

SEE ELECTRICAL PLM

Version 4 Release 7

Requirements



Revision Table

Version	Comments	Author	Date
1.0		IGE-XAO	08/12/2014
2.0		IGE-XAO	02/06/2015
3.0		IGE-XAO	06/08/2015



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1 - General Installation Process

This document defines how to install all the software products from the SEE Electrical PLM suite.

2 - Installing a License Server

This paragraph explains how to install a license server to be used by the SEE Electrical PLM applications. Refer to your deployment architecture to remind which database servers need to be used to hold your databases.

2 types of license server software are supported by SEE Electrical PLM:

- Hasp servers
- FlexLM servers

Note: The SEE Electrical PLM - Application Server uses only FlexLM license.

2.1 Hardware requirements

None, a license server is a light application not requiring specific hardware resources

2.2 Software requirements

We recommend installing the license server on a computer that is always online, for an optimal availability of the software. A license server can be installed on all common operating systems:

- 32 bits or 64 bits
- Windows XP SP3
- Windows 7 SP1
- Windows Server 2008 R2
- Windows Server 2012 R2
- ...

The computer has to be in a Windows domain, and you will need its physical network address (mac address) to get licenses for your IGE+XAO software.

To display the **mac address** of your computer, run in a command window (cmd.exe):

```
ipconfig -all
```

The network address can be read from the "Physical Address" line.

The minimal required FlexLM server version is 11.13.

2.3 User rights requirements

For installations, you need Windows administrator rights.

3 - Installing a Database Server

This paragraph explains how to install a database server holding one of the databases used by SEE Electrical PLM. Refer to your deployment architecture to remind which database servers need to be used to hold your databases.

3.1 Hardware requirements

It depends on the size of data you want to manage. The database should however be a powerful computer with big, fast and safe disk storage:

- Fast disks, size depending on the size of your data
- Multi-core processor, because SQL Server can use several cores for concurrent queries
-

Minimum Configuration (for functional tests only):

- Processor 2 GHz minimum
- RAM: 2 GB
- Required disk space: 20 GB minimum (depends on the amount of data)
- Network Adapters (100 Megabits/s)

Recommended Configuration (for production):

- Processor 3 GHz dual core
- RAM: 64 GB
- Required disk space: 100 GB (depends of the numbers of pieces of data you want to use – and their volume)
- Network Adapters (1 Giga bits/s or more)

3.2 Software requirements

- Windows Server 2008 R2 (64 bits), Windows Server 2012 R2 (64 bits) or later.
- SQL server 2008 R2, SQL Server 2012 and its related software requirement.

Refer to *Microsoft Websites for SQL server 2008 R2* installation.

We recommend you to read the *Microsoft® SQL Server® 2008 R2 Release Notes* and *Microsoft® SQL Server® 2008 R2 Read me, before installing Microsoft® SQL Server® 2008 R2*.
Idem for SQL server 2012 R2 installation

Usually, the following components are pre-required to install *Microsoft SQL Server 2008 R2*:

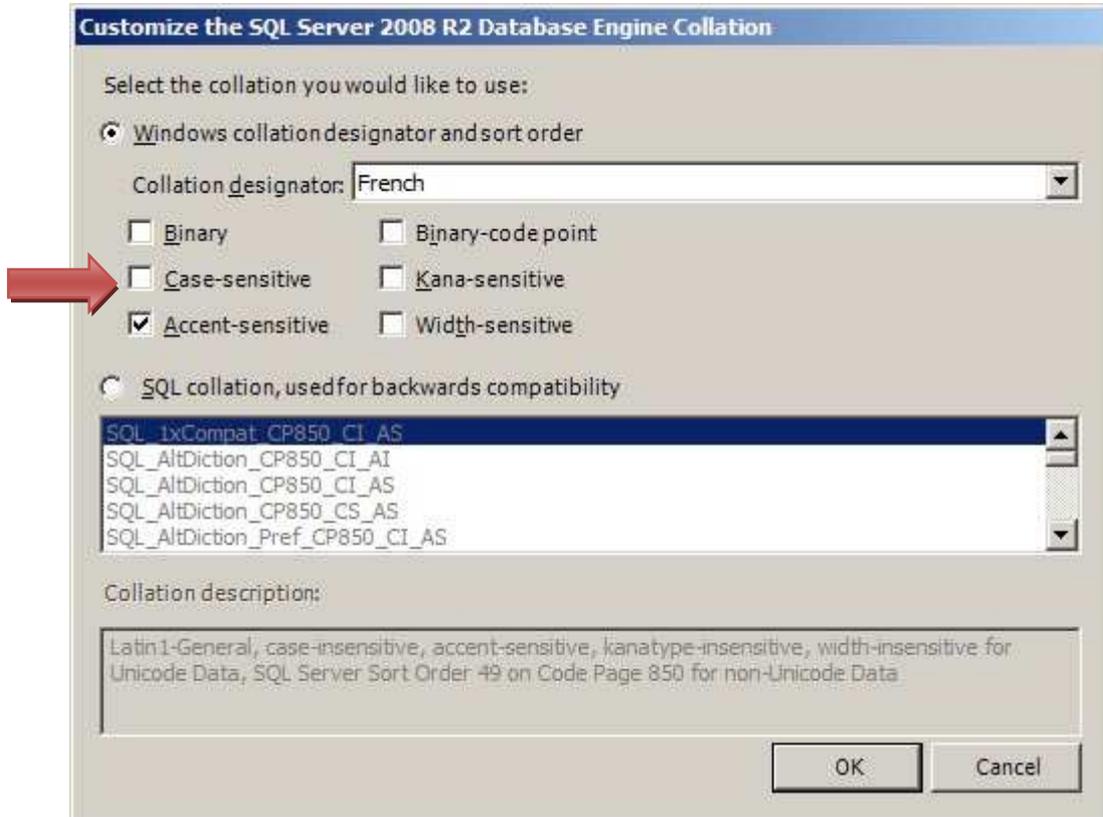
- *Microsoft Net Framework 3.5 SP1*
- *Windows Installer 4.5*
- *Windows PowerShell 1.0.*

