

Remote Viewer Guide

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Table of Contents

Section	Title	Page Number
1	Scope	3
2	Summary	3
3	Configuring the Executing Machine	3
3.1	Check Ports Being Used	4
3.2	Check the IP Address of Executing Machine	5
4	Configure the Remote Viewer	6
5	Custom Resolution	9
6	Possible Errors	10
6.1	Connection Failed	10
6.2	Application Did Not Open	11

Note: this document is only for Microsoft Windows Operating System

1. Scope

The ADISRA SmartView Remote Viewer Guide explains how remote access works internally and the steps to follow in order to deploy the remote access feature within ADISRA SmartView.

2. Summary

Remote Viewer is a tool which allows the user to connect the Viewer to ADISRA SmartView runtime on a local or remote computer. In order to execute the Remote Viewer, the user needs to run the full installation of ADISRA SmartView and then execute the Viewer.exe

📙 ≪ Disco Local (C:) → Program Files (x86) → ADISRA → Adisra SmartView → Bin 🛛 🗸						
Nome	Data de modificaç	Tipo	Tamanho			
🚳 VXLEngine.dll	01/09/2020 10:12	Extensão de aplica	97 KB			
NXLEditor.dll	01/09/2020 10:12	Extensão de aplica	123 KB			
😹 Viewer.exe	01/09/2020 10:12	Aplicativo	280 KB			
VIBlendWPFEditors.dll	25/08/2020 15:04	Extensão de aplica	88 KB			
🚳 vcruntime140.dll	25/08/2020 15:04	Extensão de aplica	79 KB			
💷 unzip.exe	25/08/2020 15:04	Aplicativo	213 KB			
🚳 Unme.Common.dll	25/08/2020 15:04	Extensão de aplica	21 KB			

When the Remote Viewer connects to the remote runtime application, it requests the Graphics which will be opened. <u>It is not necessary to manually copy the</u> <u>application to the machine where the Remote Viewer will be executed</u>. This is an important feature since the application will be only placed in the machine where the runtime is running. There will be no need to keep applications in different machines. Additionally, whenever a change is made on a Graphics layout (i.e. added an extra label on engineering), this change will already be available to the Remote Viewer, the user needs to re-open the updated Graphics. When logic has been updated in a Service, Trigger, Driver or any module that is part of the runtime, the user must restart the runtime process and the Remote Viewer will be automatically disconnected/closed.

3. Configuring the Runtime

Every Remote Viewer needs to connect to a ADISRA SmartView runtime process. We will look at the runtime configuration first.

To configure the project that is going to be executed, follow the steps below:

On the Settings Ribbon, go to Viewer and select "SelfHosting". Enter a port number, the default port is "9000" but it can be changed if it is already in use.

	8 9 L ()	ADISRA SmartView 4.0.1.0	
Runtime Build	View Settings Search License		
Security Graphics Resolutions Da	te and ime * Events * * * * * * * * * * * * * * * * * * *	Viewer Viewer Web Connections *	Redundancy *
Navigation Tree 🔹 🕂 🗙		Port: 9000 Prop	oerties 💌 🕂 🗙
ProjectViewer		Service Type: SelfHosting V ?	Search 🗙
Data Types Graphics		Viewer	
Templates			
Services			
Alarm History			
Tag History			
Recipes			
Drivers			
Images	Runtime Log	- ↓ ×	
System Functions Library	Severity Source Description TimeStamp		
system runctions clorary			
< >	Engineering Log Runtime Log Search Output	Build Output	
			*

3.1 Check the Ports Being Used

This step is only needed if it is uncertain if the port is already in use. Stop the application if it is running.

 Press "Windows+R" and type "cmd" and click OK to open the Command Prompt:

🖅 Run	×
٨	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
<u>O</u> pen:	cmd ~
	OK Cancel <u>B</u> rowse

• In the Command Prompt type "netstat -an" and see the ports that are being used. Make sure the port to be configured is not listed. If it is, select a different port number that is not being used.

Comm	Command Prompt -					
(.)vets	tat _an				^	
c. (mets						
Active C	connections					
Proto	Local Address	Foreign Address	State			
TCP	0.0.0.0:80	0.0.0:0	LISTENING			
TCP	0.0.0.0:135	0.0.0:0	LISTENING			
TCP	0.0.0.0:443	0.0.0:0	LISTENING			
TCP	0.0.0.0:445	0.0.0:0	LISTENING			
TCP	0.0.0.0:3389	0.0.0:0	LISTENING			
TCP	0.0.0.0:4840	0.0.0:0	LISTENING			
TCP	0.0.0.0:5040	0.0.0:0	LISTENING			
TCP	0.0.0.0:5432	0.0.0:0	LISTENING			
TCP	0.0.0.0:7680	0.0.0:0	LISTENING			
TCP	0.0.0.0:48400	0.0.0:0	LISTENING			
TCP	0.0.0.0:48401	0.0.0:0	LISTENING			
TCP	0.0.0.0:49664	0.0.0:0	LISTENING			
TCP	0.0.0.0:49665	0.0.0:0	LISTENING			
TCP	0.0.0.0:49666	0.0.0.0:0	LISTENING			
					\sim	

3.2 Check the IP Address of the Executing Machine

The IP Address and the port number configured in the project will be used to create the connection between the Remote Viewer and the Runtime. Please follow the instructions below to obtain the correct IP Address for the machine where the runtime is being executed.

