



# OPC UA SDK for .NET

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# Development Guides

[Client Development Guide](#) [Server Development Guide](#)

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A free and simple but professional OPC UA Client to access OPC UA Servers.

[Version History](#) - The list of improvements in each version

## Preview Download

There are currently no preview versions available. In case you're interested in some feature the SDK may not fulfill in the latest version:

**Do not hesitate and just contact us via [support@traeger.de](mailto:support@traeger.de)!**

## OPC UA Client

[OPC UA Client Development Guide](#)

**Example Code: OPC UA Client**

- [C#](#)
- [VB](#)

```
namespace Client
{
    using System;
    using System.Threading;

    using Opc.UaFx.Client;

    public class Program
    {
        public static void Main()
        {
            using (var client = new OpcClient("opc.tcp://localhost:4840")) {
                client.Connect();

                while (true) {
                    var temperature = client.ReadNode("ns=2;s=Temperature");
                    Console.WriteLine("Current Temperature is {0} °C", temperature);

                    Thread.Sleep(1000);
                }
            }
        }
    }
}
```

```
Imports System
Imports System.Threading

Imports Opc.UaFx.Client

Namespace Client
    Public Class Program
        Public Shared Sub Main()
            Using client = New OpcClient("opc.tcp://localhost:4840")
                client.Connect()

                While True
                    Dim temperature = client.ReadNode("ns=2;s=Temperature")
                    Console.WriteLine("Current Temperature is {0} °C", temperature)

                    Thread.Sleep(1000)
                End While
            End Using
        End Sub
    End Class
End Namespace
```

# OPC UA Server

## OPC UA Server Development Guide

### Example Code: OPC UA Server

- C#
- VB

```

namespace Server
{
    using System.Threading;

    using Opc.UaFx;
    using Opc.UaFx.Server;

    public class Program
    {
        public static void Main()
        {
            var temperatureNode = new OpcDataVariableNode<double>("Temperature", 100.0);

            using (var server = new OpcServer("opc.tcp://localhost:4840/", temperatureNode))
            {
                server.Start();

                while (true) {
                    if (temperatureNode.Value == 110)
                        temperatureNode.Value = 100;
                    else
                        temperatureNode.Value++;

                    temperatureNode.ApplyChanges(server.SystemContext);
                    Thread.Sleep(1000);
                }
            }
        }
    }
}

```

```

Imports System.Threading

Imports Opc.UaFx
Imports Opc.UaFx.Server

Namespace Server
    Public Class Program
        Public Shared Sub Main()
            Dim temperatureNode = New OpcDataVariableNode(Of Double)("Temperature", 100.0)

            Using server = New OpcServer("opc.tcp://localhost:4840/", temperatureNode)
                server.Start()

                While True
                    If (temperatureNode.Value = 110) Then
                        temperatureNode.Value = 100
                    Else
                        temperatureNode.Value += 1
                    End If

                    temperatureNode.ApplyChanges(server.SystemContext)
                    Thread.Sleep(1000)
                End While
            End Using
        End Sub
    End Class
End Namespace

```

1) , 2) , 3) Your "License Code" turns the package into a productive full version.

4) Not recommended for productive use.



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