



Data Exchange Preparation Procedures_006

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Document Preparation and Approval

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1 Introduction

The purpose of this document is to provide guidance and information to all Plans that need to establish connectivity to, and a data exchange process with, CMS, for participation in the Medicare Modernization Title I and Title II programs.

The scope of this document is to provide information on the following:

- Security and Authorization processes/requirements
- Data Exchange Protocols – selection, installation and high-level testing
- Connectivity

This document *does not* cover application testing (i.e. the transfer and receipt of application specific files and file formats).

The intended audience of this document is the Plans that will be exchanging data with CMS as well as entities that act on the behalf of Plans.

Please contact the MAPD Help Desk if there are any problems or questions encountered while following the procedures outlined in this document.

Phone: 1-800-927-8069

Email: mapdhelp@cms.hhs.gov

2 References

The following documents provide additional supporting information and can be found in the Connectivity Preparation section of the MAPD Help Desk website:

<http://www.cms.hhs.gov/MAPDHelpDesk/PRG/itemdetail.asp?filterType=none&filterByDID=-99&sortByDID=1&sortOrder=ascending&itemID=CMS056665&intNumPerPage=10>

- Connect:Enterprise (SFTP Client) Internet Guides – This document provides instruction on downloading, installing, and configuring the Connect:Enterprise SFTP Client.
- Instructions to import security certificates for HTTPS Access – This document provides instructions for installing the latest browser security certificates that are needed to access the Gentran mailboxes.
- HTTPS example – This manual is available at the MAPD Technical Support Desk website; document provides instructions for accessing a Gentran mailbox.
- EPOC User Registration Procedure- This document describes the procedures to register Entity Points Of Contact that will approve access to CMS Computer Services.
- Plan Setup Information – This document contains instructions for completing the Connect:Direct Secure Point of Entry (SPOE) access request form as well as the form itself. This form is required for new T1 Connect:Direct connections to CMS.

3 Overview

Exchanging information with CMS can be accomplished using different tools and procedures and is dependant on a Plan's current capabilities and the volume of data to be exchanged.

In general there are three types of physical connectivity available for a Plan:

- Internet
- Extranet through a dedicated T1 to the MDCN

There are three data exchange protocols available to the Plans:

- HTTPS – HyperText Transfer Protocol Secure
- SFTP – Secure File Transfer Protocol
- C:D – Sterling Commerce's Connect:Direct software

Large Plans, with 100,000 participants or more, must use a T1 line to the MDCN and Connect:Direct software to facilitate the exchange of data.

Small Plans using the Internet can use the Connect:Enterprise client from Sterling Commerce or a secure Web page (HTTPS – HyperTextTransfer Protocol Secure) to exchange data with CMS. The Connect:Enterprise client implements the secure file transfer protocol (SFTP) to accomplish the file transfer. The chart below describes the available connectivity methods and the corresponding data exchange/software options.

Plan size	Physical connection	Data Exchange method/software	Destination at CMS
Large Plans (100,000 participants or more)	MDCN	Connect:Direct	CMS Mainframe
Small Plans	Internet	Connect:Enterprise (SFTP) or HTTPS	Internet Gentrans Server

Figure 1 describes the two connectivity options available.

