

Remote Device Startup

System Requirements

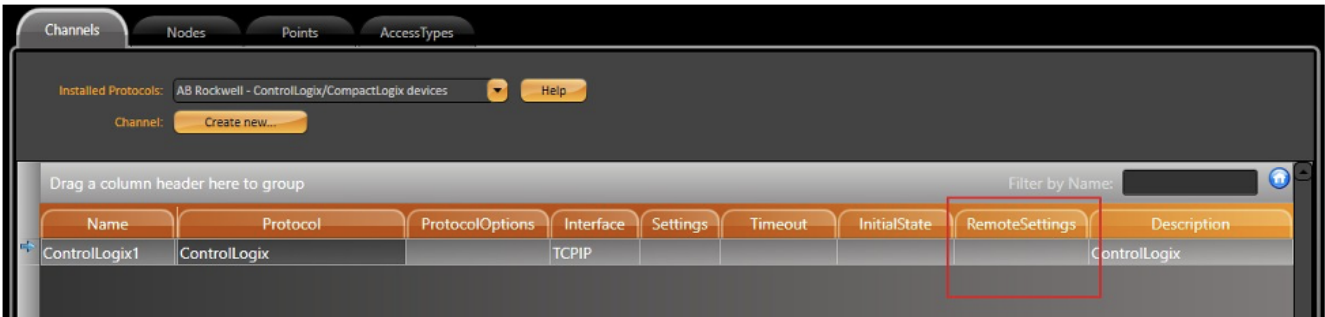
To make use of this feature the following requirements must be matched.

- All computers must be on the same network.
- The product must be installed on both computers.
- A WebServer application (e.g.: **TWebServer**, **IIS**) must be running on the remote computer.

