

HP ProLiant Servers, LO100i - How To Configure SSL/HTTPS On The Lights-Out 100i Management Port

QUESTION:

How to configure SSL/HTTPS on the Lights-Out 100i management port

ANSWER:

Requirements:

A Trivial File Transfer Protocol (TFTP) server, a version of OpenSSL, and a version of OpenSSH are needed to configure SSL on the LO100i.

TFTPd: TFTPd.exe, OpenSSL, and OpenSSH are downloadable from multiple sites on the Internet.

Configure SSH on the LO100i:

1. Install OpenSSH on a windows server
2. Use the following command in a DOS (command) window to generate a 1028-bit DSA key: `ssh-keygen -b 1028 -t dsa -f sshkey`

This command will create two files in the current directory, a private key file (sshkey) and a public key file (sshkey.pub).

3. Place the private key file (sshkey) on a TFTP server for upload to the Lights-Out 100 management processor.
4. Login to the Lights-Out 100i, through the CLP interface using the admin username, change to the `./map1/firmware` directory, and execute the following command from the command line: `load -source <URL> -oemhpfiletype key`

- <URL>—//tftpserver IP/path/filename to be downloaded
- tftpserver—the URL or IP address of the TFTP server containing the keyfile

NOTE: The command prompt does not come back if telnet is used. If the serial port is used the command prompt does come back. Both ways of logging in are working fine though.

Configure SSL on the LO100i:

1. Install and setup OpenSSL on a windows server
2. Use the following command in a DOS (command) window to generate a DSA parameters file:
`openssl dsaparam -out server_dsaparam.pem 2048`
3. Generate the DSA private key file, called server_privkey.pem:
`openssl genrsa -out server_privkey.pem server_dsaparam.pem`
4. Generate the DSA certificate (public key) file, called server_cacert.pem:
`openssl req -new -x509 -key sshkey -out server_cacert.pem -days 1095`
5. When prompted for a distinguished name, fill in the appropriate details of the network. (For testing, it is possible to fill in the LO100i IP-address as the name and leave all other fields blank)
6. After a certificate has been created and copied to a TFTP server accessible on the same network as the Lights-Out 100, use the CLP interface to log into the Lights-Out 100 as administrator, change directory to `./map1/firmware` and issue the command to upload and install the certificate: `load -source <URL> -oemhpfiletype cer`

- <URL>—//tftpserver IP/path/filename to be downloaded
- tftpserver—the URL or IP address of the TFTP server containing the certificate

After this, the LO100i will be accessible through `https://IP-address`