**Safe Connect**

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

In today’s lesson, we will describe another Gamanet’s additional product, allowing secure remote connection of users to the C4 System.

The remote access to information systems of small and medium-sized companies is always a security challenge. A commonly used strategy is the VPN access, but that requests deep technical network settings and Internet connection configuration knowledge. The standard cloud solution is an alternative.

But there are several issues as well.

Cloud solution secures both, the remote management of devices installed in the buildings and remote access of users at the same time.

Several fundamental conditions must be met with such cloud solution. All devices must support the connectivity to the remote cloud. That eliminates integration of existing legacy devices, that were not designed to be monitored over the Internet. The number of installed legacy devices is still significant. Therefore, many customers are nowadays facing the dilemma whether to invest in the modernization of their devices, or to seek for progressive solutions.

One central server is accessed by more customers in a typical cloud solution. Each of them is authorized to only see the devices in buildings managed by him. The performance of the overall solution is determined by the performance of the cloud, regardless of the scale of the customer’s installation.

Internal 24/7 monitoring control rooms are run by most of large organizations. Having cloud solution in place, their operators must also access managed devices via cloud.

When the Internet goes down, ...

... the operator cannot manage and control his local devices.

The second major challenge of cloud solutions is the central management of sensitive information. Customer who utilizes any cloud solution...

.... got all his sensitive data stored in one central database, together with data of all other customers.

Credentials, like PINs, access cards, biometric data, and authorization settings should be managed within high security level environment. A security leak occurs generally in cloud solution business from time to time.

The C4 System with Safe Connect works differently. C4 System is always installed as "on-premises" solution, meaning at the customer’s site. The Safe Connect is a cloud-based extension, only to allow the secure remote connection of the user to the C4 Server, located at the company site.

The Safe Connect System is a simple relay between the C4 Client and the C4 Server. Since the communication between the client and the server is encrypted, the data transferred via Safe Connect is unreadable along the entire transmission path. This concept is called end-to-end encryption.

Several customers are aggregated by the Safe Connect using one central point in the same way as with the standard cloud solutions. It is designed to guarantee a high level of security for extremely sensitive projects. As a multi-layer solution, it allows to allocate the dedicated communication server for specific individual customer.

System C4 with Safe Connect offer the remote management of legacy devices that cannot connect to standard cloud solutions.

Additional benefits come naturally based on unique functionalities of the Safe Connect.

The operators are able to monitor local devices when the Internet is down as an example.

Safety of managed data is another significant benefit. The Safe Connect solution allows for all sensitive data to be stored in a local database at a local server at customer’s site. This concept of data isolation from the Internet considerably minimizes potential security leaks.

The customer can manage his employees’ data according to his own processes with no involvement of 3rd party data processing.

The Cloud provider would never see customer’s personal data.

The key parameter during the development of the Safe Connect was to achieve the high level of cyber security and safe data transfer. C4 System with Safe Connect combine the advantages of a cloud solution with the safety of a local solution.