# DXNS Secure FTP Transfers

**DXNS provides options for FTP Client and FTP Server transfers, including security with SSL encryption (TLS) and SSH encryption.**

## FTP Client Communications

The DataExpress FTP Client provides DataExpress-initiated Collections and Distributions. The DataExpress DXFTPAPI program is run via a TACL routine initiated by the DataExpress TACL server. The FTP Client runs over an existing IP connection to the remote FTP Server with optional authentication with Firewalls.

## FTP Server Communications

The DataExpress FTP Server provides a complete FTP service for users. Almost every computer contains at least one FTP Client. Thus, any user with access to the public Internet will have the capability to transfer files to and from DataExpress via FTP. DataExpress eliminates security concerns, as all clients connecting to the DataExpress FTP Server are automatically restricted to existing schedules and security in the DataExpress environment. In other words, users are limited to viewing and transferring files for their DataExpress-defined Customer ID only. They cannot access the Guardian file system or the Guardian's security in any way.

## TLS Secure FTP Communications

TLS Secure FTP uses a proxy SWAP program provided by comForte. All Secure FTP communication, client and server, flows through one of the proxy processes. The proxy process encrypts and decrypts the communication, so that all messages flowing between the HP NonStop platform and the remote will be secure, yet nearly transparent to the FTP Client and Server programs on the HP NonStop platform. A license for SecureFTP/SSL from comForte is required.

## SSH Secure FTP Client Communications

DataExpress provides a Secure FTP option that uses the SSH (Secure Shell) with SFTP version 3.0.The DataExpress SFTP Client allows for DataExpress-initiated Collections and Distributions using SSH (Secure FTP) file transfers. The DataExpress DXSSHCLT program is run via a TACL routine initiated by the TACL server (BTF-TACL-SVR). The DataExpress DXSSHCLT program works with comForte SSH components.

## SSH Secure FTP Server Communications

DataExpress provides a Secure FTP option that uses the SSH (Secure Shell) with SFTP, using SSH components from comForte. Similar to the FTP Server, Remote Users log into DataExpress where they are limited to the schedules assigned to their user. DataExpress SSH users cannot access the Guardian file system.

### SECURE FTP OPTIONS

- FTP
- TLS
- SSH