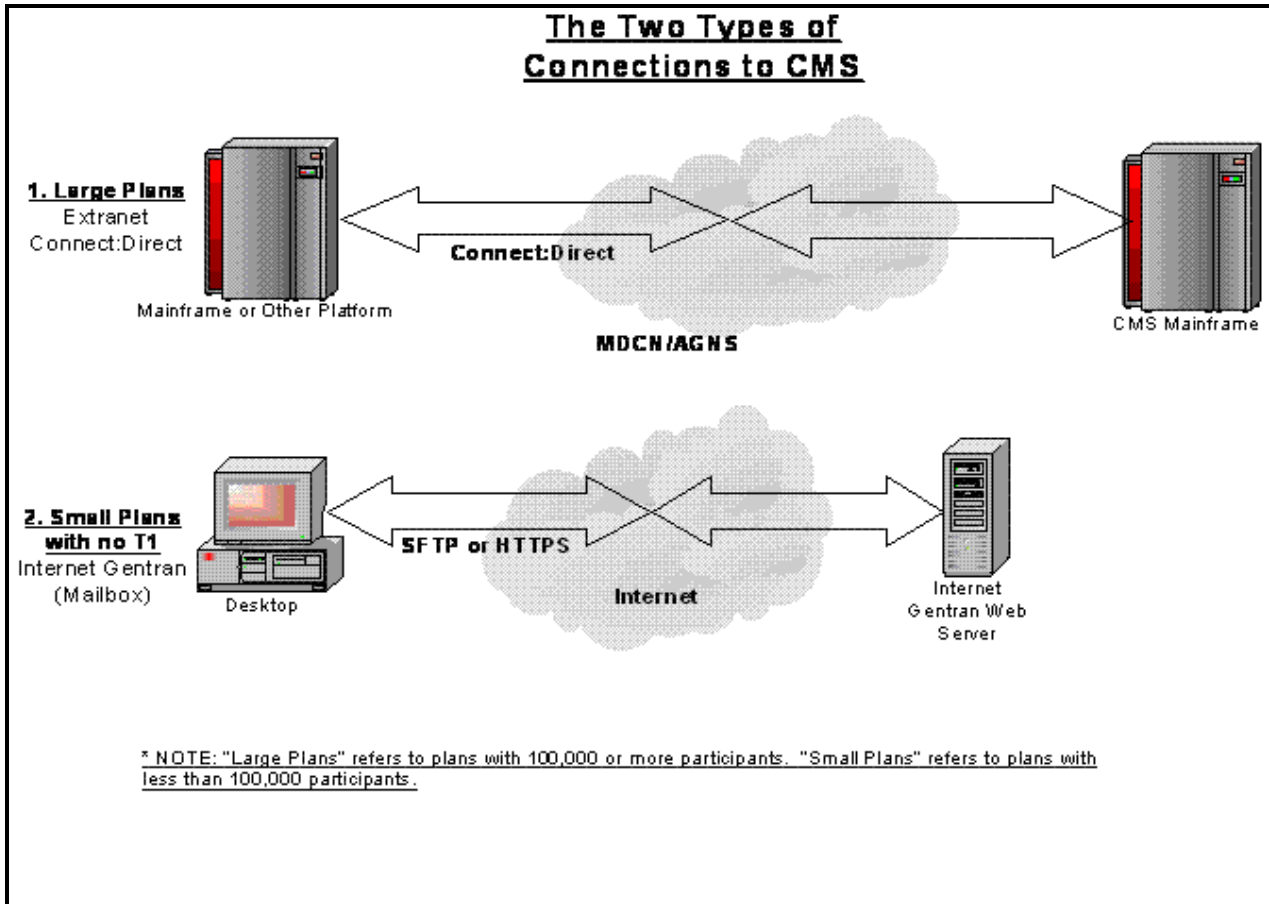


Figure 1: Connectivity Options

4 Security and Authorization

Only authorized users can conduct business with CMS. There are a number of processes to be followed and forms to be completed in order for a Plan to be granted the necessary credentials. The specific credentials that a Plan needs are dependent on how data will be exchanged with CMS.

Before specific users are granted access to the CMS systems, an Entity Point of Contact (EPOC) needs to be established for each Plan. The EPOC will be an employee of the Plan (not CMS), and will be responsible for approving all access requests from their organization. In addition, the EPOC will notify CMS when accounts need to be deleted or suspended for any reason (i.e. an employee leaves). The EPOCs will be approved by CMS. EPOCs will need to self-register through the Individuals Authorized Access to the CMS Computer Services (IACS) Web site on the Internet:

Once registered, CMS will approve or reject the EPOC.

Individual users will also self-register through the IACS Web interface on the Internet for access to the applications and systems they require. This process requires an electronic approval from the EPOC (accomplished through the IACS web interface). When the user is successfully registered, all of their supporting access (i.e. mailboxes, RACF ID's, etc.) will be created. This includes access to the MARx and MBD User Interface as well as the ability to submit files to CMS. New users as well as existing users must register through the IACS Web interface to obtain a global User ID (GUID). After registering, users will be required to change their password.

Instructions on how to register the EPOC, can be found on the MAPD Help Desk web address, by contacting the MAPD Help Desk by phone at 1-800-927-8069, or by email at mapdhelp@cms.hhs.gov.