Important remarks:

- On Windows Server 2012 R2 (64 bits) by default *Microsoft Net Framework 3.5* is not installed

- During the SQL SERVER installation, regarding the collation, be sure your installation is not made with the "**Case -sensitive**" option (this is required for all the SEE software products databases).

(Unchecked by default)



3.3 User rights Configuration

Once the databases have been created or restored, you need to set the proper SQL rights for the users that will connect to those databases.

Here are the SQL Server right requirements per type of user and type of SEE Electrical PLM databases:

User profiles	SEE_EDB	SEE_EED	SEE_SPM	SAC
Consultation User	none	db_reader EED_ExecStoredProcedures	db_reader	db_reader
Authoring user	none	db_writer, db_reader EED_ExecStoredProcedures	db_writer, db_reader	db_reader
Application server user identity of the COM service	db_owner	db_reader EED_ExecStoredProcedures	none	db_reader
SAC admin	none	none	none	db_owner
EED admin	none	db_owner EED_ExecStoredProcedures	none	db_reader
SPM admin	none	none	db_owner	db_reader

3.4

4 - Installing an Application Server

This paragraph explains how to install an application server to manage a product family definition under SEE Electrical PLM. Refer to your deployment architecture to remind:

- which application servers need to be installed
- which EDB and EED databases they should connect to
- with which login the COM+ application should run

4.1 Hardware requirements

They depend on the number of concurrent clients that may use the application server.

Minimum Configuration (for functional tests only):

- Processor 2 GHz
- Ram: 2GB (we recommend adding 1GB by client)
- Available disk space: 50 GB
- Network Adapters (100 Megabits/s)

Recommended Configuration (for production):

- Processor 3 GHz dual core
- Ram: 12GB (+ 1GB by authoring client, 200Mb by consultation client)
- Available disk space: 500 GB
- Network Adapters (1 Giga bits/s or more)

4.2 Software requirements

4.2.1 - Supported Operating Systems

- Windows Server 2008 R2 (64 bits)
- Windows Server 2012 R2 (64 bits)

4.2.2 - Pre-required Components

Those pre-required components are sometimes not installed by default on the computer. Or they can be installed, but not active in the operating system.

- Windows installer 5
- Microsoft .NET Framework 3.51
- Microsoft .NET Framework 4.5



Note

✓ *Microsoft .NET Framework is not delivered and you have to*

install it separately beforehand. If it has not been installed, the installer stops and asks you to do it.

4.2.3 - Application Server Settings

You must proceed with the following verifications:

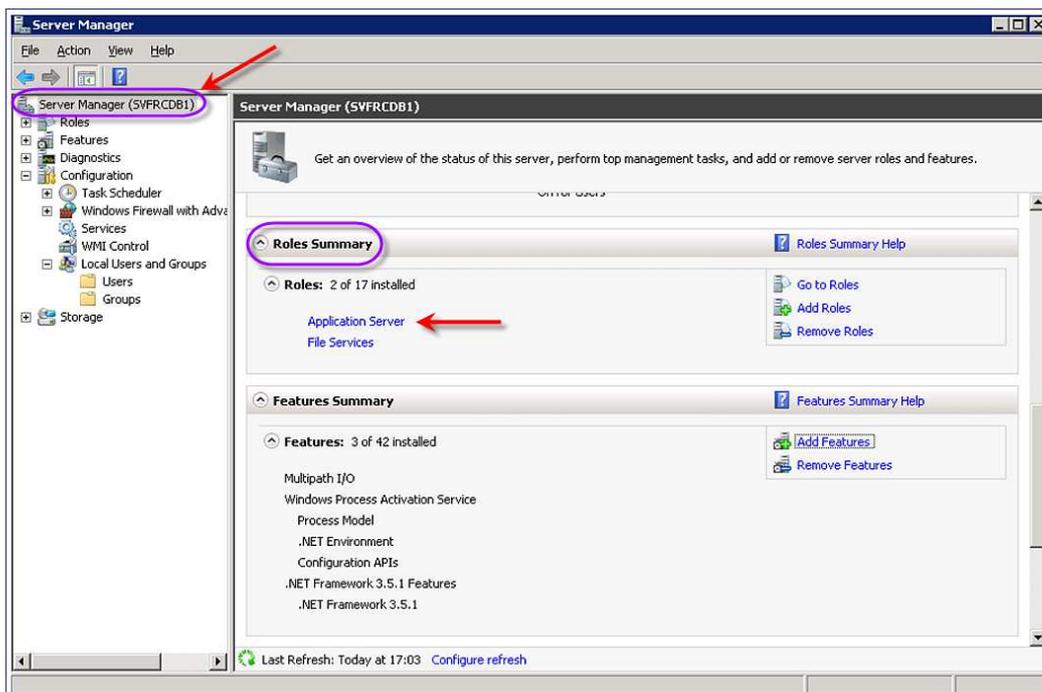
4.2.3.1 - Checking the Application Server Role

On the Application server, under Windows server, you must verify that the Application server (IIS, ASP.NET) is active.

