



Advanced Module 32

Remote Desktop Services Environnement

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1 Introduction

1.1 PcVue version

This module is for PcVue version 11.0.

1.2 In this module you will learn

- ★ What are the specific behaviors due to the Remote Desktop Services environment
- ★ How to configure user auto login.
- ★ How logs files are managed by PcVue running into Remote Desktop Services session host.

Note: Since Windows Server 2008, Terminal Server is not used. It is replaced by Remote Desktop Session Host.

Documentation : [http://msdn.microsoft.com/en-us/library/windows/desktop/dd979766\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/windows/desktop/dd979766(v=vs.85).aspx)

Previous name	English	French
Terminal Services	Remote Desktop Services	Services Bureau à distance
Terminal Server	Remote Desktop Session Host (RD Session Host)	Hôte de session Bureau à distance
Terminal Services Licensing (TS Licensing)	Remote Desktop Licensing (RD Licensing)	Gestion de licences des services Bureau à distance
Terminal Services Gateway (TS Gateway)	Remote Desktop Gateway (RD Gateway)	Passerelle des services Bureau à distance
Terminal Services Session Broker (TS Session Broker)	Remote Desktop Connection Broker (RD Connection Broker)	Service Broker pour les connexions Bureau à distance
Terminal Services Web Access (TS Web Access)	Remote Desktop Web Access (RD Web Access)	Accès Web Bureau à distance
Terminal Services Virtualization	Remote Desktop Virtualization Host (RD Virtualization Host)	Serveur hôte de virtualisation des services Bureau à distance



1.3 Files used in this module

None.

1.4 Third party software used in this module

None.

2 Specifics behaviors due to the Remote Desktop Services environment Requirements

As described into the based module, using PcVue in a Remote Desktop Services server environment is based on network configuration. We have seen that several PcVue are running on the same computer into different sessions. That point allows to PcVue to dynamically provide a free station number by using the -WTS option.

We will encounter some specificity because PcVue may run several times on the same computer.

2.1 Architecture

This picture represents the same architecture than the one described in the base module. Near to the network representation, you have a zoom to the server.

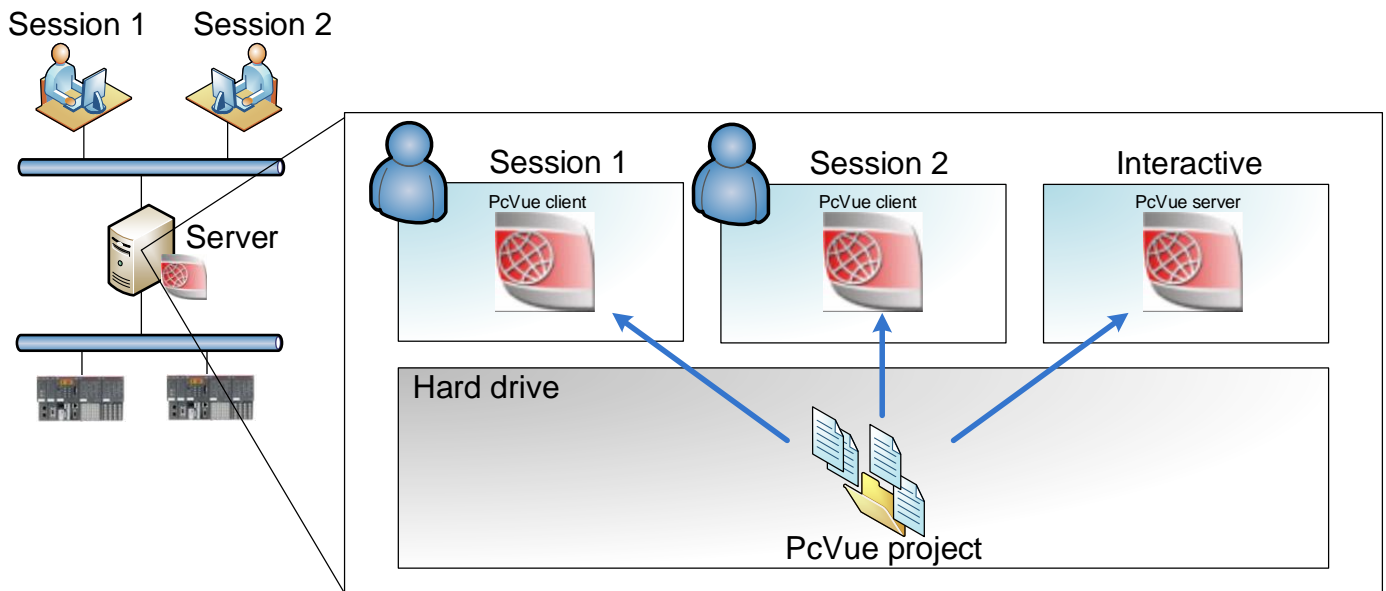


Figure 1

In this project, 3 stations are defined: 1 Real Time server and 2 clients. The SERVER console session hosts the PcVue server which is in charge of communication with PLCs. Two different users launched 2 remote sessions (session1 and session2) by using RDP from their computers.

