**C4 Server Setup**

Hi Everybody, welcome to the human soul of your security engine!

Installation of C4 System consists of 3 parts.

The first part is the installation of the C4 Server. Following part is the installation of C4 Client. The last part of the entire process is the registration of the installation. Each part is explained in a separate lesson.

We will deal with the C4 Server installation in this lesson. You will learn all basic steps; also, what conditions must be met before the installation and how to properly install system components.

Before you start the installation, it is necessary to obtain the C4 System installation package. It can be sourced from your security systems supplier. Alternatively, it can be downloaded as an ISO file from the product website.

In case you wish to get the installation package from the product website, please type into any internet browser the address “my.c4portal.com/downloads”.

We recommend to install the C4 Server Setup at the computer with clean Windows or Linux operating system without any installed 3rd party applications.

Prior the installation, it is necessary to check the C4 System computer parametres. Hardware and software requirements to run and install the system are to be found at the above link for each version of C4.

To proceed to the next step of the installation, you need to be logged-in to your account on the product website.

Your completed training at our website “my.c4portal.com/edu“ to the “Administrator Basic” level is an important, mandatory condition.

At the website, there are two alternatives of the installation package for download. The "Full version" is a significantly larger one, containing the installation packages of all supporting tools. It is used in case you need to install C4 without internet access. The "Light version" C4 Setup package, downloads the necessary missing support packages from the Internet during the installation process. Both versions of the C4 Setup applications are designed for the Windows operating system.

A complete setup is available for you after downloading the Full version ISO file and opening it in the Virtual CD drive.

In the following steps, we will install the server part of the C4 System from the downloaded installation package.

The setup for Windows operating system is located at the root of the installation media. Batch Setup, which is primarily used for installation in the Linux operating system is located in a folder “CommandLineSetup“.

Support packages are required for the actual launch of C4 Setup. These are installed automatically if needed, once the Setup is launched.

The C4 Setup starts automatically once these packages are installed. Kindly begin by choosing the language in which the installation will take place. C4 provides the support for the most common languages by default. Should the required language be missing in the list, please contact our customer support department.

One of the key characteristics of the C4 System is a scalability, which allows the system to be installed in the optimal configuration for a specific customer. In the case of a large-scale installation, individual server components can be installed multiple times on several computers depending on the number of managed devices or the number of users. During the standard C4 System installation procedure, all components are installed on one computer.

C4 Setup checks the environment in which C4 Server will be installed, identifying all missing system components.

These are conveniently listed. At the same time, the system checks the available disk space. It calculates exactly how much space it needs and whether there is enough.

Should the C4 Setup miss some supporting packages required for the installation, these are automatically downloaded from the manufacturer's official source. An internet connection is required for this step.

The installation of missing components takes place in the next step. It may take several minutes, depending on their extent.

In the next step, please select, whether the C4 System will be accessing the local or remote SQL Server. In case the central database SQL Server is already installed on another computer, C4 Setup allows the use of this Server via the "Remote SQL Server" option. In a standard installation, SQL Server is installed on the same computer as the remaining system components.

When selecting the local SQL Server, Setup checks whether such server is already installed on the computer. If not, Setup will install the Express edition of the SQL server.

Express edition is limited by 10 GB of database size. If SQL Server is already installed, C4 Setup automatically offers the selection of a local SQL Server instance.

In the multi-server installation, the individual C4 modules mutually communicate via port 8400. To secure a seamless installation, it is necessary to enable communication via ports 443 and 8400 in the application server computer firewall.

Setup checks the availability of these ports prior the installation. In case the ports are available, C4 Setup indicates this with a green check box. If one or both of these ports are occupied by other applications, a red exclamation mark appears. Before proceeding with the installation, these applications shall be uninstalled or different ports shall be selected, via "Use custom ports" option. In default mode, Setup uses the standard ports.

The server components of C4 System shall be run within a certain range of system permissions, principally at the level of a standard computer user. The only special authorization for the service account is the server access to the certificate for https. For this purpose, C4 Setup creates a service user account with the necessary authorizations. The created account possesses minimum permissions to access server resources.  
When using windows authentication to access the SQL Server, all users access the data in the context of this service account.

The preferred choice is a local account on the same computer where C4 Server is installed. If the C4 System is installed in an environment that does not allow the user to create an account, ask the network administrator to create a special service account and provide its name and password. If required by the company's internal security rules, a domain user account can also be used. During the standard procedure, Setup creates the local account automatically.

In the Windows operating system, C4 is installed by default in the Program Files\Gamanet directory, but if needed, the default path can be changed.

After checking the sufficient disk space, C4 Setup installs the required System components on the computer.

Once the installation is finished, all the services necessary to run the C4 System are started and ready for use. To complete the installation process, it is necessary to install the C4 Client application. It is offered upon the completion of the C4 Server installation by selecting the "Finish" button.

The detailed procedure of the C4 Client installation will be introduced in the following lesson.