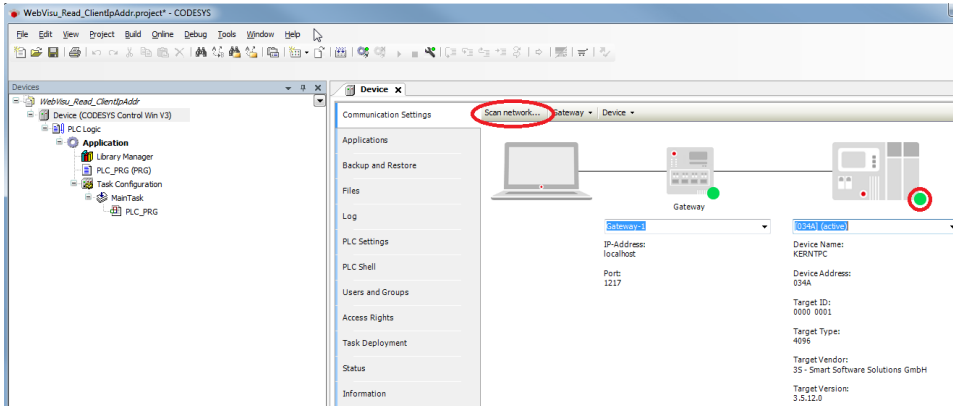


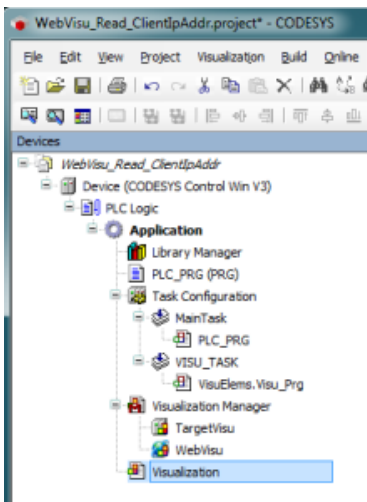
WebVisu: Reading the IP Address of the Client

- Create a "Standard project" and select *CODESYS Control Win V3* as the device.
- Define the target system by means of the *Network scan*.



- Insert a visualization in the device tree. Then the *Visualization Manager* is inserted with the visu types *TargetVisu* and *WebVisu*.

In addition, a *Visu_Task* is also created automatically.

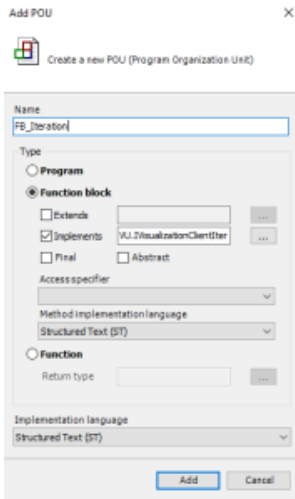


As of SP17:

- Open the *Library Manager* and add the following libraries:
VisuUtils

Name	Namespace	Effective Version
System_VisuElemTextEditor = VisuElemTextEditor, 3.5.17.0 (System)	VisuElemTextEditor	3.5.17.0
System_VisuElemTrace = VisuElemTrace, 3.5.17.0 (System)	VisuElemTrace	3.5.17.0
System_VisuElemXYChart = VisuElemXYChart, 3.5.17.0 (System)	VisuElemXYChart	3.5.17.0
system_visuinputs = visuinputs, 3.5.17.0 (system)	visuinputs	3.5.17.0
System_VisuNativeControl = VisuNativeControl, 3.5.17.0 (System)	VisuNativeControl	3.5.17.0
VisuUtils = Visu Utils, 3.5.17.0 (System)	VU	3.5.17.0

- Create a new FB named *FB_Iteration* and implement the interface *VU.IVisualizationClientIteration*.



