

Operation principle of the Caspoc License Manager.

The Caspoc License Manager is designed to work in a network where PC's have access to a common shared directory. There is no requirement for a special Server, the license Manager can operate from one of the PC's in the network.

The main requirement is that there should be one common shared directory where the Clients (Caspoc.exe) and the Server (CaspocLM.exe) have both read and write access to. The communication is based on the exchange of data via text files in the XML format.

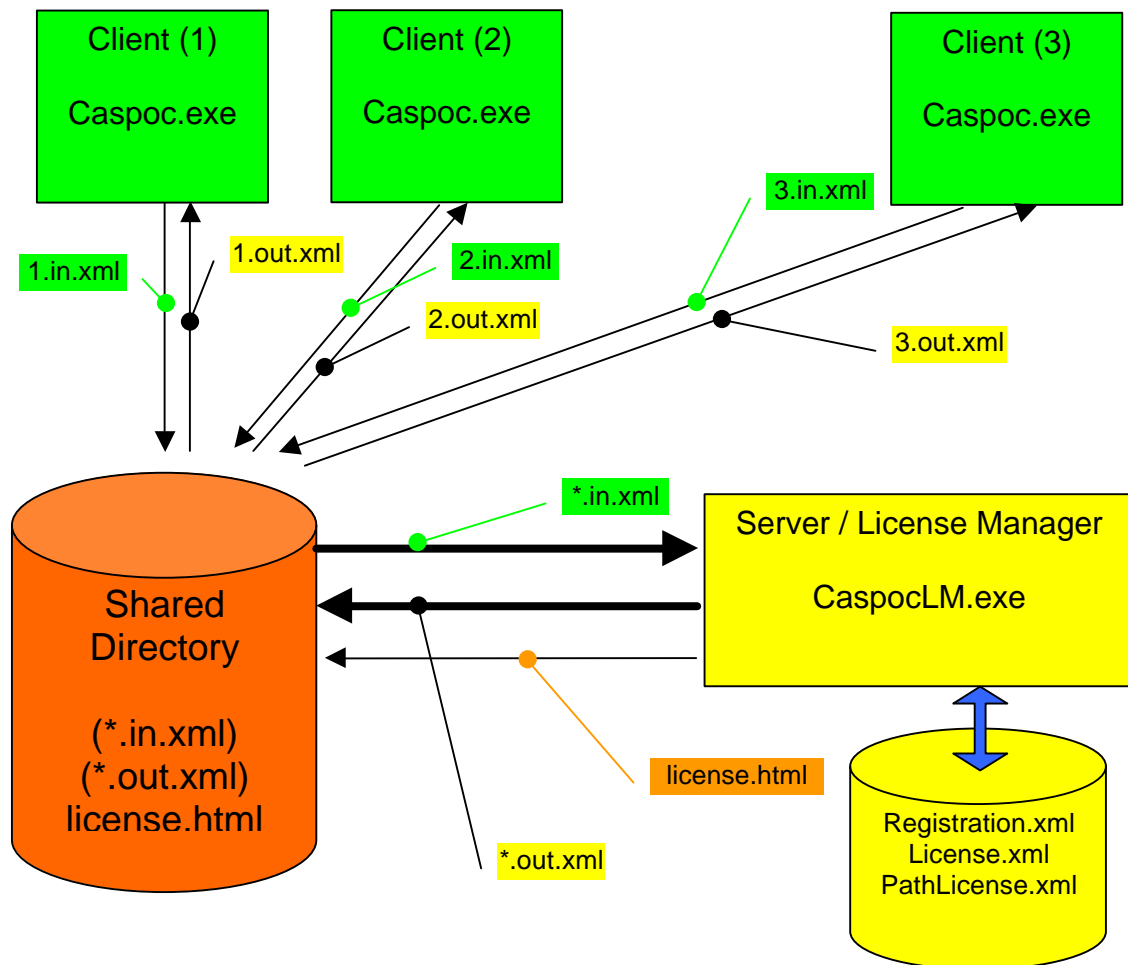


Figure 1: File communication between Clients and License Manager

File Communication

The following files are in use for the communication between the Caspoc.exe Clients and the Caspoc License Manager CaspocLM.exe

The communication files (*.in.xml and *.out.xml):

Each Client (Caspoc.exe) writes a file called *Client-Identifier.in.xml* to the shared directory.
The License Manager writes files called *Client-Identifier.out.xml* to the shared directory.

