

UDcrypt

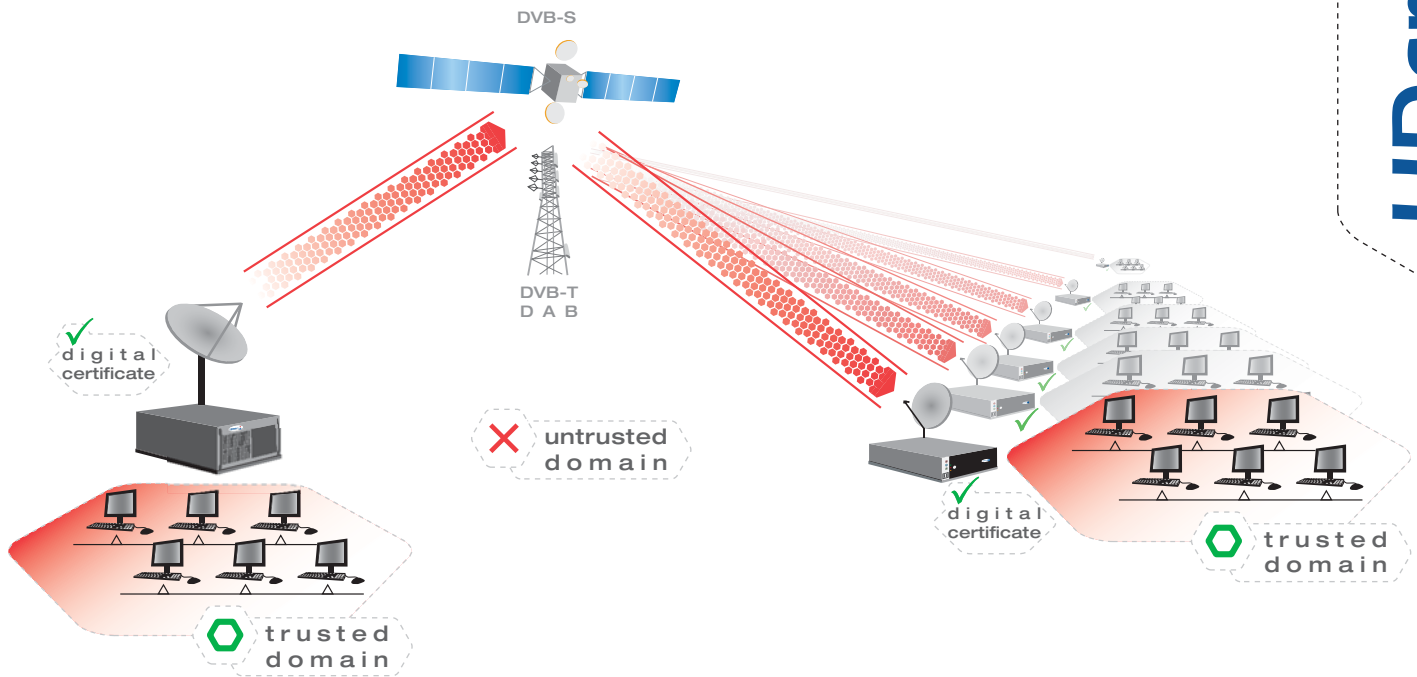
Solution for multicast networks

Software/IP security

- + Scalable multicast security
- + Standard content protection



UDcrypt



01 Description

The **UDcrypt** software architecture provides a unique way to protect all IP multicast traffic in a centralized and controlled way.

Based on a group of IPsec gateways and a certificate management system, the **UDcrypt** solution provides IPsec based tunneling functionalities, associated with a digital certificate infrastructure optimized specifically for multicast.

The **UDcrypt** implementation leverages IP multicast to manage protected multicast traffic in a scalable & transparent way for all end hosts. Broadcasting premium IP-based content, such as video or music content, on top of any IP infrastructure becomes possible in a centrally managed and scalable way.



UDcrypt

02 Features / Benefits

- +Secure multicast traffic**
 - . Protection of both point and multi-point to multi-point multicast traffic, with end-gateway authentication and IP packet replay or modification protection
 - . Security activation on an individual multicast group basis
- +Multicast traffic protection based on true IP multicast**
 - . Transparent integration of an insecure network into a global multicast architecture, based on true end-to-end multicast routing protocols
 - . Network boundaries (trusted/untrusted) based on transparent IPsec gateways
- +State of the art technologies**
 - . Strong security mechanisms based on fully proven implementations of IPsec encryption algorithms, and robust digital certificates (X.509)
 - . Up-to-date standards implementation, providing MSEC key distribution compliance and adapted GCKS (Group Controller/Key Server)
 - . Multicast specific, scalable, dynamic, and robust re-keying mechanism
- +Multi-layered content access management**
 - . Content protection assigned to individual multicast groups
 - . Central management of access rights across groups of 'communities'
 - . Flexible definition of community groups across either sets of multicast groups or receiver sites
- +Optimized for unidirectional infrastructures (e.g. simplex satellite)**
 - . Passive mode supported by central security management of remote passive sites
 - . Seamlessly integrates across infrastructures of variable quality, such as unpredictable packet loss ratio, using a robust key distribution mechanism

03 Usage

UDcrypt enables new services based on content access management and security enforcement to be sold to new or existing end-customers. Examples of advantages for a range of customer categories are:

- +Content Service Provider**
 - . Manage content access rights independently of the data type
 - . Secure all data including rich media and interaction control messages
- +Security Service Provider**
 - . Multicast security integration and management
 - . IP multicast VPN service
- +Corporate/Integrator**
 - . Secure all the network, even when multicast
 - . Complement traditional IP VPN with multicast extensions

04 Integration

- +Integration within the UDcast product suite**

UDcrypt, along with the suite of multicast solutions from UDcast (UDpush, UDroustecast and UDauth), are specifically designed to fully scale on UDLR-enabled networks. Combined with UDpush, UDcrypt provides the perfect secure content distribution platform across a UDLR virtual Ethernet, to which host access can be controlled by UDauth. UDroustecast provides the essential foundation of native multicast routing performance across diverse infrastructures.
- +Integration with the customer's environment**

UDcrypt seamlessly integrates with standard corporate IP security systems. It extends IP VPN services to multicast environments, across remote sites and content sources. Multicast routing can be enabled on the existing corporate network with minimum integration cost.