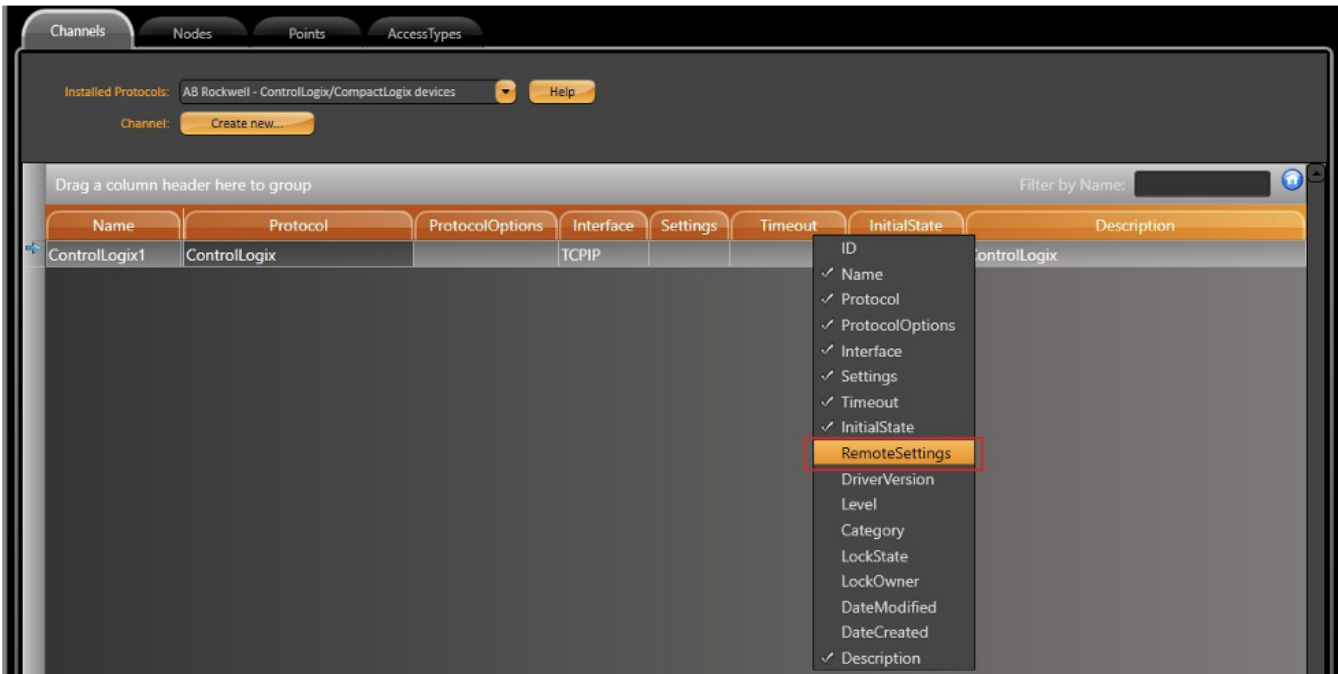
How to Use

To enable this feature, your Project should make use of a Communication Protocol. In your Engineering environment, navigate to the **Devices > Channel T** ab, and create a new Channel for one of the protocols on the list.

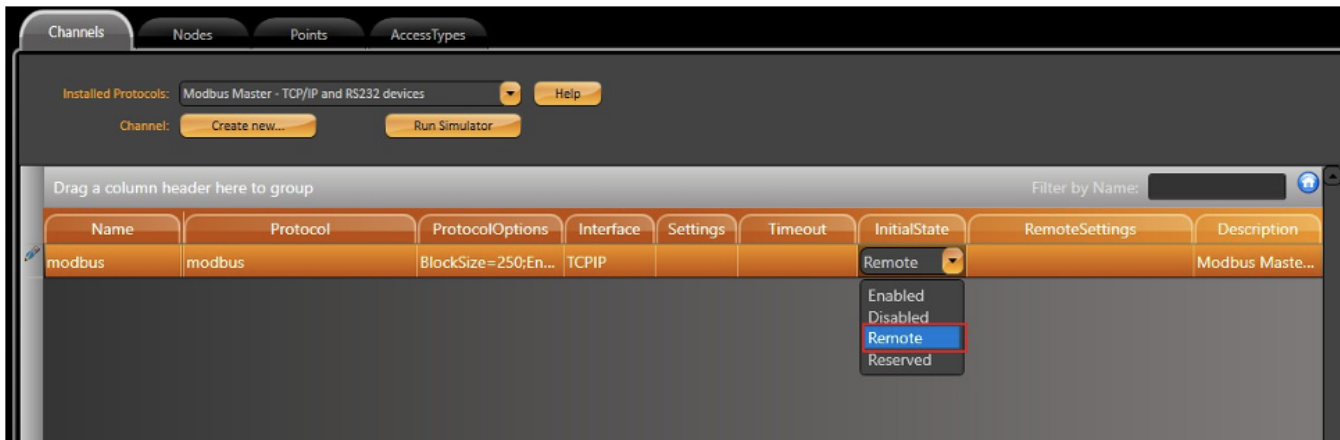
Once a Channel is created, you will find a column called *RemoteSettings* in the configuration grid.



If the column is not visible on the grid, you need to enable it by right-clicking the grid header, and selecting it from the list.



In the *Initial State* column, select the **Remote** option from the ComboBox.



This feature is available for all of the available protocols.

If the channel is either PI, Tundra or Prediktor, the tag's Historical Data that was configured in the **Device > Points** tab is returned by the Remote Computer.