License Overview:

The License Manager writes an overview of the used licenses in the shared directory. The file name is for the overview is *license.html*. Each User and the administrator can open this file in a Web-browser and see the current licenses.

Registration and License Files:

The *Registration.xml* file is created by the user for obtaining a softlock license or required for updating the current license. The *License.xml* file is the license for the License Manager. The *PathLicenseFile.xml* file stores the path name of the shared directory.

The *License.xml* and the *PathLicenseFile.xml* file have to be present in the same directory as the License Manager *CaspocLM.exe*.

All the communication takes place via the *.in.xml and *.out.xml files on the shared directory. Therefore both the Clients and the License Manager need read and write rights for the shared directory. The process for the communication is very simple.

Step 1:

The License Manager CaspocLM.exe is started and has a valid *license.xml* file. The license is visible in the combo-box on top of the window. (See the online help on starting the License Manager)

Step 2:

The Client (Caspoc.exe) is started and a connection with the Shared Directory is available. (See the online help on how to connect to the Shared Directory when Caspoc is started for the first time and has to be connected to the License Manager.)

Step 3:

The Client (Caspoc.exe) writes the *UserName-ClientID-ComputerName.in.xml* file in the shared directory and starts checking for the presence of an *UserName-ClientID-ComputerName.out.xml* file.

Step 4:

The License Manager reads the file *UserName-ClientID-ComputerName.in.xml* file from the shared directory and start processing the license.

Step 5:

If a license is granted, the License Manager writes the *UserName-ClientID-ComputerName.out.xml* file in the shared directory. The License Manager window is updated and a new report file *license.html* is written in the shared directory. This report file is for viewing the licenses by the users only!

Step 6:

The Client (Caspoc.exe) reads the *UserName-ClientID-ComputerName.out.xml* file and will start. The Client is now available for the user.

Step 7:

Every 15 minutes the steps 3 to 6 are repeated.

Timing and Settings

The License Manager scans the Shared Directory every 500ms for a *.in.xml file.

The Client tries to update the license every 15 minutes. During this process the Client writes the *.in.xml file in the shared directory and scans the shared directory until a *.out.xml file is written by the License Manager CaspocLM.exe

The Client ID is build from the UserName, a random time-dependent number and the ComputerName of the client. Therefore it is required that all clients have unique UserNames and ComputerNames. In case of equal UserNames and equal ComputerNames, the clients have to be started with intervals larger than one second, to get unique Client ID's

The maximum number of users should not be limited below the number of users of Caspoc. Take care when setting the number of users for a shared directory, see figure 2:

