhoneNumber(string)

Redacts the provided phone number.

```
string RedactPhoneNumber(string phoneNumber)
```

## Parameters

**phoneNumber** [string](#)

The phone number to redact.

## Returns



[string](#)

## RedactPhoneNumber(string, PhoneNumberRedactorOptions)

Redacts the provided phone number.

```
string RedactPhoneNumber(string phoneNumber, PhoneNumberRedactorOptions redactorOptions)
```

### Parameters

**phoneNumber** [string](#)

The phone number to redact.

**redactorOptions** [PhoneNumberRedactorOptions](#)

The options to control redaction behavior.

### Returns

[string](#)

## RedactString(ReadOnlySpan<char>)

Redacts the provided string.

```
ReadOnlySpan<char> RedactString(ReadOnlySpan<char> value)
```

### Parameters

**value** [ReadOnlySpan](#) <[char](#)>

The string to redact.

### Returns

[ReadOnlySpan](#) <[char](#)>

# RedactString(ReadOnlySpan<char>, StringRedactorOptions)

Redacts the provided string.

```
ReadOnlySpan<char> RedactString(ReadOnlySpan<char> value, StringRedactorOptions redactorOptions)
```

## Parameters

**value** [ReadOnlySpan](#) <[char](#)>

The string to redact.

**redactorOptions** [StringRedactorOptions](#)

The redactorOptions to control redaction behavior.

## Returns

[ReadOnlySpan](#) <[char](#)>

# RedactString(string)

Redacts the provided string.

```
string RedactString(string value)
```

## Parameters

**value** [string](#)

The string to redact.

## Returns

[string](#)

# RedactString(string, StringRedactorOptions)

Redacts the provided string.

```
string RedactString(string value, StringRedactorOptions redactorOptions)
```

## Parameters

value [string](#) 

The string to redact.

redactorOptions [StringRedactorOptions](#)

The redactorOptions to control redaction behavior.

## Returns

[string](#) 