The following methods are created automatically with the FB:

EndIteration
HandleClient
StartIteration

- Adapt the *FB_Iteration* function block as follows:

Declaration

```
FUNCTION_BLOCK FB_Iteration IMPLEMENTS VU.IVisualizationClientIteration
VAR CONSTANT
    c_MaxClients      : __XINT := 5;
END_VAR
VAR
    _iIndex           : __XINT;
    asIpAddresses     : ARRAY [0..c_MaxClients-1] OF STRING;
END_VAR
```

- Adapt the *EndIteration* method as follows:

Declaration

```
METHOD EndIteration
VAR
    _iCounter : __XINT;
END_VAR
```

Implementa
tion

```
FOR _iCounter := (c_MaxClients - 1) TO _iIndex BY -1 DO
    asIpAddresses[_iCounter] := '';
END_FOR
```

-
- Adapt the *HandleClient* method as follows:
-

Implemen
tation

```
IF _iIndex <= (c_MaxClients - 1) THEN
    asIpAddresses[_iIndex] := itfClient.GetIPv4Address();
    _iIndex := _iIndex + 1;
END_IF
```

-
- Adapt the *StartIteration* method as follows:
-

Implemen
tation

```
_iIndex := 0;
```

-
- Adapt the POU *PLC_PRG* as follows:
-

Declaration

```
VAR
    fbIteration      : FB_Iteration;
    fbIterateClients : VU.FbIterateClients;
    xIterate          : BOOL;
END_VAR
```

Implemen
tation

```
fbIterateClients(xExecute := xIterate, itfClientFilter := VU.Globals.OnlyWebVisu,
itfIterationCallback := fbIteration);

IF fbIterateClients.xDone THEN
    xIterate := FALSE;
END_IF
```

- Start the project and insert the variable `PLC_PRG.fbIiteration` in the watch list.
- Open a browser and type in the following address: <http://localhost:8080/webvisu.htm>
- Set the `PLC_PRG.xIiterate` variable to `TRUE`.

WebVisu_Read_ClientAddr

- Device [connected] [CODESYS Control Win V3]
 - PLC Logic
 - Application [run]
 - Library Manager
 - FB_Iteration (FB)
 - EndIteration
 - HandleClient
 - StartIteration
 - PLC_PRG (PRG)
 - Task Configuration
 - MainTask (EC-Task)
 - PLC_PRG
 - VISU_TASK (EC-Task)
 - VisuBemS_Visu_Prg

Device: Application: PLC_PRG

Expression	Type	Value	Prepared value	Address	Comment
fbIteration	FB_Iteration				
fbIterateClients	WU_FbIterateClients				
xIterate	BOOL	FALSE			

```

1 fbIterateClients(xIterate:=FALSE, xIterate:=FALSE, itfClientFilter := WU_GlobalS_OnlyWebVisu, itfIterationCallback := fbIteration);
2
3 IF xIterateClients.xDone:=FALSE THEN
4   xIterate:=FALSE;
5 END_IF
6 RETURN
          
```