4.2.3.1.1 - With Windows Server 2008

- Click **Start > Administrative Tools > Server manager**.
The *Server Manager* window appears.

Check that 'Application Server' is installed in the *Roles Summary* pane.



If it is not, contact your network administrator.

- Click on the **Next >** button.
- Click on Roles in the left pane of the *Server Manager* window.

The screenshot shows the Windows Server Manager interface for a server named SVFRCDB1. The 'Roles' section is selected in the left-hand navigation pane. The main content area displays the following information:

- Roles Summary:** 2 of 17 installed. Roles listed: Application Server, File Services. Buttons: Add Roles, Remove Roles.
- Application Server:** Provides central management and hosting of high-performance distributed business applications. Buttons: Application Server Help, Go to Application Server.
- Role Status:** Messages: None; System Services: 7 Running, 1 Stopped; Events: None in the last 24 hours. Note: Best Practices Analyzer: To start a Best Practices Analyzer scan, go to the Best Practices Analyzer tile on this role's homepage and click Scan this Role.
- Role Services:** 6 installed. A table lists the services and their status:

Role Service	Status
.NET Framework 3.5.1	Installed
Web Server (IIS) Support	Not installed
COM+ Network Access	Installed
TCP Port Sharing	Not installed
Windows Process Activation Service Support	Not installed
HTTP Activation	Not installed
Message Queuing Activation	Not installed
TCP Activation	Not installed
Named Pipes Activation	Not installed
Distributed Transactions	Installed
Incoming Remote Transactions	Installed
Outgoing Remote Transactions	Installed
WS-Atomic Transactions	Installed

Description: [COM+ Network Access](#) enables Application Server to host and allow remote invocation of applications built with COM+ or Enterprise Services components.

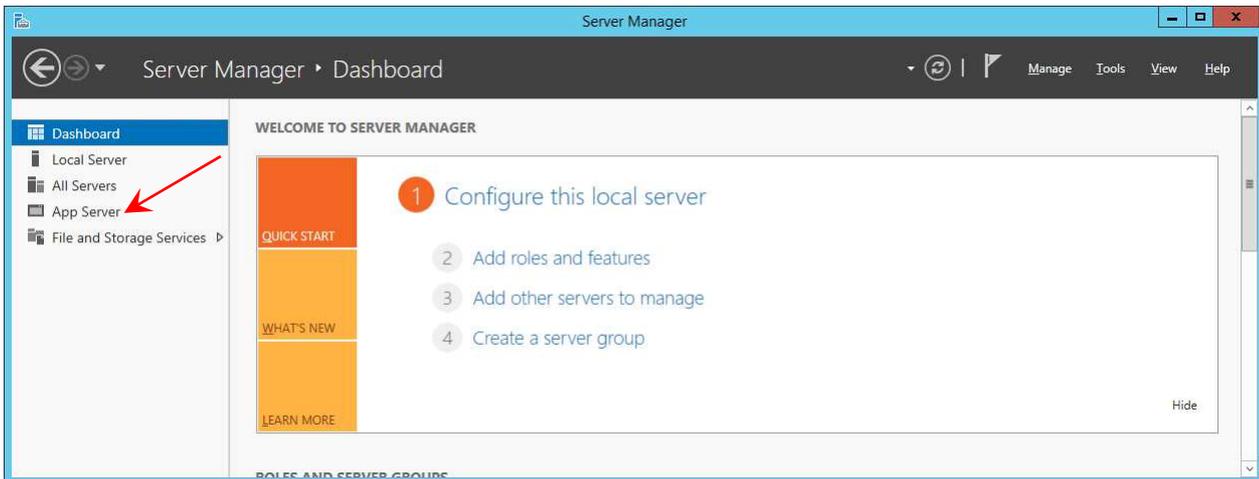
Last Refresh: Today at 10:53 [Configure refresh](#)

In the 'Role Services' area, check that the following services are installed:

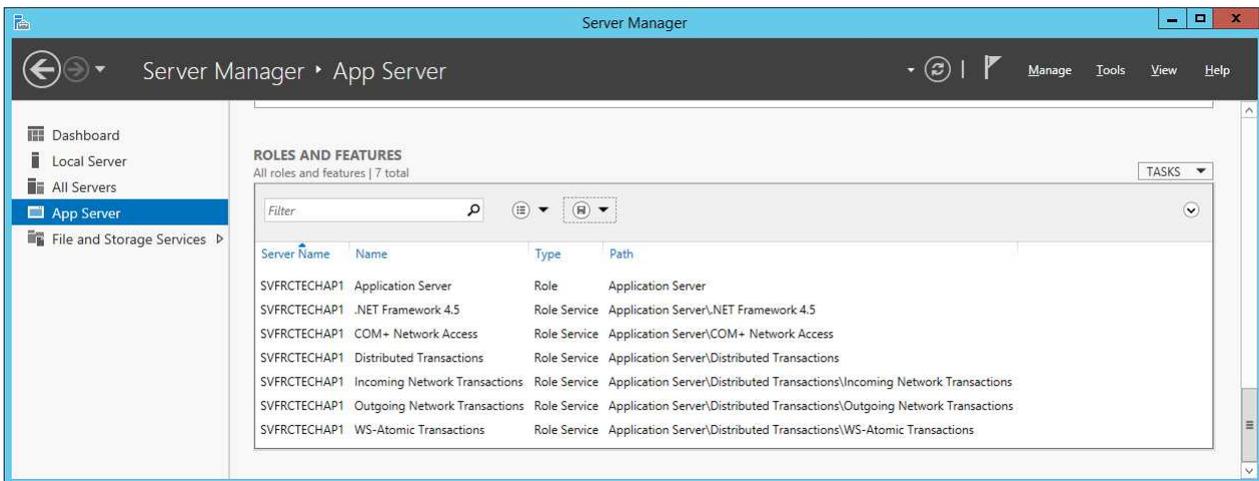
- COM+ Network Access
- Distributed Transactions
- Incoming Transactions
- Outgoing Transactions
- WS-Atomic Transactions

4.2.3.1.2 - With Windows Server 2012 R2

- Open the Server Manager
- Click here



- Click on the **App Server**.

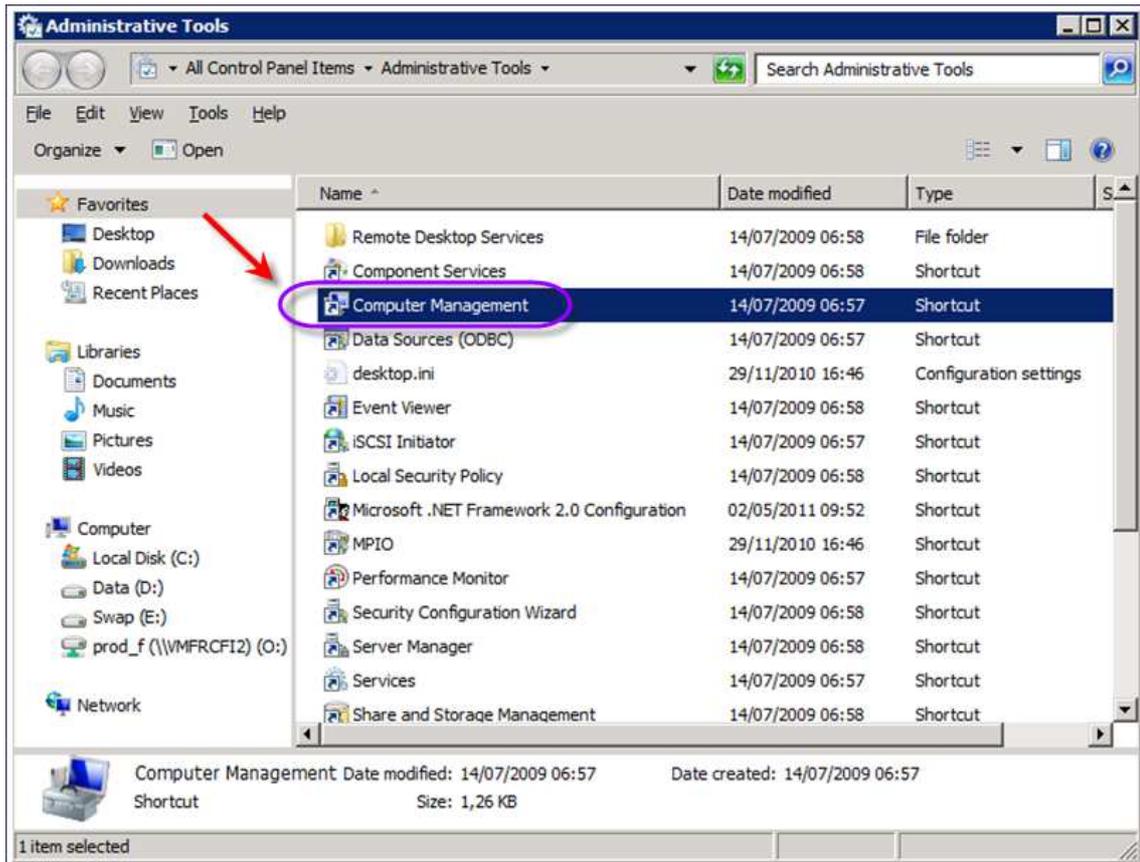


- Scroll down to the ROLES AND FEATURES part, and verify that you have all those items:
 - Application Server
 - .NET Framework 4.5
 - COM+ Network Access
 - Distributed Transactions
 - Incoming Network Transactions
 - Outgoing Network Transactions
 - WS-Atomic Transactions