Large Plans with newly established T1 lines to MDCN, must obtain a SPOE ID and initiate the Connect:Direct setup procedure in order to transfer files to the CMS mainframe. The SPOE ID is used to identify the organizational entity sending the files to CMS. To request a SPOE ID Request form and C:D Setup Request form; contact the MAPD Help Desk by phone at 1-800-927-8069 or by email at mapdhelp@cms.hhs.gov

5 Data Transfer Protocol – Tools and Processes

The following section describes the requirements to support connectivity and configuration. Section 5.1 describes the requirements for large Plans and how to obtain the software/hardware to support the activities. Section 5.2 describes the options available to small Plans, recommendations and benefits of each, how to obtain the necessary software, and the configuration and testing required for that option.

5.1 Large Plan Connectivity (>= 100,000 in Enrollment)

Connectivity for large Plans participating in the MAPD program (those with enrollment of 100,000 or more beneficiaries) must be implemented using a T1 line and Sterling Commerce's Connect:Direct software.

5.1.1 T1 Line and Connect:Direct

A T1 Line directly connects the health Plan to the CMS Data Center in Baltimore, MD. The software to support the data transfer across the T1 is Connect:Direct (C:D), a software product that must be licensed from Sterling Commerce. Health Plans are expected to fund the cost of these tools. Existing T1 lines to CMS may be leveraged until May 2006 when the Plan will be expected to pay all associated costs.

Those Plans seeking to establish a new T1 line to MDCN with C:D should contact the MAPD Technical Support Desk to request the C:D Template. The C:D Template consists of the Plan Setup Information Document and a Plan C:D Setup Request form. The Plan Setup Information Document contains a link to the SPOE ID Request form. Both the SPOE ID Request form and the Plan C:D Setup Request form need to be completed and sent to CMS per the instructions on the forms.

To obtain a T1 Line, Connect:Direct software, or the C:D Template, please contact the MAPD Technical Support Desk by phone at 1-800-927-8069 or by email at mapdhelp@cms.hhs.gov

5.2 Small Plan Connectivity (< 100,000 in Enrollment)

Two options are available to the small Plans seeking to participate in the MAPD Program:

- Secure File Transfer Protocol (SFTP)
- Secure HyperText Transfer Protocol (HTTPS)

Both of these options are available to use over a connection to the Internet.

5.2.1 Secure File Transfer Protocol – SFTP

SFTP is a standards based protocol and CMS has selected Sterling Commerce's Connect:Enterprise Client as their SFTP vendor. The SFTP client must be configured to connect to the Gentran mailbox to drop off and pick up files. The following section provides information for this activity.

The following minimum requirements are recommended to run Sterling Commerce's SFTP:

For Microsoft Windows:

- RAM 512 MB
- Windows NT 4 SP6 / 2000 PRO / XP SP1

For Unix:

- RAM 512 MB
- AIX 5.3 Solarix 9 / HP-UX 11i

Before connecting to the secure Gentran mailbox through the SFTP interface, each Plan will need to configure their network firewalls and Access Control Lists (ACLs) to allow SFTP access to **gis.cms.hhs.gov on port 10022.**

5.2.1.1 Connect:Enterprise Secure Client

5.2.1.1.1 Ordering Instructions

Before attempting to order the SFTP software, the following steps should be completed by the Plan:

Determine how many copies of SFTP are needed. The SFTP software is licensed per user. If file transfers are to be sent from multiple users, knowing how many copies are required will facilitate the ordering.

Determine on which operating system(s) the SFTP client will run. The Connect:Enterprise Secure Client runs on Windows and multiple types of Unix. The biggest factor to making this decision should be how the files are processed once they make it back to the Plan. If most of the file processing occurs on a Unix machine, a Unix-based client may be the best approach.

Have a credit card available. Sterling accepts Visa, MasterCard or American Express as credit card options.

To order the Sterling Commerce Secure Client software, contact the Sterling Commerce Sales Team toll free at 1-800-299-4031 or 614-793-4041. Please note online ordering is not available.

5.2.1.1.2 Installing and Configuring Connect:Enterprise Secure Client

Support for installing and configuring Connect:Enterprise Secure Client is provided by Sterling Commerce.

Plans must register a submitter through IACS before completing the configuration requires of the Connect:Enterprise Secure Client.

For additional install and configure details, see the Connect:Enterprise (SFTP Client) Internet Guide.