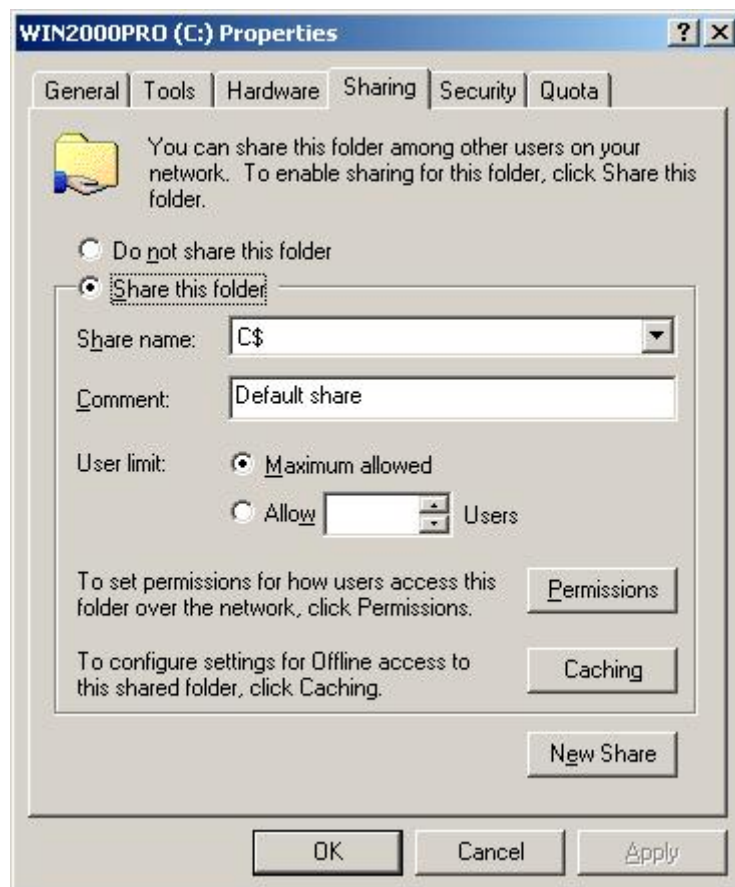
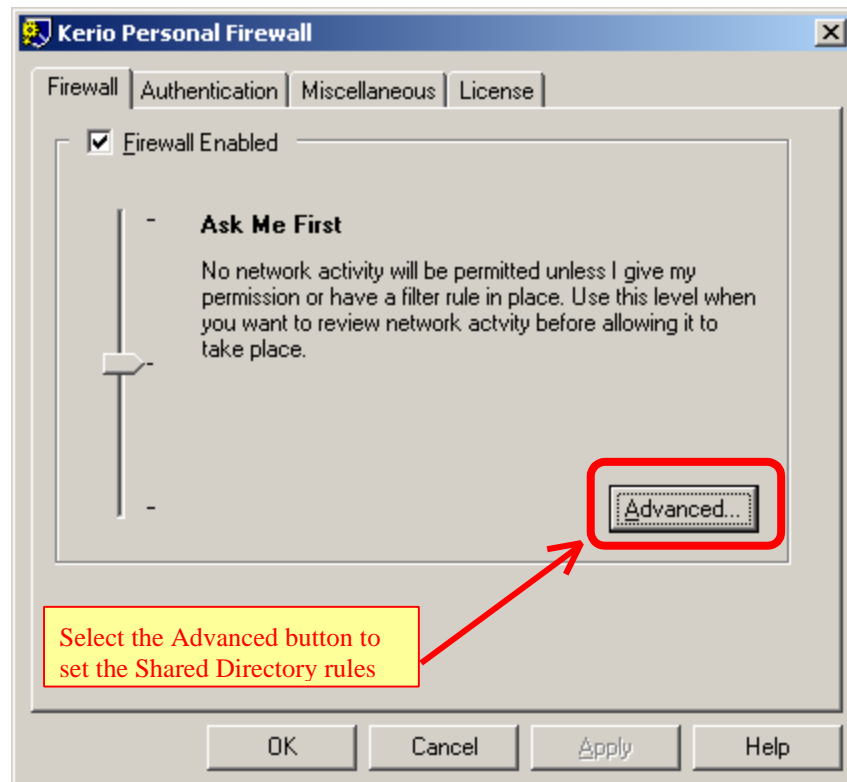


Figure 2: Allow the maximum number of users to the shared Directory

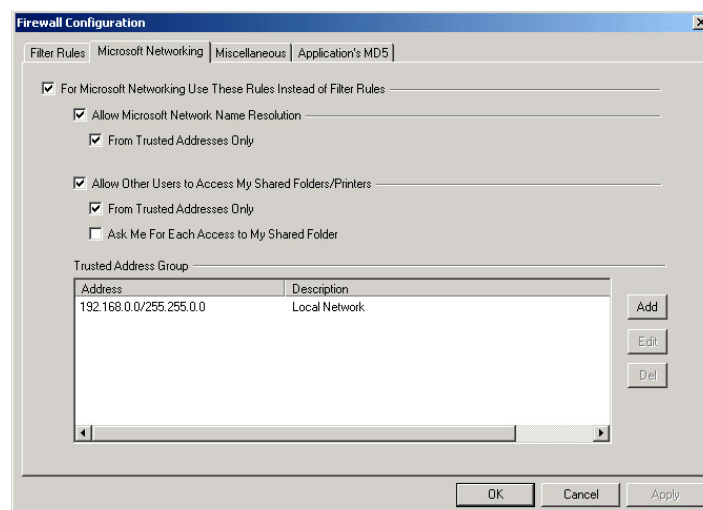
Each Client stores the name of the Path for the Shared Directory in the Caspoc.set file. The Caspoc.set file is a text file, that can be read in any text-editor like, for example, Notepad.exe

Firewall

If you are using a Firewall in your network, enable the access to shared folders. For example, for the Kerio Firewall you can set the properties for the shared directory.



In the Kerio Firewall select the [Advanced...] button and define which computers are allowed to have read and write permission in the shared directory



(Excerpt from the Kerio Help file)

If your computer is connected to a local network where you trust your colleagues and you want them to be able to access all your shared directories, enable all options except *Ask Me For Each Access to My Shared Folders*. In the field *Trusted Address Group* define your local network (e.g. as a sub-network with a corresponding mask or as a range of IP addresses).

Please see the documentation of your Firewall for similar configurations.