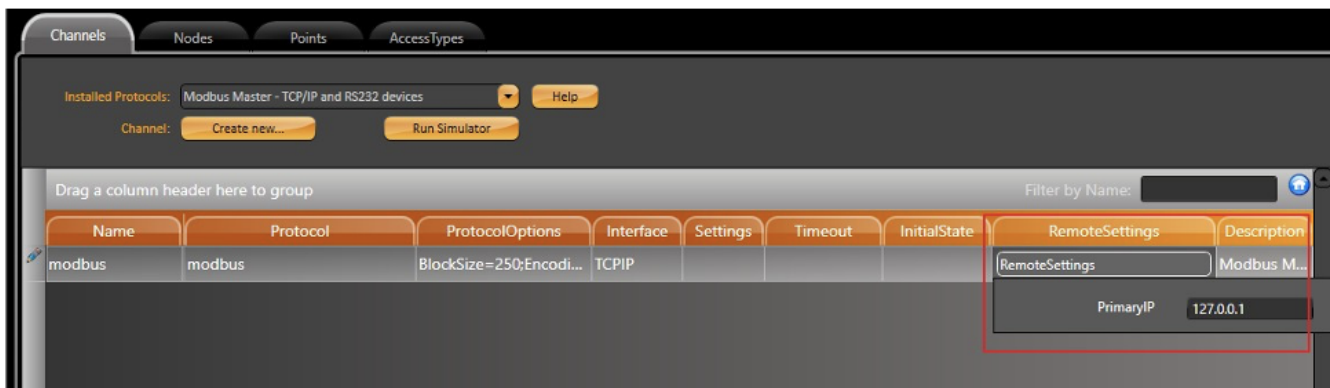


Important

Some protocol drivers must be executed by **Windows Users** that contain certain access permissions (e.g.: PI). This means that the **TWebServer** or **IIS** must be executed by the same **Windows User** (even when the Project runs as a service).

Channel Configuration

To start the remote setup, navigate to the **Devices > Channels** tab. Under the *RemoteSettings* column, insert the IP Address where the device will run remotely.



Any other tab related to those *Channel* settings (*Nodes* and *Points*) are configured as they would be in a local configuration.

Project in Execution

Before running the Project, there are some important details that must be taken into account:

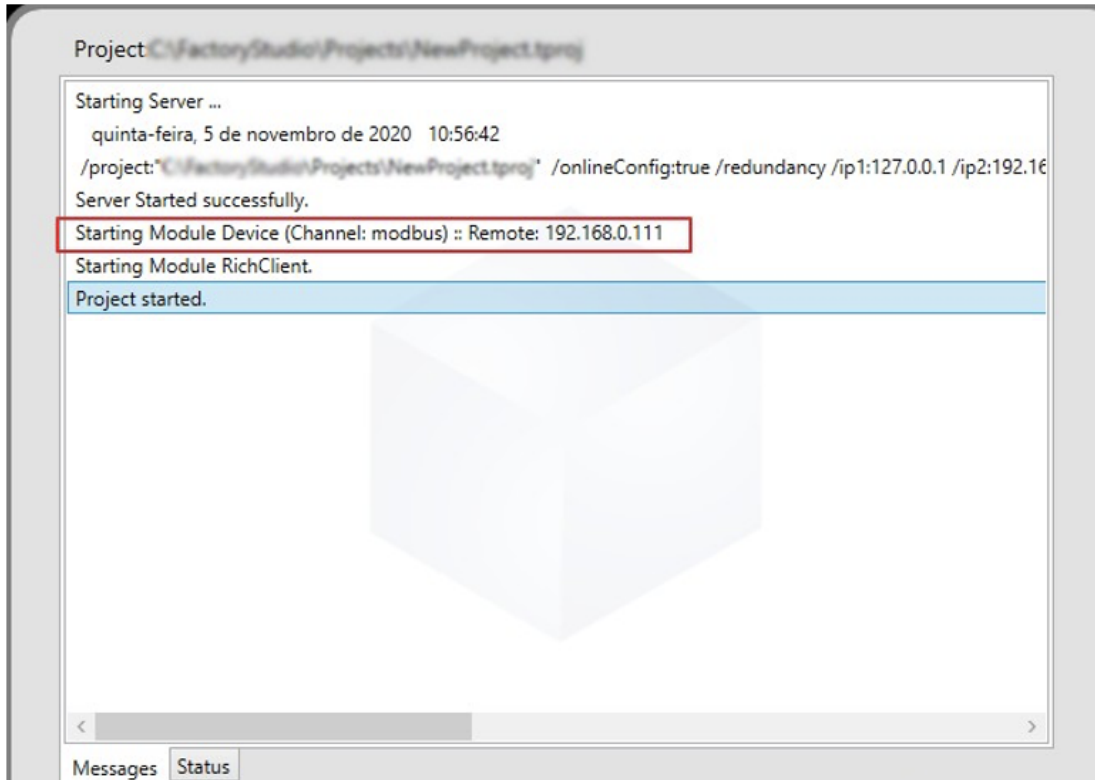
- The Remote Device will be executed remotely using the settings from the **Device/Channels/RemoteSettings** option.