 Press "Windows+R" and type "cmd" and click OK to open the Command Prompt:

🖅 Run	×
Ø	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
<u>O</u> pen:	cmd ~
	OK Cancel <u>B</u> rowse

• In the Command Prompt type "ipconfig" and check the IPv4 Address, this will be used later. In this example, it is "192.168.1.145".

Select Command Prompt	_	×
C:\>ipconfig		^
Windows IP Configuration		
Ethennet adapter Ethennet.		
Connection-specific DNS Suffix :		
Link-local IPv6 Address		
Subnet Mask		
Default Gateway 192.168.1.1 192.168.1.5		
		\sim

4. **Configure the Remote Viewer**

To configure the Remote Viewer to connect to the executing Runtime from another machine, follow the steps below:

• Open the Viewer. To open the Viewer, the user must navigate to the ADISRA SmartView installation bin folder and double click Viewer.exe.

▹ Meu computador → Disco Local (C:) →	Program Files (x86) ADIS	RA → Adisra SmartVie	w ⊧ Bin	,
Nome	Data de modificaç	Тіро	Tamanho	
winhttpcertcfg.exe	25/08/2020 15:04	Aplicativo	15 KB	
🚳 WebAppServer.dll	10/09/2020 17:15	Extensão de aplica	197 KB	
WcfAppServer.dll	25/08/2020 15:04	Extensão de aplica	49 KB	
🚳 VXLEngine.dll	10/09/2020 17:15	Extensão de aplica	96 KB	
S VXLEditor.dll	10/09/2020 17:15	Extensão de aplica	124 KB	
😹 Viewer.exe	10/09/2020 17:15	Aplicativo	279 KB	
VIBlendWPFEditors.dll	25/08/2020 15:04	Extensão de aplica	88 KB	
🚳 vcruntime140.dll	25/08/2020 15:04	Extensão de aplica	79 KB	

• Note: the red circle indicates the viewer is not connected to an executing Runtime; set the IP address and designate the port to be configured (as shown in the last chapter), then test the connection.



🕱 Viewer			-		\times
IP:	192.168.1.145				
Port:	9000				
🗌 Sa	ve configuration				
	istom Resolution:		640	x 360	
w 1280 H 720					
ſ	Test Connection		Conr	nect	
-				1	

• If everything is configured correctly, this message will be displayed. Remember that the ADISRA SmartView Runtime must be running.

×	1
Connection is OK	
ОК	

• Then click the "Connect" button, the default graphic of the executing project will open; note, now the viewer has a green circle indicating it's connected to the Runtime:

🔭 Vie	ewer	_		×	
IP:	192.168.1.145				
Port:	9000				
Save configuration					
		64	0 x 360		
	istom Resolution:	w 1	280 н 7	720	
Г	Test Connection	Disc	onnect		

5. Custom Resolution

In this section, understand how to configure the custom resolution of the Remote Viewer.

If the machine selected for the Remote Viewer has a different resolution than the initial machine intended for the project, then the viewer's resolution can be changed. Click the "Custom Resolution" check box. Two options are offered:

• First option, click the down arrow on the far right of the first resolution box and the box will descend displaying available resolutions. Select the desired resolution.

🔭 Viewer			_		\times	
IP:	192.168.1.145					
Port:	9000					
🗆 Sa	ve configuration					
		۲	640 x	360	~	
Cu	ustom Resolution:	0	640 x	360	^	
			720 x	480		
	Test Connection		800 x	600		
			1024 >	768		
			1280 >	(720		
			1280 >	c 800		
			1280 >	(1024		
			1360 >	768		
			1366 >	768		
			1440 >	c 900		
			1536 >	864		
			1600 >	c 900		
			1680 >	(1050		
			1920 >	(1080		
			1920 >	(1200		
			2048 >	(1152		
			2560 >	c 1080		
			2560 >	(1440	\sim	

• Or, click the second box and type in the desired resolution:

	🕻 Vie	wer	_		\times		
IF) ;	192.168.1.145					
P	ort:	9000					
	Save configuration						
	7.0	stern Peselution	○ 640 x 360 ~				
		stom Resolution:	⊙ w 12	80 H 72	20		
1					1		

6. Possible Errors

6.1 Connection Failed

When testing the connection in the Remote Viewer and a connection failed message appears:



- To resolve this problem, first make sure the runtime is running on the remote machine. Also, make sure the runtime IP Address and the port number are correct.
- Next, check if the network is operating properly. Open the CMD (Command prompt) and ping the runtime IP Address.

```
"ping 192.168.1.145".

C:\>ping 192.168.1.145
Pinging 192.168.1.145 with 32 bytes of data:
Reply from 192.168.1.138: Destination host unreachable.
Ping statistics for 192.168.1.145:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

• If the ping fails, there is a problem with the network.

6.2 Application Does Not Open

This might not be an error. To confirm the project has a Startup Graphic configured. Select "Settings" to display the Startup Graphic box. Page "Home" is the "Startup Graphic". When the user runs the Remote Viewer, it will connect to Runtime and the Home page will be displayed for the user. If there is not a "Startup Graphic" configured, nothing will be displayed.



Alternatively, a Graphic maybe opened from the windows notification area located on the screen's bottom right near the system clock. Right click on the highlighted icon, click on the "Graphics" option and then click on the Graphics to be opened.