5.2.1.2 Other SFTP Clients

CMS strongly recommends using the Connect:Enterprise SFTP client from Sterling Commerce to transfer files. Other SFTP clients may be used however, Plans are responsible for the configuration of that software. CMS cannot guarantee that a non–Sterling Commerce SFTP client and the Gentran Integration Suite (GIS) are compatible. Compatibility issues could impact the Plan’s progress toward being certified to move into production.

5.2.1.3 SFTP Considerations

- While the Connect:Enterprise Secure Client does not have a command line interface, it does have the capability to schedule file uploads and downloads. If there is a need to automate the file transfer process, please call the MAPD Technical Support Desk for assistance.
- Connections to the Gentran mailbox will not be automatically closed. Since some of the files are expected to take quite a while to download, the user must explicitly close their connections to the Gentran server when the file transfer is complete.
- The Gentran Integration Suite can handle compressed (.zip) files as well as uncompressed files. In order to expedite the transfer of larger files, they may be compressed before they are sent to the Gentran Integration Suite.

5.2.2 Hyper Text Transfer Protocol Secure – (HTTPS)

HTTPS is a secure web interface to provide connectivity to the customer’s Gentran mailbox. This option requires no purchase as long as the user’s browser and Operating System meet the following CMS requirements:

- Internet Explorer version 5.0 or later
- Windows operating system including latest service packs downloaded and installed

Users will login to the Gentran mailbox through this web interface to send data to CMS. The URL for this site is <https://gis.cms.hhs.gov:3443/mailbox>.

Before connecting to the secure Gentran mailbox through the HTTPS interface, each Plan will need to configure their network firewalls and Access Control Lists (ACLs) to allow HTTPS access to the machine and port mentioned above.

5.2.2.1 Setup instructions

Install latest Verisign security certificates. This certification is installed per machine. For additional information, see EFT_Verisign_Certificates.doc. This document is available at the MAPD Technical Support Desk website, www.cms.hhs.gov/mapdhelpdesk. Select the *Plan Reference Guide for CMS Part C/D Systems* link from the left menu bar, then select the *Connectivity Preparation* link.

- The CMS HTTP Example manual is available as a guide to show end user screen shots for the following procedures:View all or individual mailboxes
- Receive inbound data
- Send data to CMS
- Log out of the CMS website

This manual is available at the MAPD Technical Support Desk website, www.cms.hhs.gov/mapdhelpdesk/. Select the *Plan Reference Guide for CMS Part C/D Systems* link from the left menu bar, then select the *Connectivity Preparation* link.

6 Connectivity Testing

The following section describes the Testing instructions and objectives for large and small Plans.

6.1 Large Plan Connectivity

For Plans with newly established T1 lines to MDCN, users should ensure that both pages of Plan Connectivity Data (PCD) Module is completed and sent to the MAPD Help Desk. Please see section 2.2 in the Connectivity Access Configuration Document on the MAPD Help website (www.cms.hhs.gov/mapdhelpdesk) before proceeding.

6.1.1 T1 Line and Connect:Direct

For Plans with newly established T1 lines to MDCN, users should ensure the CMS C:D SPOE Request form and the Plan C:D Setup Request form has been sent to CMS and the information supplied by CMS has been applied to the Plan system. The CMS C:D SPOE Request form and the Plan C:D Setup Request form are collectively known as the C:D Templates.

To facilitate testing, each Plan should call the MAPD Technical Support Desk at 1-800-927-8069 to schedule a time.

The Plan's technical representative or programmer should have the Plan's Job Control Language (JCL) and PROC for submitting a file to the CMS mainframe constructed, tested and ready to be submitted. The following values from this job should be available for confirmation:

- PNODE (Plan node name)
- SNODE (CMS supplied node name)
- SNODEID (CMS supplied user id and password)
- Dataset name of file being sent to CMS from the Plan and JCL UNIT value
- RUNTASK statements and Job name to be submitted after a successful file transfer (CMS supplied)

CMS' technical representative or programmer will have the CMS Job Control Language (JCL) and PROC for submitting a file to the Plan mainframe constructed, tested and ready to be submitted. The following values from this job will be available for confirmation:

- PNODE (CMS node name)
- SNODE (Plan supplied node name)
- SNODEID (Plan supplied user id and password, if required)
- Dataset name of file being sent to the Plan from CMS and JCL UNIT value

