IPSECURE

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Internationally operating medium-sized enterprises required VPNs that, on one hand, guarantee **high security** and on the other hand, **can be implemented** and **supported at reasonable cost levels**. The worldwide accessibility of the internet will be utilized in order to create **flexible network solutions** and to guarantee employees worldwide secure access to their company network whether being on a business travel, in the office or working from home. Therefore IP Sec utilizes transparently different access technologies for the implementation.

IP Secure VPNs are **highly secure virtual private networks**, which are implemented with **encrypted tunnels** (IPSec) over IP networks. They will be applied for IP connections with dial up or dedicated access.
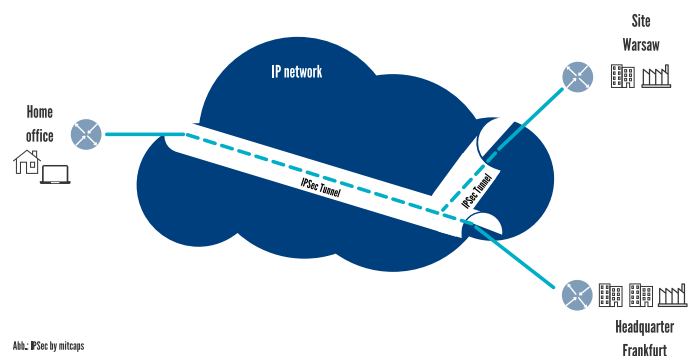
IPSec was defined as a **standard by the IETF** (Internet Engineering Task Force) and can be applied within every IP network to link LANs as well as single workplaces.

What does IPSecure offer?

- **Confidentiality:** only authorised parties can read the transmitted data.
- **Data integrity:** it is guaranteed that the transferred data is not being changed during its transmission.
- **Authentication:** the identity of the transmitter of the data is verified.

Advantages

- Cost-efficient
- Available nearly worldwide
- flexible
- location independent
- Fast deployment possible

Abb.: IPSec by mitcaps

Challenges

- **High intensity of administration**
- Required communication with the end user in case of an issue / incident.
- **Quality can vary** – as networks are implemented with and within different technologies, clients have to be configured with the corresponding know-how of the respective **access technology.**

Solution

1. LAN-to-LAN:

- 24x7 Management
- Managed Router
- Monitoring of availability and utilized capacity

IP network

IPSec tunnel
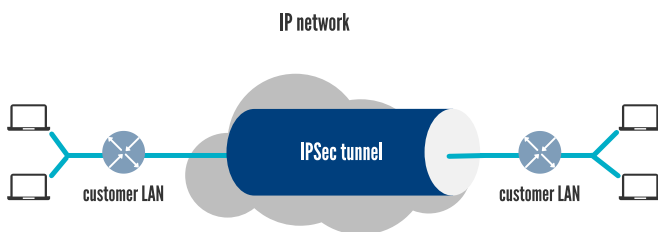
customer LAN   customer LAN

Fig.: LAN-to-LAN

2. Remote Access / Einwahl:

- IPSec access software and digital certificate and /or authentication.
- IP dial up or any fixed internet access.
- Dedicated IP connection for customer locations.

IP network

IPSec tunnel   ISDN | DSL

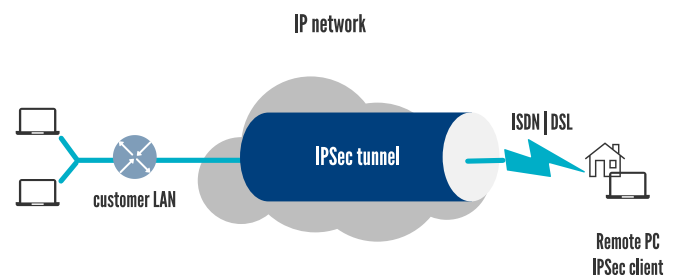customer LAN

Remote PC
IPSec client

Fig.: Remote access

A combination of these options is possible and will be adapted specifically and individually to the requirements of the customer.

We relieve our customers of the time consuming administrative tasks and also support their end users in different time zones with our 24x7 management.

As we know the different access technologies, we are able to implement and adapt the configurations promptly and comprehensibly to the individual end user.