On the SERVER side, only one PcVue has been installed with its project but it runs 3 times in three different sessions.

2.2 File sharing

2.2.1 During startup

In the Remote Desktop Services environment, it is important to be careful about file sharing. On PcVue side, the Bin folder and if you use the option "Use same working folder for all Terminal sessions", the same PcVue project is used by several sessions. When PcVue is starting in a session, it needs to read these files. During the startup phase, files have to be free of others connections.

That's why PcVue startups are serialized per session.

Exercise 1.



1. Launch PcVue in the server session
2. Open 2 Remote Desktop sessions from RDP
3. Launch PcVue in a Remote Desktop session and immediately after try to launch PcVue in the second one.



What do you see in the 2nd Remote Desktop session while PcVue is starting in the other session? Why?



What's happen once PcVue startup complete in the 1st Remote Desktop session?



If you're trying to start PcVue in a session whereas it is starting in another one, then you have to wait the complete startup of the other PcVue before to start or at least 600 seconds.

To change this timeout value you have to

Step 1. Select Configure/Project/general option menu

Step 2. Select the Communication section

Step 3. Change the Networking value concerning Windows® terminal session starting timeout

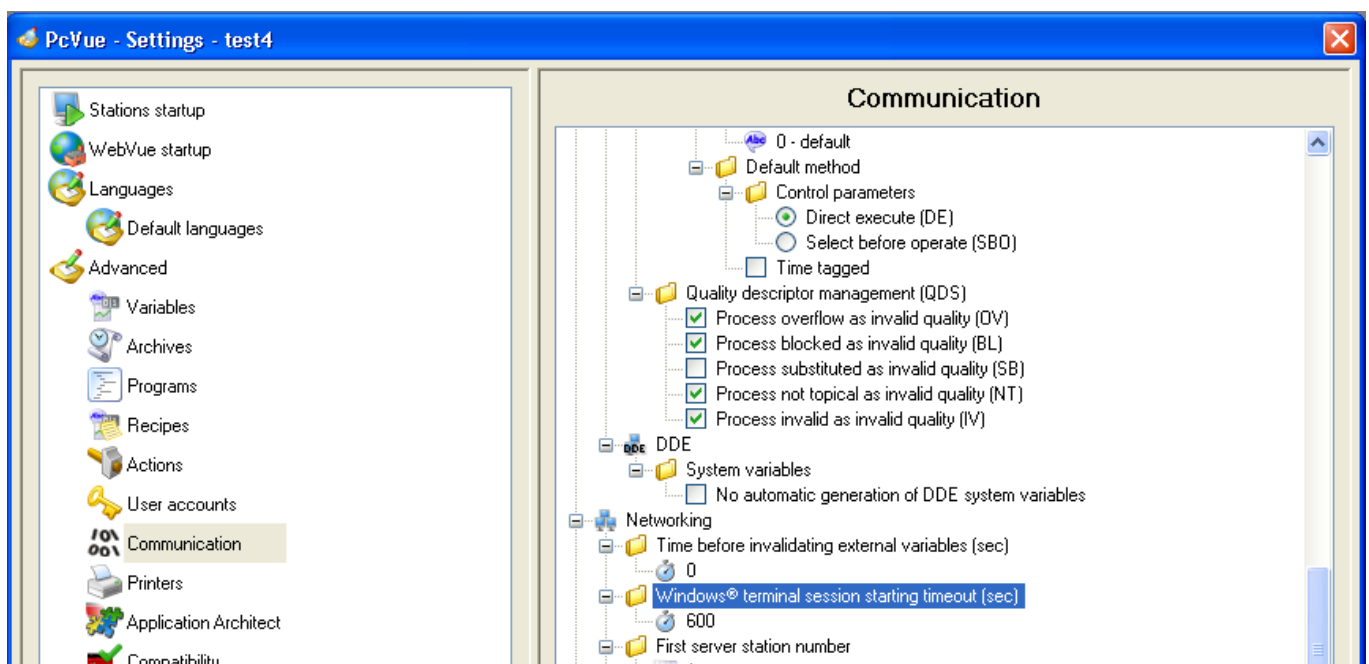


Figure 2



You have to adjust it according to your project and your hardware performances.