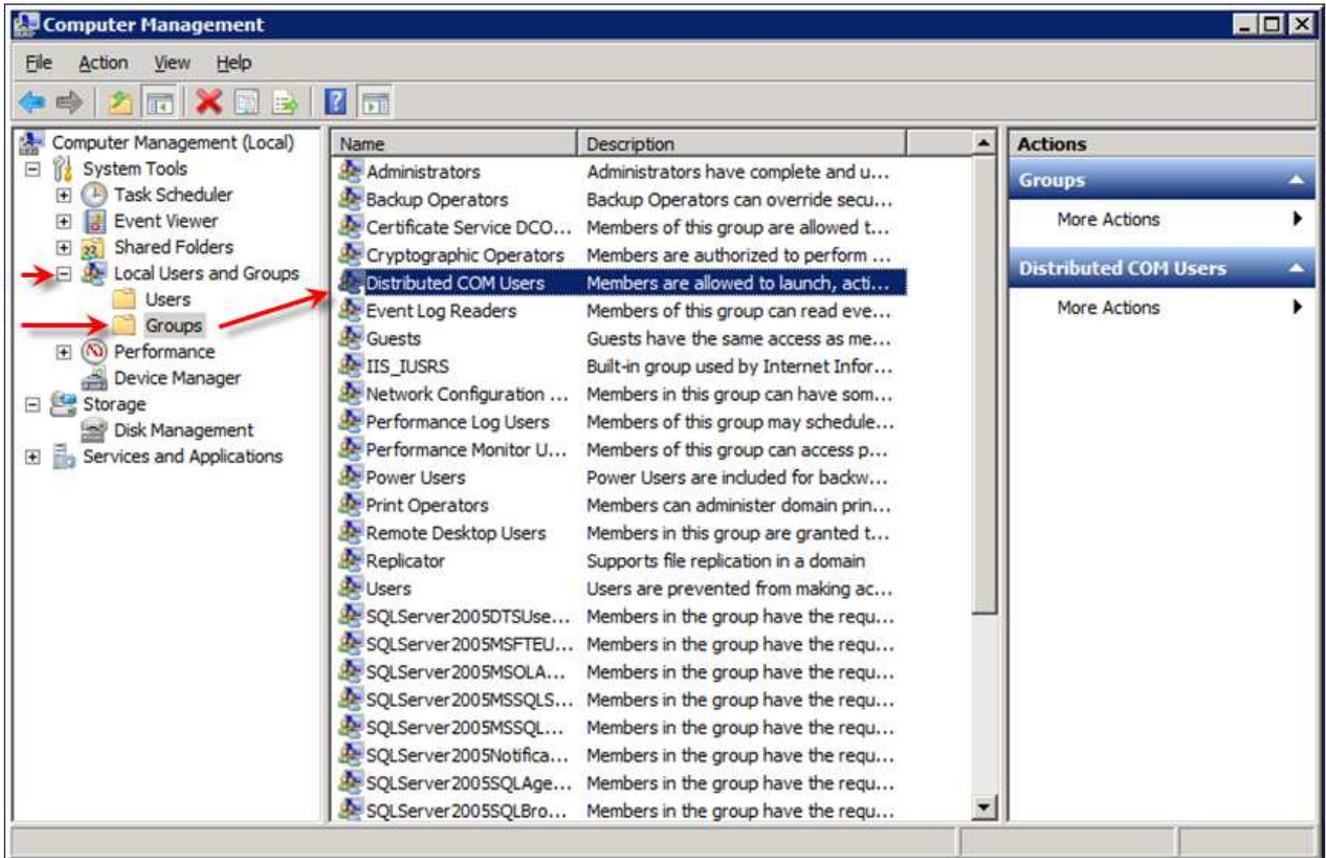
If you don't have it all, contact your Network Administrator

4.2.3.2 - Configuring COM+ Security

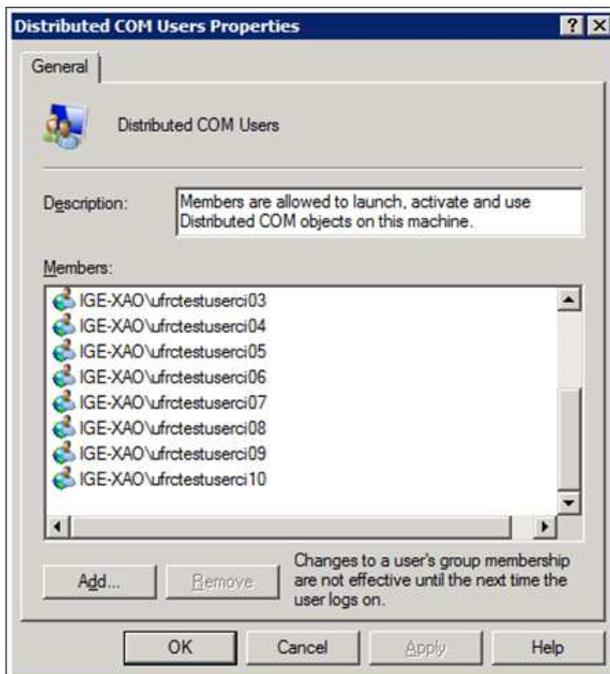
- Click **Start > Control Panel > All Panel Items > Administrative Tools**. (for Windows Server 2008)
- On the Windows logo, click **Administrative Tools**. (for Windows Server 2012 R2)
- Double click on '*Computer Management*'.



The *Computer Management* window appears:



- In the left pane, open the 'Local Users and Groups' node and select 'Groups'.
 - In the **Name** column of the middle pane, double click on 'Distributed COM Users'.
- The **Distributors Com Users Properties** window appears:



Check that your users exist on this group, especially the user defined as the identity of the COM+ service representing the SEE Electrical PLM application server, add also the application user who is define into the com+ application from the application server.

