

CLASSING DATA ON THE INTERNET

Ronald F. Robbins

USDA AMS Cotton Program

Memphis, TN

Abstract

The USDA AMS Cotton Program will implement software that enables Internet access to classification data for our customers. Internet access to all Cotton Program offices is scheduled to be installed before the start of the 2003 crop.

Introduction

The Cotton Program currently disseminates classing data to over 1,800 customers via modem access from the Cotton Electronic Recording System (CERS). The customers include gins, agents, cooperatives, warehouses, mills, merchants, other government agencies and foreign customers. Since the installation of HP Nonstop Servers (formerly Tandem Computers) in 1990, gin and/or agent customers have been able to download data directly from their classing office's computer system as soon as a sample is officially classed. Also, data is available from the Quality Assurance computer system for all certificated stock classification as soon as the data is officially released. For all other customers, classification data is available on the Central Database system in Memphis within several hours of being classed. The number of records disseminated during a crop year is usually twice the number of samples classed (e.g. 19,000,000 bales classed equals 38,000,000 disseminated).

Discussion

Internet access to the CERS is being added in response to customer requests. The Cotton Program has purchased Comfote's J6530 web-enabling software to implement Internet access. The J6530 software is a java applet that is installed on the customer's computer. The applet has the ability to emulate an HP Nonstop 6530 terminal with host-initiated file transfer capability in a Netscape or Internet Explorer browser window. The Cotton Program purchased a system-wide license for the J6530 software. The software will be distributed **at no cost** to all current and future customers who have an account in good standing. The charge for access to data is the same for Internet access as it is for the current access methods. The software will be distributed from a password-protected directory on a web-server. The password to the directory will be changed often for security reasons. Contact the Cotton Program's IT Staff at (901) 384-3007 to get the current password. The software will also be available on CD for a small fee.

Even with Internet access, the CERS will remain a closed type system. In addition to the downloaded software, customers must have an assigned user ID and password before accessing the system. The installed software contains the java applet, file creation programs and HTML files that are required to be installed on the local computer. An HTML file exists for the Central Database, Quality Assurance, and for each classing office. Your connection to the system will be determined by which HTML file you select. All of the HTML files point to the Central Database Nonstop server in Memphis, but they all select a different service that is executed after the connection is made.

The file transmission speed will be dependent upon the Internet connection speed and the Information Xchange Facility (IXF) transfer rate. A replacement for IXF will be examined due to the known speed limitations of the IXF transfer protocol. All file transmissions will be 128 bit SSL encrypted for security. All file formats will remain exactly the same as they are today via modem access (e.g. file1, sendm, ams01, autol, etc.).

The USDA in Washington provides access to the Internet for this system. A dedicated T1 is installed from Washington to Memphis for all Internet connections which route through the Central Database Nonstop Server. Our Internet access has been and should continue to be highly reliable using Washington as our Internet gateway. However, the Cotton Program encourages all customers to have the modem software installed as a backup if they need access to their data at all times.

Current customers will be notified by mail when Internet access is enabled. Internet Explorer 4.01 or later or Netscape 4.06 or later is required for the java applet. Browsers must have java support and 128 bit encryption capability.

Conclusion

The implementation of Comfote's J6530 web-enabling software allows the Cotton Program to satisfy our customers' Internet access requests in a timely fashion. The software needed to access the CERS will be easier for customers to install and execute since the software will be available on the Internet and the modem configuration part is eliminated by using the customers' existing Internet connection.