If you use the option "Use different working folder for each Terminal session", it is recommended to fix timeout to the minimum, 30 seconds.



The timeout value that you have to define not depends of your project.

So, the file that contains this timeout value IS NOT located in your PcVue project.

You will find it in Start.ini file as shown below.

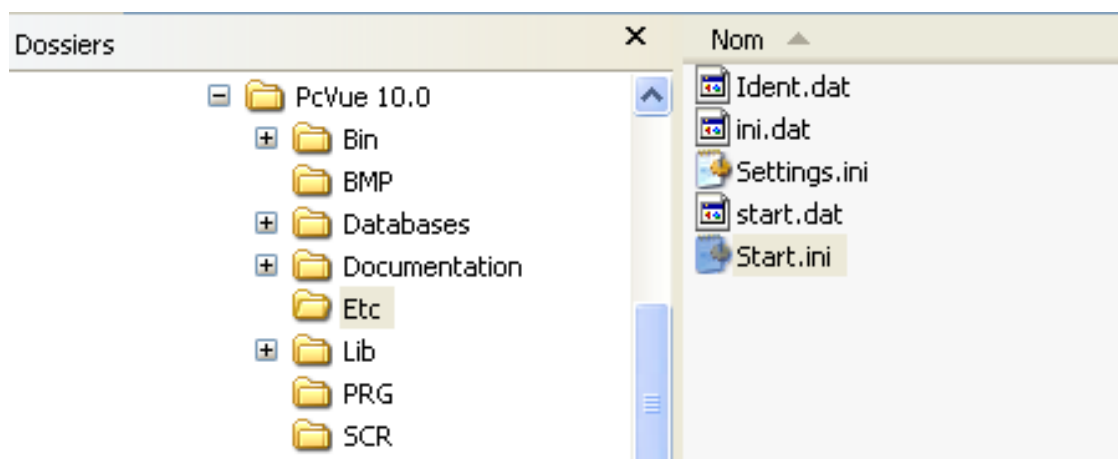


Figure 3



By default, this file does not exist. It will only be created if you change the default value in the project setting.

Exercise 2.



1. Close PcVue in session1 and 2
2. Change the Windows Remote Desktop session starting timeout to 30 seconds.
3. Launch PcVue in a Remote Desktop session and immediately after try to launch PcVue in the second one.



What is the difference with the previous exercise?



Main points you have to keep in mind:

- ★ Even if several sessions are open in parallel, PcVue startups are serialized.
- ★ You can manage the PcVue Windows Remote Desktop session starting timeout.

2.2.2 Saved variables

By default saved variables are stored in a file located in the PER folder of your application.

Then classical saved variables are not supported in Remote Desktop Services environment. You will have a message in the event viewer during PcVue startup as below:

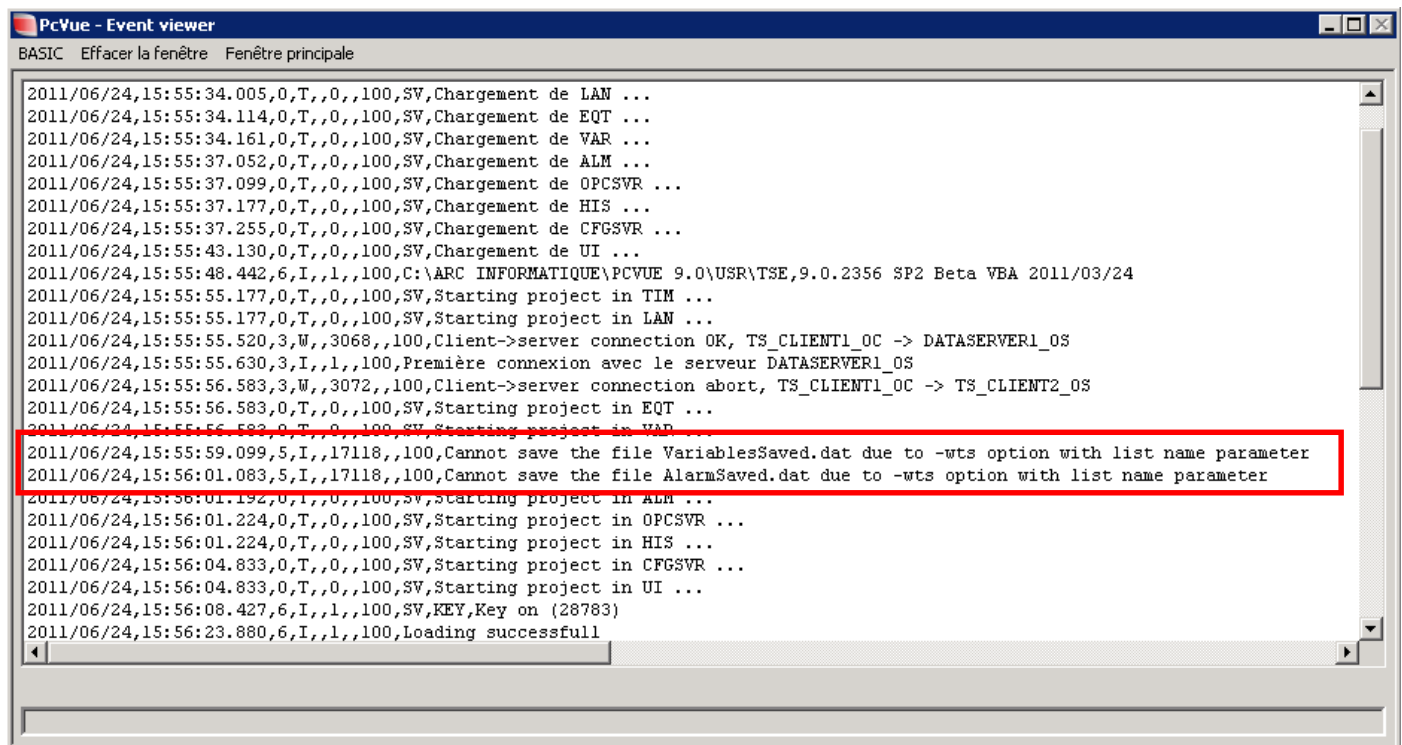


Figure 4

Saved variables files are located in the folder:

- With the option "Use same working folder for all Terminal sessions"
<ProjectPath>\USR\<ProjectName>\PER\
- With the option "Use different working folder for each Terminal session"
<ProjectPath>\USR\WTS\<ProjectName>_<StationName>\PER

Nevertheless, an option allows defining saved variables per user:

Step 1. Select Configure/Project/settings menu

Step 2. Select the Advanced/variables section

Step 3. Tick "User context" under Internal variables/behavior parameter

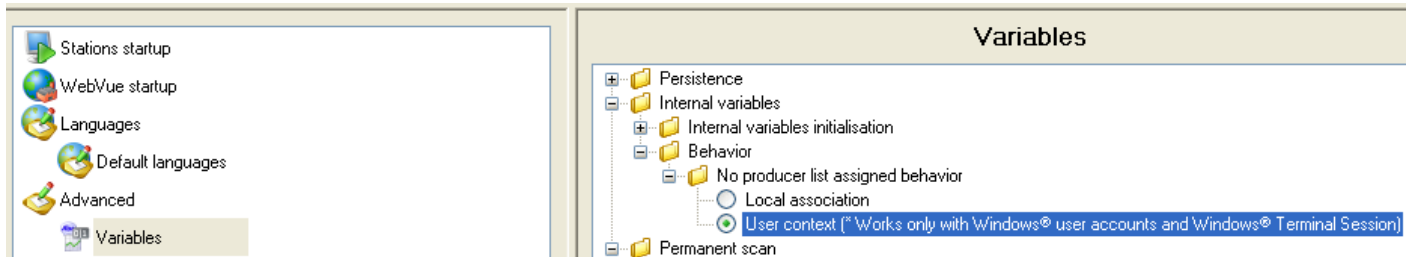


Figure 5



Exercise 3.

- Select User Context as internal variables behavior.
- Tick saved in the advanced tab of a register variable
- Change the value of this variable
- Stop PcVue



Where is located the file with the saved value?



Main points you have to keep in mind:

- ★ By default saved variables are located to different folders in Remote Desktop Services environment.
- ★ You can define saved variables per user.

2.3 User management

As you probably know, user.dat file is the file that contains all your users' definition. This file is loaded by PcVue each times your trying to login in your project.

In your PcVue user configuration you can activate an option based on Active Directory allowing to use windows users into PcVue. By choosing this option it is also possible to enable an auto login into PcVue with the current windows user.