To test Plan connectivity, the following procedure will be used:

- AT&T representative will review and confirm that the T1 connection is complete and ready for use.
- CITIC will review and confirm that the Plan security access to the CMS mainframe is complete (SPOE, RACF, valid user id and password, ACL, etc.)
- Plan technical representative will review and confirm that CMS' security access to the Plan mainframe is complete (RACF, valid user id and password, etc.)
- Plan programmer and CMS programmer will review and confirm the Connect:Direct procedures for sending and receiving files values are correct.
- Plan programmer will submit the job to send a file to the CMS mainframe.
- MAPD Technical Support Customer Service Representative (CSR) will verify that the file transmitted from the Plan mainframe was successfully received at the CMS mainframe.
- CMS programmer will submit the job to send a file to the Plan mainframe.
- Plan programmer will verify that the file transmitted from the CMS mainframe was successfully received.
- A successful test is complete when a file has been sent from the Plan mainframe to the CMS mainframe and a file has been sent from the CMS mainframe to the Plan mainframe. The files being sent and received by CMS and the Plan will be empty. Upon a successful test, the MAPD Technical Support Desk will send an email to the Plan confirming that the test was successful.

A Detailed checklist can be found at Appendix C-MAPD Phase 1 Test Checklist for Connect:Direct.

6.2 Small Plan Connectivity

Small Plans should follow the testing procedures defined below for their selected protocol and connectivity methodologies. Section 6.2.1 provides testing information for Plans using the SFTP protocol through the Internet. Section 6.2.2 provides testing information for Plans using HTTPS over the Internet.

Plans must register a submitter in IACS before completing connectivity testing. Therefore, please register in IACS and wait to receive your Userid and password before performing the connectivity test.

6.2.1 Secure File Transfer Protocol – SFTP

As indicated earlier, users must register in IACS before accessing their Gentran mailbox. Once the user id is obtained, users should login to the Gentran server and take a screen snap shot of their mailbox.

Note: *It is highly recommended that screen shot files are converted to JPEG format. This allows for smaller email attachments for storage purposes. In Windows 2000, and XP using Microsoft's Paint to convert from standard BMP (Bitmap) to JPEG is just a matter of using the "Save as..." function and converting the "Save as type" to JPEG.*

