



Overview

The SSL Services Module is a Layer 4-through-Layer 7 service module that you can install into the Catalyst 6500 series switch. The module terminates secure sockets layer (SSL) transactions and accelerates the encryption and decryption of data used in SSL sessions.

The module operates either in a standalone configuration or with the Content Switching Module (CSM). In a standalone configuration, secure traffic is directed to the module using policy-based routing (PBR). When used with the CSM, only encrypted client traffic is forwarded to the module, while clear text traffic is forwarded to the real servers.

The SSL Services Module uses the SSL protocol to enable secure transactions of data through privacy, authentication, and data integrity; the protocol relies upon certificates, public keys, and private keys.

The certificates, which are similar to digital ID cards, verify the identity of the server to the clients. The certificates, which are issued by certificate authorities, include the name of the entity to which the certificate was issued, the public key of the entity, and the time stamps that indicate the certificate expiration date.

The public and private keys are the ciphers that are used to encrypt and decrypt information. The public key is shared without any restrictions, but the private key is never shared. Each public-private key pair works together; data that is encrypted with the public key can only be decrypted with the corresponding private key.