If not, add them.



Note 1

Remember that all users must be in the same domain.



Note 2

*For easier management:
We recommend creating group users that you can add into
Distributed COM User.*



Note 3

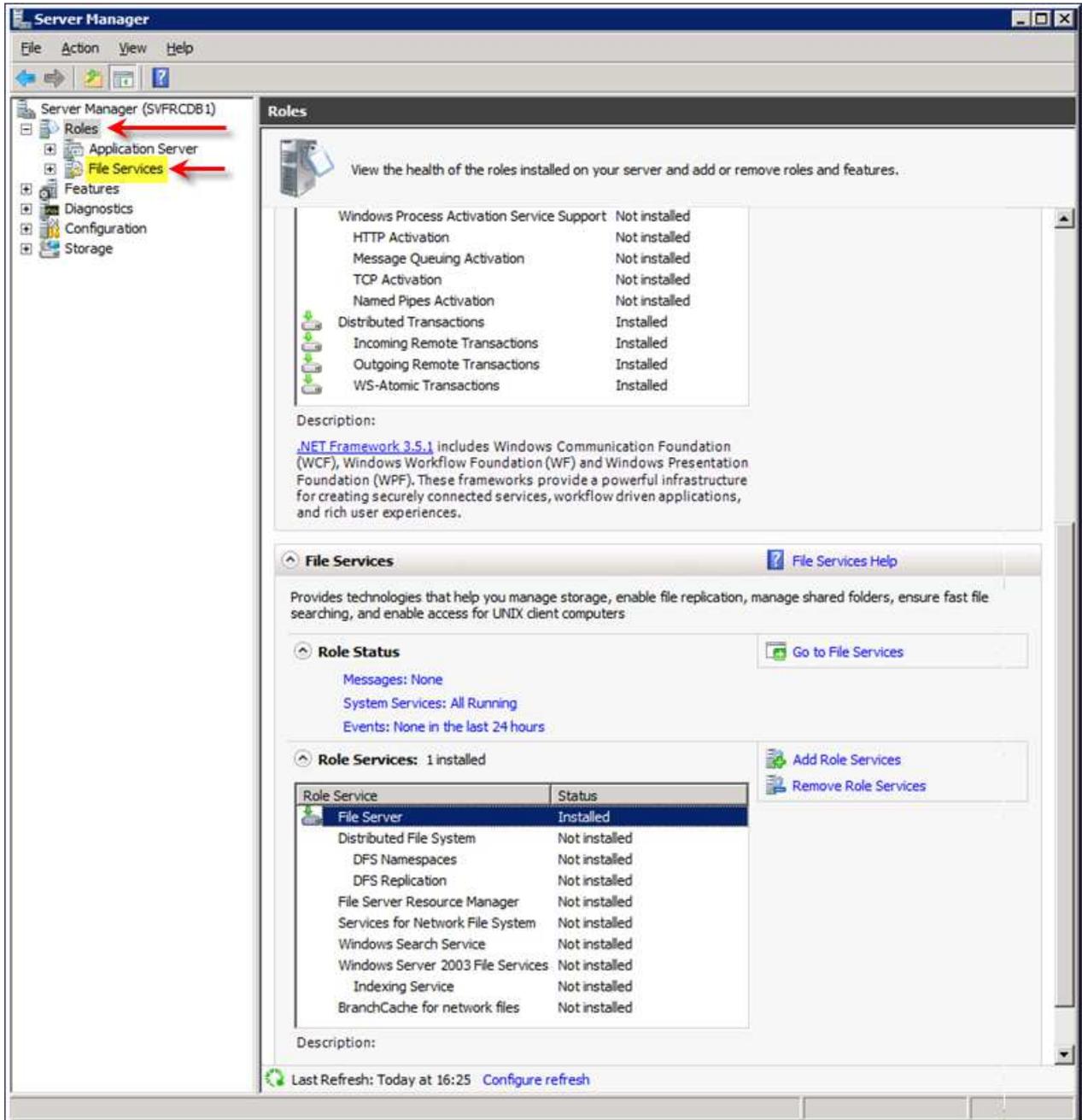
In both cases, we recommend you to contact your network administrator to do this.

The "Everyone" members group allows access to all users.

4.2.3.3 - Activating Sharing Rights (Firewall)