- The Project (TStartup) will connect to the remote computer that is running the **TWebServer** or **IIS** through the ProjectServer. Format: *IP:port* (e.g.: *192.168.1.1:3100* - default port is 80).
- **Windows Firewall** or any other firewall in every router must enable some **Inbound** and **Outbound** ports on both computers.
 1. WebServer port - 80, 3100 or other.
 2. TServer port - 3101 or other.



TWebServer or **IIS** only needs to be executed on the **Remote Computer**.

Once the Project is launched, you will notice a non-default message in the *TStartup* dialog window, stating that the Module Device was started remotely.



A process called *TRemoteDevice* can be found running in the Task Manager on the Server computer. This application is responsible for launching the Device Module on the Remote PC.

Gerenciador de Tarefas

Arquivo Opções Exibir

Processos	Desempenho	Histórico de aplicativos	Inicializar	Usuários	Detalhes	Serviços
Nome	PID	Status	CPU	Memória (...)	Virtualização do UAC	
SystemSettings.exe	8764	Suspenso	00	0 K	Desabilitado	
SystemSettingsBroker.exe	16004	Em execução	00	2.064 K	Desabilitado	
taskhostw.exe	6844	Em execução	00	3.620 K	Desabilitado	
taskhostw.exe	15936	Em execução	00	1.004 K	Não permitido	
Taskmgr.exe	22304	Em execução	01	19.324 K	Não permitido	
TeamViewer_Service.exe	6988	Em execução	00	1.076 K	Não permitido	
Tempo Ocioso do Sistema	0	Em execução	77	8 K		
TextInputHost.exe	22676	Em execução	00	5.984 K	Desabilitado	
THardkeyService.exe	20336	Em execução	00	7.516 K	Não permitido	
TManagerExe.exe	18804	Em execução	00	192.420 K	Desabilitado	
TRemoteDevice.exe	18632	Em execução	01	29.312 K	Desabilitado	
TRichClient.exe	7180	Em execução	00	84.612 K	Desabilitado	
TServer.exe	9920	Em execução	00	93.516 K	Desabilitado	
TStartup.exe	3856	Em execução	00	57.788 K	Desabilitado	
uihost.exe	12404	Em execução	00	1.176 K	Desabilitado	
UserOOBEBroker.exe	5784	Em execução	00	980 K	Desabilitado	
Video.UI.exe	8644	Suspenso	00	0 K	Desabilitado	
wininit.exe	776	Em execução	00	4 K	Não permitido	
winlogon.exe	916	Em execução	00	420 K	Não permitido	
WinStore.App.exe	18024	Suspenso	00	0 K	Desabilitado	

Menos detalhes

On the Remote computer, we can also look at the Task Manager and browse for that same *TRemoteDevice*. The command line for this process will show more information related to the Channel we are running on remote machine, such as the Channel Name, Server's IP, and Port Number.