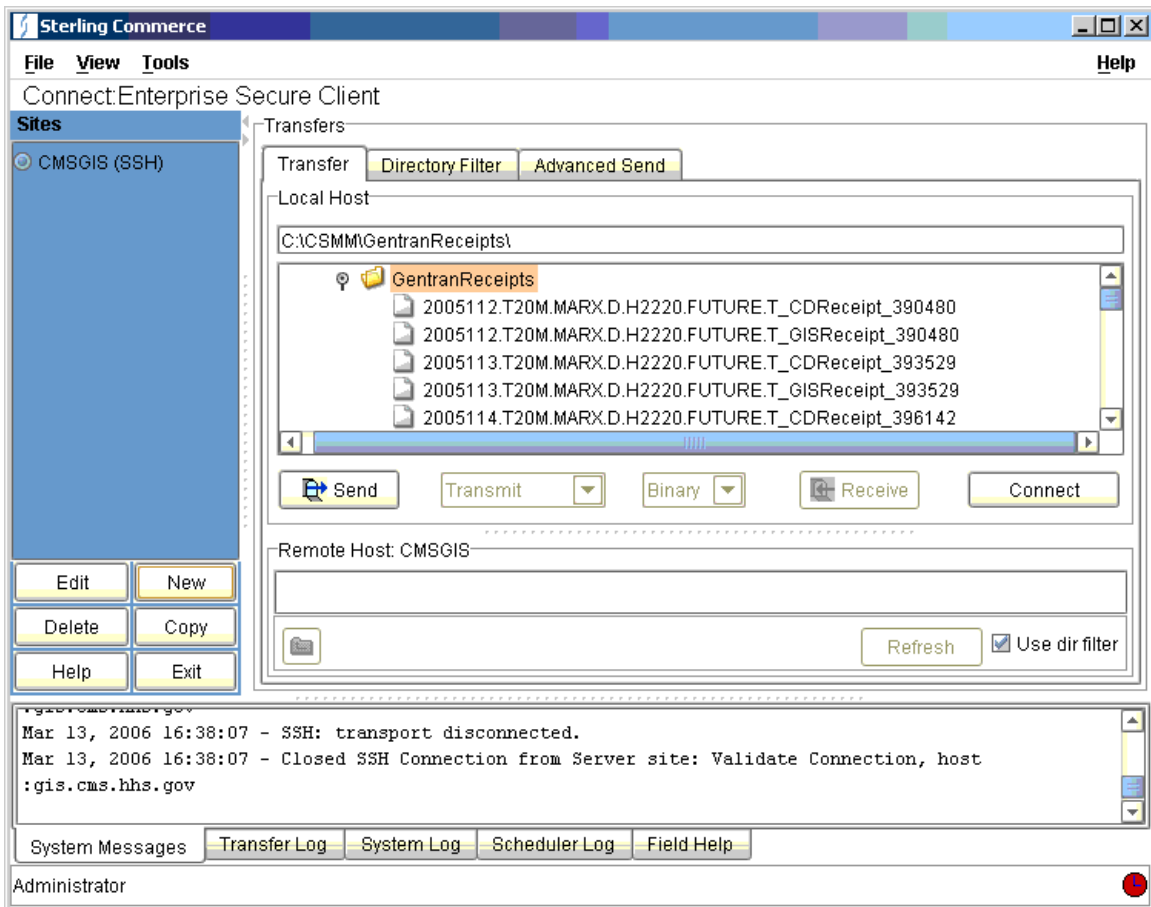


Figure 2

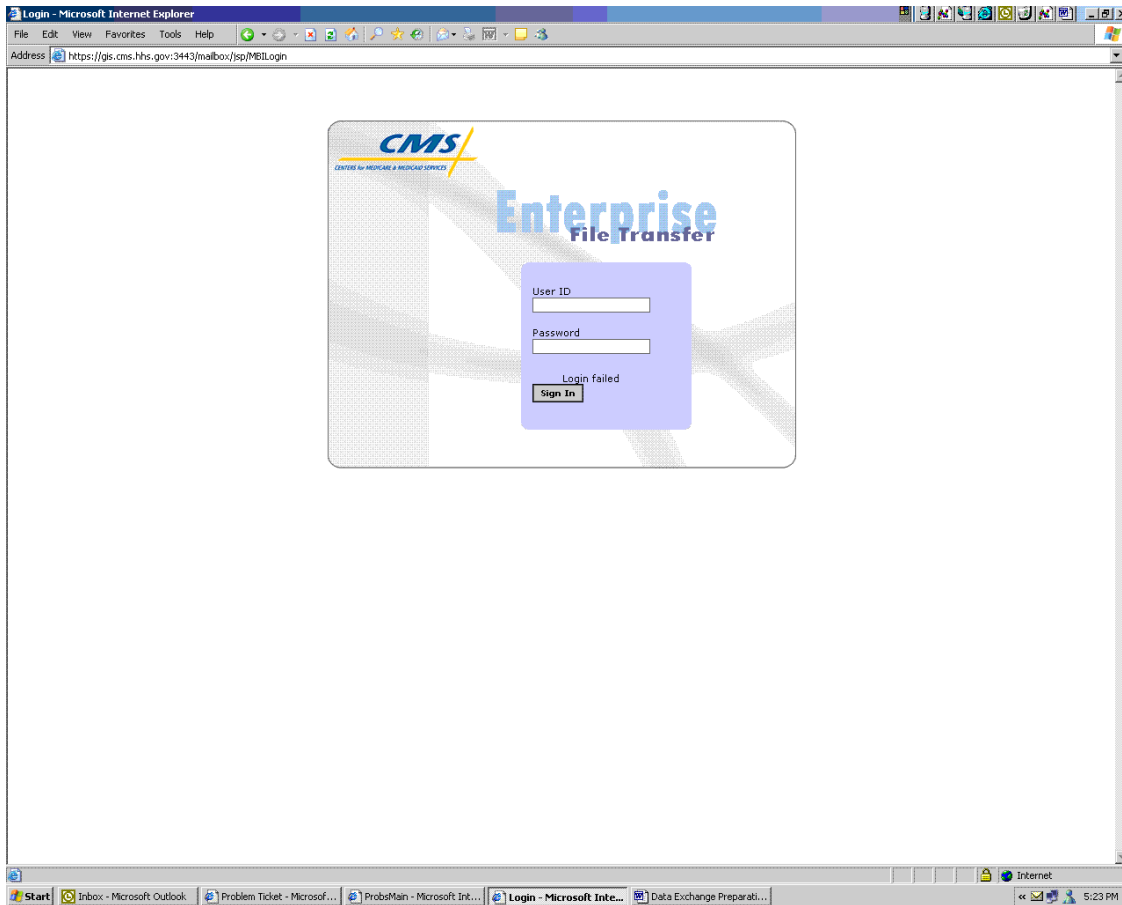
To complete the test, the user should forward screen snapshot of their mailbox to the MAPD Technical Support Desk at mapdhelp@cms.hhs.gov. Upon receiving the email, the MAPD Technical Support Desk will send an email to the Plan confirming the test was successful.