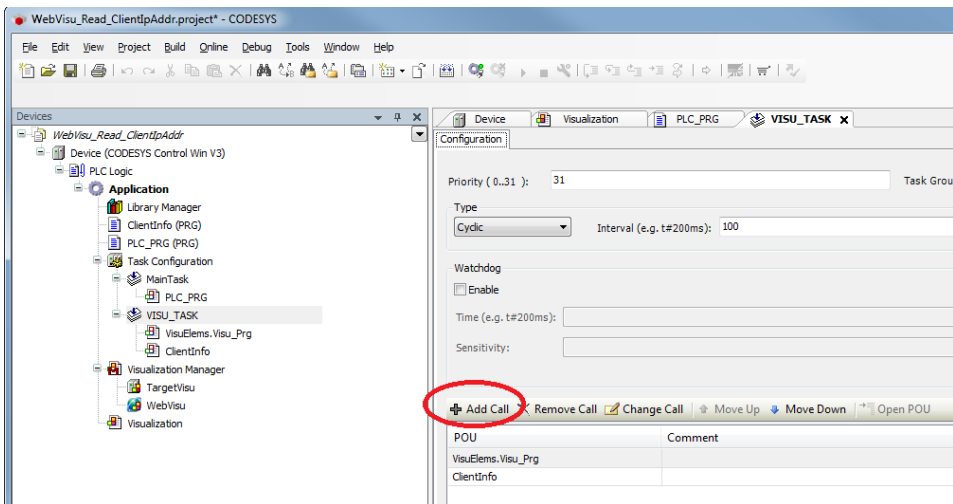
Watch 1

Expression	Application	Type	Value	Prepared value	Execution point
PLC_PRG.fbIteration	Device: Application	FB_Iteration			
c_MaxClients		DINT	5		Cyclic Monitoring
i_Index		DINT	1		Cyclic Monitoring
asIpAddresses		ARRAY [0..(c_MaxClients - 1)] OF STRING			Cyclic Monitoring
asIpAddresses[0]		STRING	'127.0.0.1'		Cyclic Monitoring
asIpAddresses[1]		STRING			Cyclic Monitoring
asIpAddresses[2]		STRING			Cyclic Monitoring
asIpAddresses[3]		STRING			Cyclic Monitoring
asIpAddresses[4]		STRING			Cyclic Monitoring

Up to SP16:

- Create a new POU named *ClientInfo* and call it from *Visu_Task*.

 The call of the *ClientInfo* POU must originate from the *Visu_Task* because only then is the required client handle passed.



- Adapt the *ClientInfo* POU as follows:

Declaration

```

VAR
    pClient      :    POINTER TO VisuElems VisuElemBase VisuStructClientData;
    helper       :    VisuElems VisuFbClientTagDataHelper;
    s1           :    STRING;
END VAR

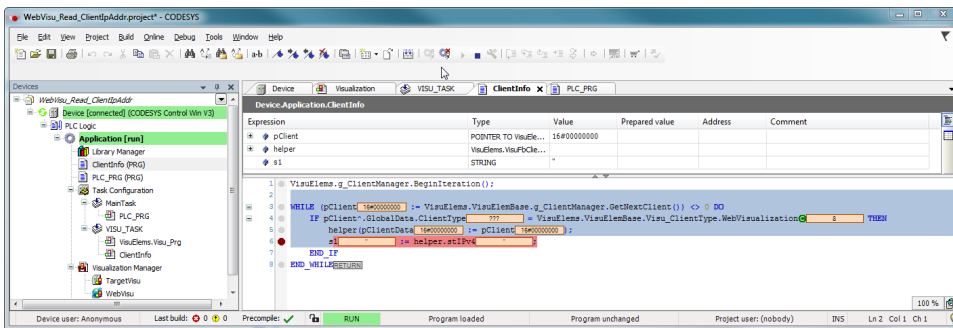
```

Implementierung

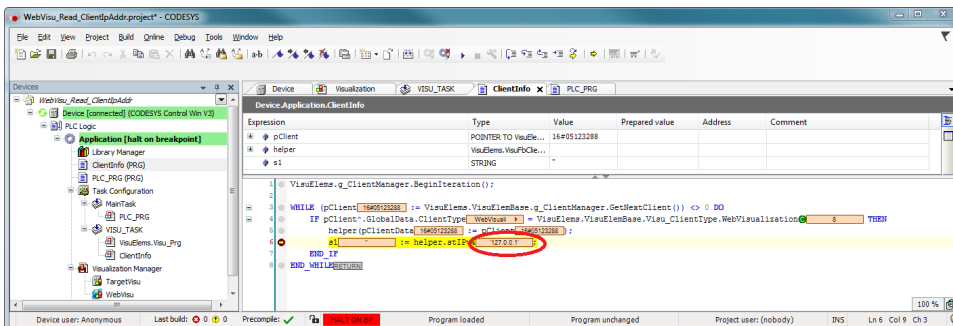
```
VisuElems.g_ClientManager.BeginIteration();

WHILE (pClient := VisuElems VisuElemBase.g_ClientManager.GetNextClient()) <> 0 DO
    IF pClient^.GlobalData.ClientType = VisuElems VisuElemBase Visu_ClientType.WebVisualization
    THEN
        helper(pClientData := pClient);
        s1 := helper.stIPv4;
    END_IF
END_WHILE
```

- Start the project and set a breakpoint in line 6 of the *ClientInfo* POU.



- Open a browser and type in the following address: <http://localhost:8080/webvisu.htm>
- After the client has connected, execution is halted at the breakpoint and the IP address can be read.



The information is available only for web clients. A TargetVisu connected to the controller does not contain this information.