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Task Manager

File Options View

Processes Performance Users Details Services

Name	PID	Status	CPU	Memory (p...	Command line	Description
vmtoolsd.exe	1376	Running	00	7,312 K	"C:\Program Files\VMware\VMware Tools\vmtoolsd.exe"	VMware Tools Co
vmtoolsd.exe	4784	Running	00	2,104 K	"C:\Program Files\VMware\VMware Tools\vmtoolsd.exe" -n vmusr	VMware Tools Co
vmtoolsd.exe	1956	Running	00	2,100 K	"C:\Program Files\VMware\VMware Tools\vmtoolsd.exe" -n vmusr	VMware Tools Co
vmacthlp.exe	1008	Running	00	832 K	"C:\Program Files\VMware\VMware Tools\vmacthlp.exe"	VMware Activation
VGAAuthService.exe	1204	Running	00	3,196 K	"C:\Program Files\VMware\VMware Tools\VMware VGAAuthService.exe"	VMware Guest Au
unsecapp.exe	2848	Running	00	1,116 K	C:\Windows\system32\wbem\unsecapp.exe -Embedding	Sink to receive as
TWebServer.exe	4900	Running	00	31,696 K	"C:\Program Files (x86)\Tatsoft\FactoryStudio\TWebServer.exe"	TWebServer
TRemoteDevice.exe	6256	Running	00	28,680 K	"C:\Program Files (x86)\Tatsoft\FactoryStudio\fs-8.1\TRemoteDevice.exe" /module:modules.device /channel:modbus /ip:192.168.0.216 /port:13101 /us...	TRemoteDevice
TRemoteDevice.exe	4728	Running	00	5,612 K	"C:\Program Files (x86)\Tatsoft\FactoryStudio\fs-8.1\TRemoteDevice.exe"	TRemoteDevice
TManagerExe.exe	4352	Running	00	304,248 K	"C:\Program Files (x86)\Tatsoft\FactoryStudio\fs-8.1\TManagerExe.exe" /project:"C:\FactoryStudio\Projects\NGFMMonitor.tproj"	TManagerExe
THardkeyService.exe	1508	Running	00	5,424 K	"C:\Program Files (x86)\UNS3\Plantio\THardkeyService.exe"	THardkeyService
THardkeyService.exe	1928	Running	00	10,824 K	"C:\Program Files (x86)\Tatsoft\FactoryStudio\THardkeyService.exe"	THardkeyService
Taskmgr.exe	4648	Running	00	8,472 K	"C:\Windows\system32\taskmgr.exe" /4	Task Manager
taskhost.exe	2188	Running	00	2,092 K	taskhost.exe	Host Process for V
taskhost.exe	908	Running	00	1,264 K	taskhost.exe	Host Process for V
System interrupts	-	Running	00	0 K		Deferred procedu
System Idle Process	0	Running	99	4 K		Percentage of tim
System	4	Running	00	28 K		NT Kernel & Syst
svchost.exe	852	Running	00	4,004 K	C:\Windows\system32\svchost.exe -k DcomLaunch	Host Process for V
svchost.exe	888	Running	00	4,032 K	C:\Windows\system32\svchost.exe -k RPCSS	Host Process for V
svchost.exe	524	Running	00	12,692 K	C:\Windows\System32\svchost.exe -k LocalServiceNetworkRestricted	Host Process for V
svchost.exe	748	Running	00	26,716 K	C:\Windows\system32\svchost.exe -k netsvcs	Host Process for V
svchost.exe	880	Running	00	5,636 K	C:\Windows\system32\svchost.exe -k LocalService	Host Process for V
svchost.exe	1060	Running	00	6,444 K	C:\Windows\system32\svchost.exe -k NetworkService	Host Process for V
svchost.exe	1228	Running	00	4,976 K	C:\Windows\system32\svchost.exe -k LocalServiceNoNetwork	Host Process for V
svchost.exe	2036	Running	00	5,304 K	C:\Windows\System32\svchost.exe -k LocalSystemNetworkRestricted	Host Process for V
svchost.exe	3284	Running	00	41,848 K	C:\Windows\System32\svchost.exe -k termsvcs	Host Process for V
svchost.exe	3340	Running	00	1,316 K	C:\Windows\system32\svchost.exe -k NetworkServiceNetworkRestricted	Host Process for V
spoolsv.exe	1392	Running	00	3,088 K	C:\Windows\System32\spoolsv.exe	Spooler SubSyste
csrss.exe	132	Running	00	776 K		Windows Sarcin

Fewer details

End task