4.2.3.3.1 - With Windows Server 2008

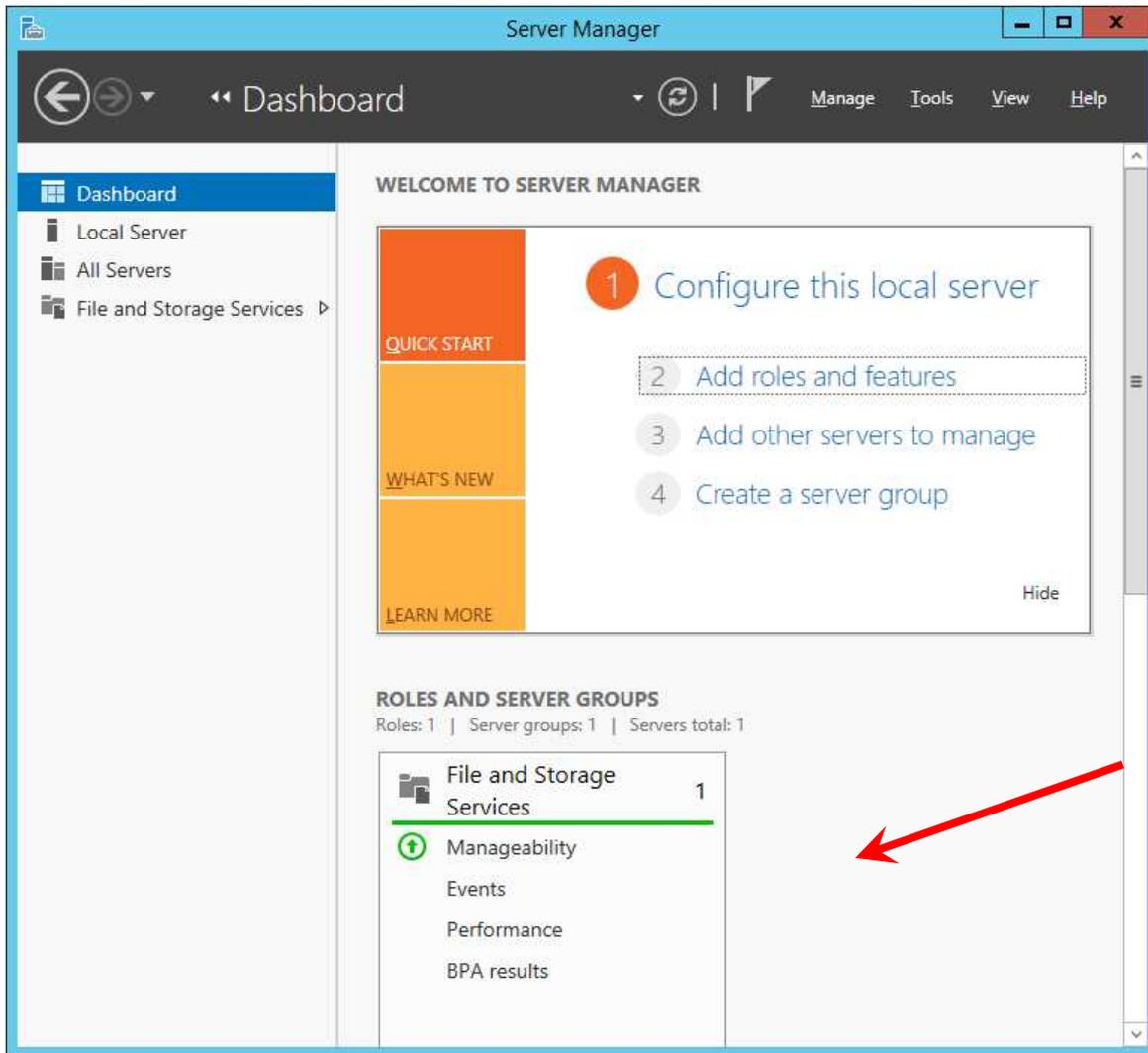
- Click **Start > Administrative Tools > Server manager.**
In the left part of the window Server Manager:
 - Click on Roles.



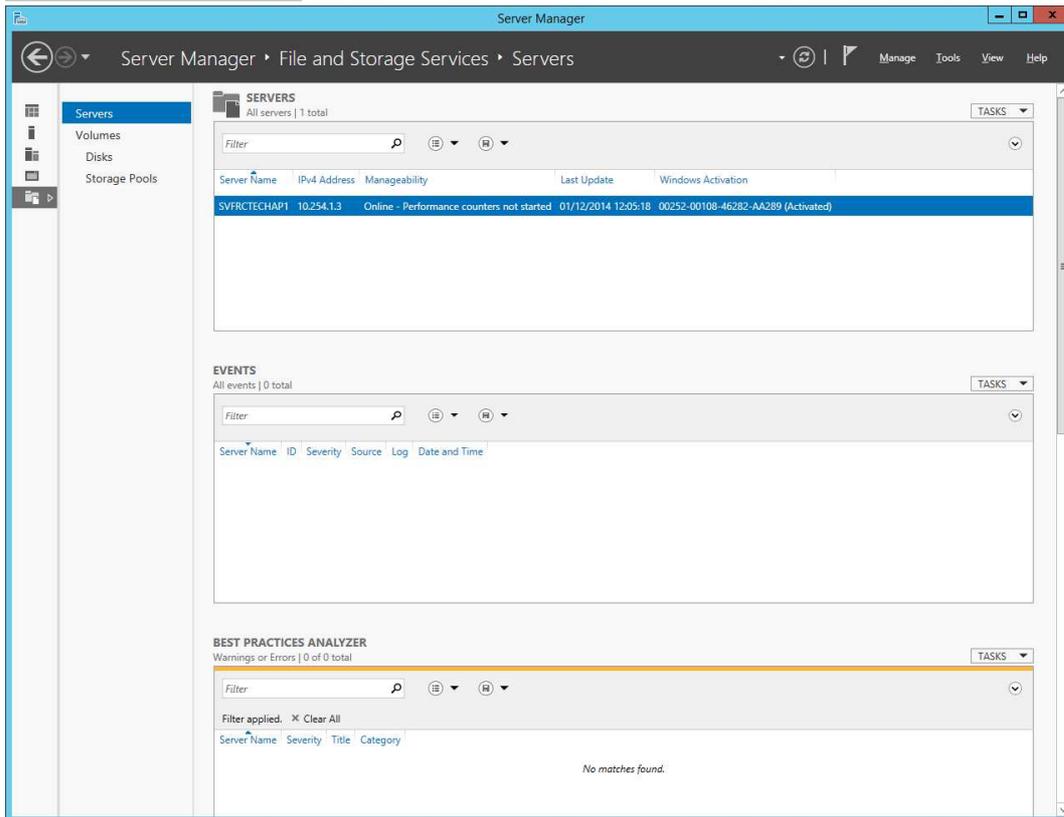
Check that 'File Server' is installed. If not, contact your network administrator for its installation.