A detailed checklist of setup activities can be found at Appendix A - MAPD Phase 1 Test Checklist for SFTP

6.2.2 Hyper Text Transfer Protocol Secure – HTTPS

To complete the test, the user should take a screen snap shot of the Gentran mailbox [login screen] and forward the screen snapshot to the MAPD Technical Support Desk at mapdhelp@cms.hhs.gov. Upon receiving the email, the MAPD Technical Support Desk will send an email to the Plan confirming the test was successful.

A detailed checklist of connectivity activities can be found at Appendix B - MAPD Phase 1 Test Checklist for HTTPS.



4. **Note:** *It is highly recommended that screen shot files are converted to JPEG format. This allows for smaller email attachments for storage purposes. In Windows 2000, and XP using Microsoft's Paint to convert from standard BMP (Bitmap) to JPEG is just a matter of using the "Save as..." function and converting the "Save as type" to JPEG.*

Appendix A: MAPD Connectivity Test Checklist for SFTP

Task	Internet
Complete and send Plan Connectivity Data (PCD) Forms to the MAPD Help Desk	
Identify/register Plan EPOC at https://applications.cms.hhs.gov	
Self Register Users	
Change the one time use password and 4 challenge questions	
Set up firewall and ACL to allow SFTP access to gis.cms.hhs.gov port 10022	
Purchase and Download Sterling's Connect:Enterprise Secure Client	
Configure the SFTP application (support is provided by Sterling Commerce)	
Capture a screen shot of the Gentran mailbox and email it to the MAPD Help Desk (mapdhelp@cms.hhs.gov). <i>If possible convert all images to JPEG format.</i>	
Use the SFTP application to connect to the Gentran Server at gis.cms.hhs.gov port 10022.	

Appendix B: MAPD Connectivity Test Checklist for HTTPS

Task	Internet
Complete and send Plan Connectivity Data (PCD) Forms to the MAPD Help Desk	
Identify/approve/register Plan EPOC	
Self Register/Approve Users	
Change the one time use password	
Set up firewall and ACL to allow HTTPS access to gis.cms.hhs.gov port 3443	
Install latest Verisign security certificates	
Launch a Web Browser and access https://gis.cms.hhs.gov:3443/mailbox	
Capture a screen shot of the Gentran login screen and email it to the MAPD Help Desk (mapdhelp@cms.hhs.gov). <i>If possible convert all images to JPEG format.</i>	
Enter the GUID and password provided to you.	

Appendix C: MAPD Connectivity Test Checklist for Connect:Direct

Task	Owner
Plan Transmission Information	
Complete and send Plan Connectivity Data (PCD) Forms to the MAPD Help Desk	Plan
Provide Contact information	Plan
Send SPOE request to CMS	Plan
Provide User Id and Password for return file	Plan
Provide Output dataset name	Plan
Provide Local Node Name	Plan
Provide TCP/IP address	Plan
Provide Port	Plan
Provide Environment	Plan
Configured Firewall Information	Plan
Configured C:D	CMS
CMS Transmission Information	
Acquire C:D Process information: Local Note Name TCP/IP Address Port Environment	Plan
Request and Receive CMS SPOE	Plan
Configure C:D Process	Plan
Connectivity Test	
CMS readiness for EFT (Enterprise File Transfer)	CMS
Sterling readiness for EFT	Sterling
Plan transmit test data to CMS	Plan
CMS receive test data	CMS
CMS transmit test data to Plan	CMS
Plan receive test data	Plan