To activate this behavior, you have to

Step 1. Select Configure/Project/User accounts

Step 2. Choose user accounts/settings

Step 3. Tick followings options and click Apply

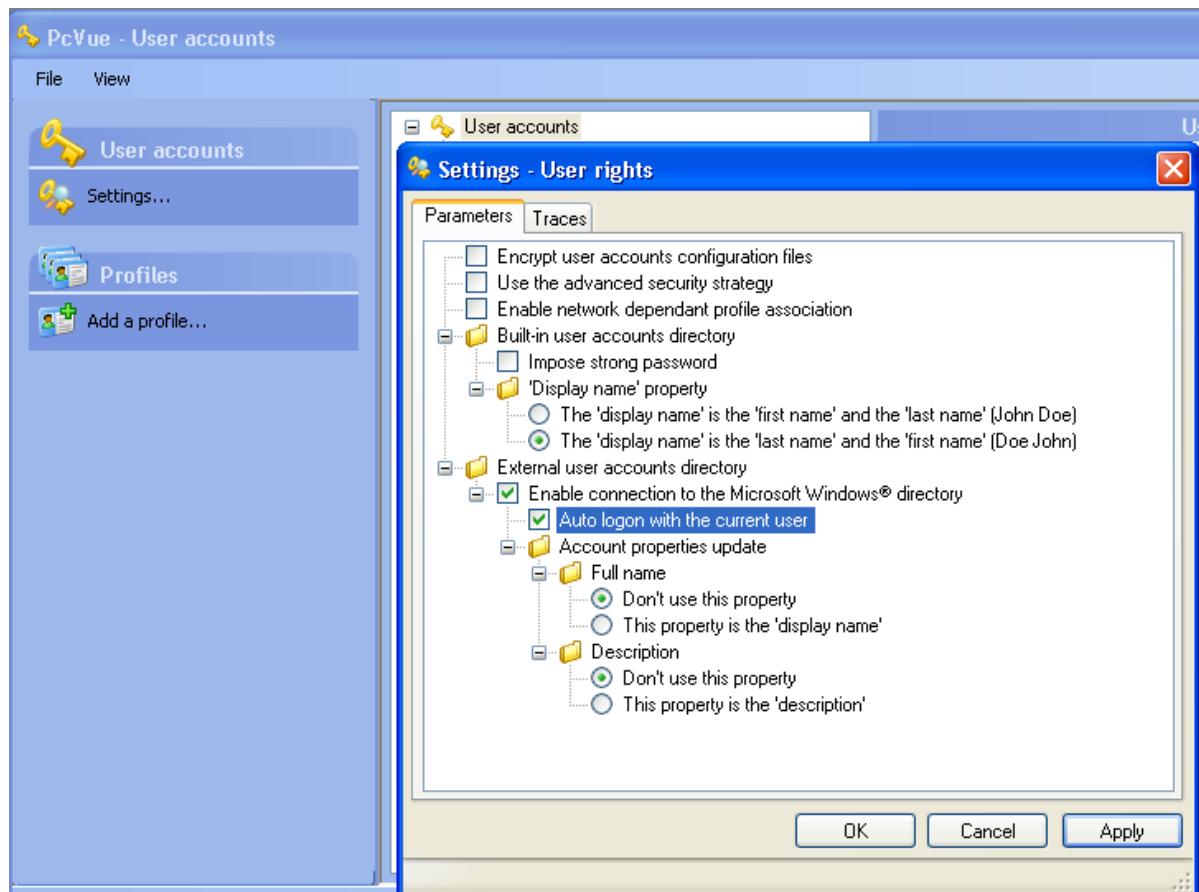


Figure 6

Step 4. Then link PcVue profile to windows user group

Main points you have to keep in mind:

- ★ If you've activated the Active Directory in Windows then you'll be able to use Windows users.
- ★ PcVue can auto login with the current user.

2.4 Log Files

With RDS architecture, Log Files management is quite different. Log Files folder is present to the InstallDir\Bin but into there are another folder WTS that contains the PcVue RDS sessions Logs.

3 Sum-up

- ★ Because some files are shared between sessions, PcVue startups are serialized.
- ★ Classical saved variables are not supported in Remote Desktop Services environment but you can define local saved variables or saved variables per user. By default saved variables are located to different folders in Remote Desktop Services environment.
- ★ Project modification should not be done in Remote Desktop Services Session environment.
- ★ Using Central project management is recommended.
- ★ PcVue is able to use Windows users if you're using Active Directory