4.2.3.3.2 - With Windows Server 2012 R2 (x64)

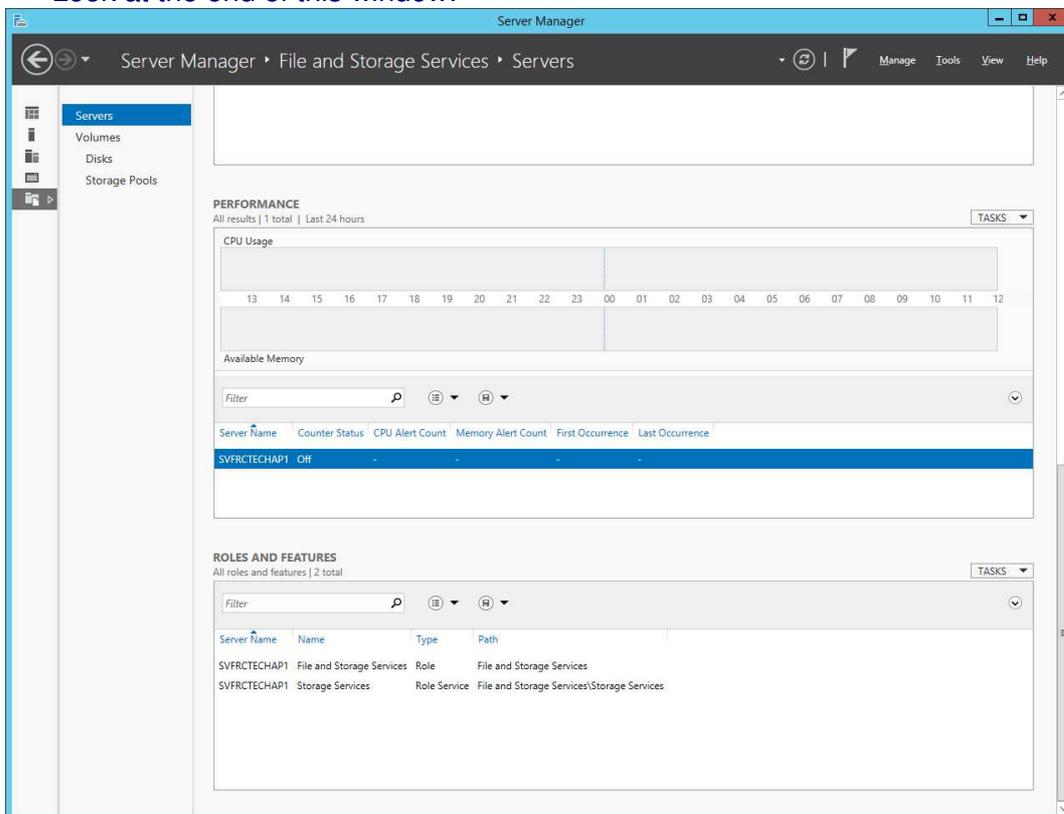
Open the Server Manager
Click here



- Click on **File and Storage Services**



Look at the end of this window:



Verify if the “File and Storage Services” role and the “Storage Services” service appear in the ROLES AND FEATURES view. If not, contact your Windows administrator to add them.

4.3 User rights requirements

The *Windows* login used for the installation must comply with the following conditions:

- it must have administrative rights
- it must be in the same domain as the client computers

5 - Installing a Client Computer

This paragraph explains how to install a client computer with all the software products required running the SEE Electrical PLM process. Refer to your deployment architecture to remind:

- which client computers need to be installed
- which software products they should receive
- with which servers (A/S, DB/S, L/S) they should work

5.1 Hardware requirements

Minimum Configuration

- Processor: 2 GHz
- RAM: 2GB
- Required disk space: 2GB
- Graphic card: 1024 x 768 – 256 colors, 128 MB RAM
- Network Adapters (100 Megabits/s)

Recommended Configuration

- Processor 3 GHz dual core
- RAM: 4 GB
- Required disk space: 30 GB
- Graphic card IDE: 1024 x 1024 - True colors, 512 MB RAM
- Network Adapters (1 Giga bits/s, or more)

5.2 Software requirements

5.2.1 - Supported Operating Systems

- Windows 7 SP1 or higher, 32 or 64 bits.

5.2.2 - Pre-required Components

The following pre-required software components are sometimes not installed by default on the computer:

- Windows installer 5 (for Windows 7 and Windows server 2008 R2)
- Microsoft .NET Framework 3.5 SP1
- Microsoft .NET Framework 4.5
- VBA 7.1