Accfin Sky Architecture

Database Server

SSL
Port 5432

Application Server

SSL
Smart Client

SSL
Web Client

Port 443

SARS e-Filing

AES/ SSL/ BCA /TA

Port 5432
IP : sky.accfin.co.za

Security and Application Verification

Auto Update

Port 21
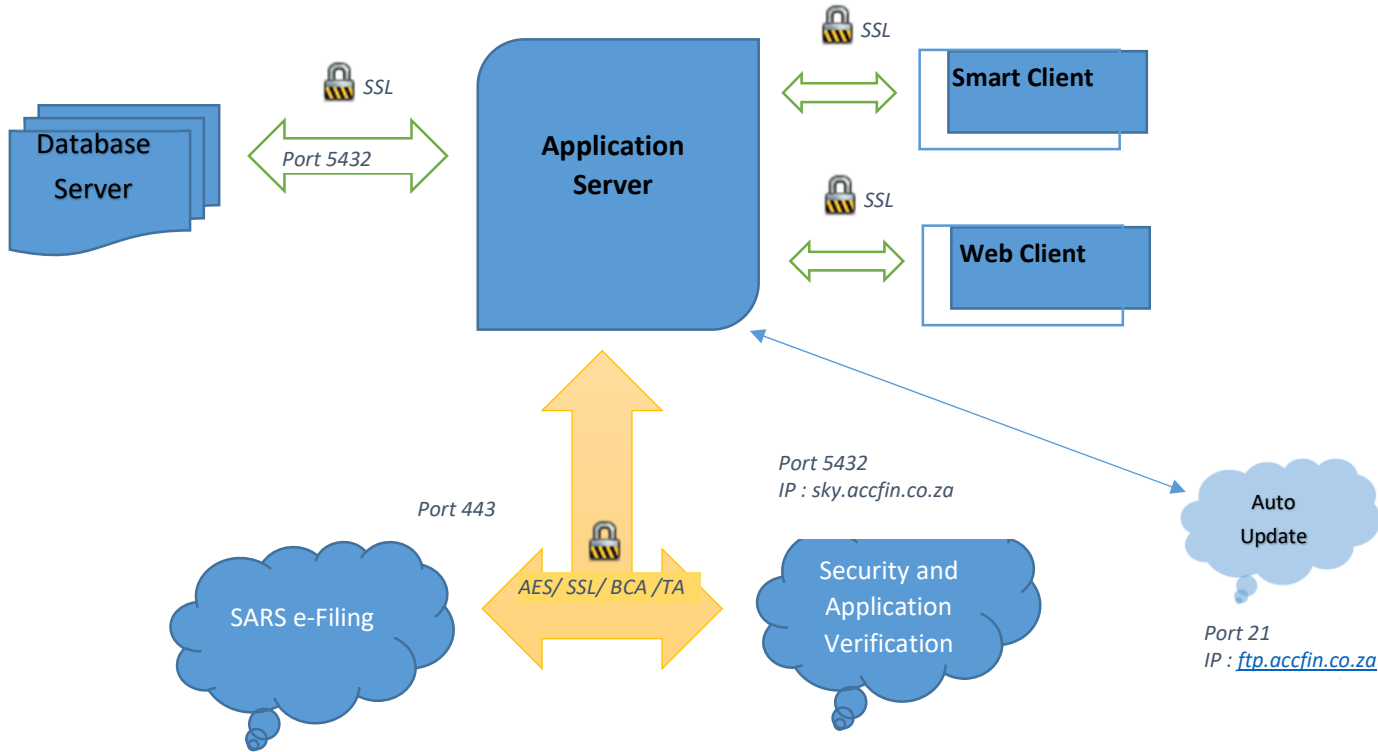*IP : ftp.accfin.co.za*

Accfin Sky Architecture

SSL – Secure Sockets Layer
BCA – Block Chain Authentication
TA – Triangular Authentication
AES – Advanced Encryption Standard (aka Rijndael)

Passwords
- All passwords are stored HASH encrypted in the database *Port 5432,1099 and 8080, 8081*
- Passwords are displayed as masked (no passwords displayed)
- To prevent against brute force attacks, AccfinSky allows for a set number of attempts before account is blocked

Database
- All data is stored in an encrypted format in the database
- The SQL database server is also protected by means of access via Username and password
- Access is via a secure port and SSL

Application Server
- Solution Code is stored encrypted
- Access is via a secure port and SSL, and authenticated by User name and Password
- No direct access to data, only through the software

Client Access
- All code sent to smart client is compiled and encrypted
- Access is via a secure port and SSL, and authenticated by User name and Password
- An additional layer of authentication is performed via BCA and/or TA to a random AccfinSky server
  This essentially allows the client to verify that the connection is to a valid server, authenticating the software, organisation and user
  This generates a unique one time access key, used for this session
- Communication between server and client is via SSL protocol and end to end encrypted
- No data is stored on the client, active connection to server at all times is needed, no offline access

Accfin Sky Architecture

Connection to SARs
- Access is via an interface through a secure port and SSL
- First Authenticated by Vendor Code and Application key and Sky Software key
  via BCA and/or TA to a random AccfinSky server to produce a unique one time Access key
- Second Authentication using one time access key and tax practitioner credentials to produce a VendorKey
- All data is encrypted using the "**Advanced Encryption Standard** (**AES**), also known as **Rijndael"** cipher and the VendorKey as the key