The FTP server choices for HMC are shown in Figure 11-13.
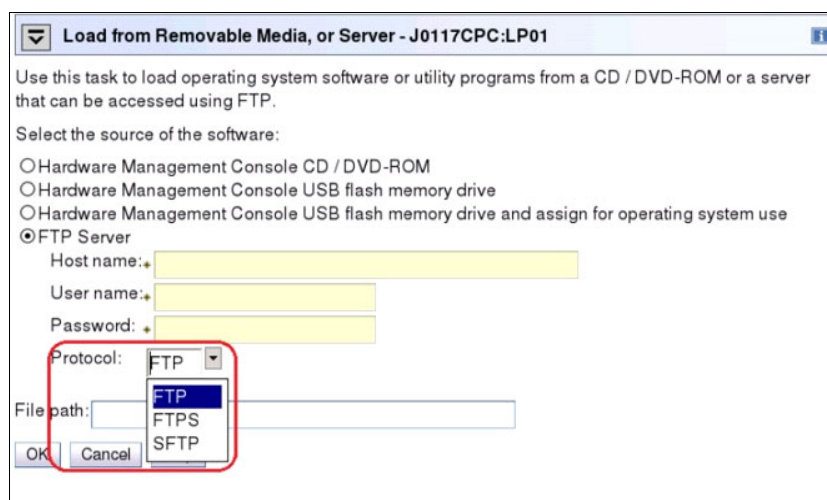

Figure 11-13 New FTP protocols drop-down list

FTP through HMC

It is highly recommended to keep IBM Z servers, HMC consoles, and SEs on an isolated network. This approach prevents SEs making FTP connections with outside networks and applies to all FTP supported protocols: FTP, FTPS, and SFTP.

With z14 HMC, all FTP connections that originate from SEs are taken to HMC consoles. Secure FTP server credentials must be imported to one or more managing HMC consoles.

After the HMC console completes all FTP operations, the HMC console performs the FTP operation on the SE's behalf and returns the results. The IBM Z platform must be managed by at least one HMC to allow FTP operations to work.

Secure console-to-console communication

Before z14, IBM Z HMC consoles used anonymous cipher suites to set console-to-console communication. Anonymous cipher suite is a part of SSL/TLS protocol and it can be used to create internal point-to-point connections. Anonymous cipher suite does not exchange certificates, which can be the source of a security breach.

Therefore, z14 HMC consoles abandon anonymous cipher suite and implement an industry standard-based, password-driven cryptography system. The Domain Security Settings are used to provide authentication and high-quality encryption. Because of these changes, we now recommend that customers use unique Domain Security settings to provide maximum security. The new system provides greater security than anonymous cipher suites, even if the default settings are used.

To allow greater flexibility in password selection, the password limit was increased to 64 characters and special characters are allowed for z14 only installations. If communication with older systems is needed, the previous password limits must be followed (6 - 8 characters, only uppercase and number characters allowed).

For more information about HMC networks, see the following resources:

► The HMC and SE (Version 2.14.0) console help system, or see IBM Knowledge Center.

   At IBM Knowledge Center, click **IBM Z**. Then, click **z14**.

► *IBM z14 Installation Manual for Physical Planning*, GC28-6965.