BCC SOFTWARE

Presort | Label Studio

System Administrator Guide

Contents

About this guide

This is a planning guide and reference for Presort® and Label Studio. This guide explains system requirements and how to set up your system to run your applications, as well as providing information on how to keep your software up to date. For information about installing programs, see this guide's platform-specific installation sections.

Who this guide is for

In a network setting, new software and updates are normally installed by the system administrator. If you are not the administrator of your network, you should ensure that your system administrator has access to this guide.

In providing this guide, we assume that you're already familiar with your hardware, software, operating system(s), and administrative procedures.

Applications that this guide covers

This guide explains installation and setup for the following products and utilities:

- Presort Job File

- Presort Views

- Label Studio

- Remote Views

- ZIPCount

- Edjob and Edjob GUI

- DefMap

- ZoneShow

- DSF_Show

Obtaining the software and USPS directories

For instructions to download and uncompress the software and USPS directories, refer to the email you received from BCC Software. If you do not have this email, contact BCC Software Support.

Preparing for Installation

This section contains information about system requirements, disk space, work space requirements, and general information and guidelines about directories and file structure.

System Requirements

This section contains information about operating systems that we support and troubleshooting possible missing libraries on Linux® Red Hat® during installation.

Operating systems

Presort and Label Studio applications are currently supported on the following operating systems.

This information is subject to change without notice and is provided as a courtesy only, with the intent that it may help you plan for the future. As we cannot control what third-party vendors will do, we cannot guarantee that this information will be accurate in the future. For authoritative information, contact your operating system provider.

Environment	Supported Platforms
Windows® Server (64-bit only)	• Windows Server 2019 • Windows Server 2016 • Windows Server 2012 R2
Windows Desktop (64-bit only)	• Windows 10 • Windows 8.1
Linux® – Red Hat® (64-bit only)	• Red Hat Enterprise Linux 8.0 • Red Hat Enterprise Linux 7.0
Linux – SUSE® (64-bit only)	• SUSE 12.0 • SUSE 11.0

IMPORTANT   BCC Software plans to discontinue Presort support for SUSE Linux Enterprise Server 11 on March 31, 2022.

You should run the same operating system (or later) as BCC Software and ensure that operating systems, runtime environments, and compilers align with their respective vendors' recommendations.

> **NOTE**   You may choose to continue running Presort on an operating system that we no longer support, but if you discover an issue that cannot be reproduced on one of the supported operating systems, you will need to upgrade your operating system to resolve the problem.

Missing libraries when using Red Hat Linux

While installing an application on Red Hat Linux, the installer may indicate that it cannot locate a certain library file. Because every system is different, it's difficult to anticipate what libraries are or are not installed on your system.

To install a library, contact your system administrator to install the proper libraries for your operating system. If you are an administrator, you will need to install the proper Red Hat Package Manager (RPM) to get the library you need. RPMs are packages that contain files that are used to install software on Linux-based systems. For example, with Red Hat Linux:

If you're missing this	Install the following RPM
libc.so.6 library	glibc-2.12-1.7.e16.i686.rpm
libGLU.so.1	mesa-libGLU-7.7-2.e16.x86_64.rpm

If you receive an error, contact BCC Software Support for assistance.

Hard-drive space requirements and Performance tips

Space requirements will vary depending on the specifics of your implementation and on the size and number of your mailing records.

Use this information as a general guideline. Having more hard drive space available generally improves performance.

Application Size	Disk space required
Presort	At least 110 MB (which includes space for directory files)
Label Studio: Windows	At least 75 MB
Label Studio: UNIX	At least 35 MB

The software spends much of its processing time reading data from input files and directories (Presort only), and writing out processed records to the hard disk. These processes are very disk-intensive and happen simultaneously and almost constantly. The speed of the application depends more on disk input/output than on your computer's CPU or memory.

> **TIP** We strongly recommend creating subfolders for input files, work files, and output files to maximize disk performance. If you are running Presort, this includes creating a subfolder for directories. This organization enables the software to find data in the directories much more efficiently. (Create the folders in a location other than a root directory location.)

> **TIP** Partition your drive as NTFS for best results.

Space for output files and reports

The software produces output files and reports. No set formula is available for estimating their size. However, an output file is typically larger than the associated input file because you can add new fields and data. The output file can also be smaller if you choose not to carry over all fields or records from the input to the output file.

Space for work files

The software creates temporary work files that remain on the disk as long as your job is active. During job setup, you select the directory folder in which to store the work files and then clean it up when a job (not a session) is finished.

The size of all work files varies depending on how the job was set up. A general guideline is to allocate processing space up to 2½ times the space required by the input files. However, extremely intensive processing (for example, sorting the file by ZIP Code before running Presort) may require up to 6 times the amount of space that the input files require.

Here are additional work-space considerations:

Application	Work space guidelines
Presort	Requires 100 bytes per record; so, one million records would require 100 million bytes (96 MB or more) for work files.
Label Studio	Requires 48 bytes per record; so, one million records would require 48 million bytes (46 MB or more) for work files.

> **TIP** If you experience significant performance problems, this may be due to your computer's

anti-virus program flagging the processing of the work files as a problem. The software opens and closes thousands of work files at the same time when processing large jobs. This action can be interpreted as "virus-like" behavior by some anti-virus programs. This can result in greatly decreased performance, and in some cases, can prevent the software from completing a job. To avoid this problem, store work files in a dedicated sub-folder and turn off anti-virus checking for this folder.

Samples sub-directory

The setup utility automatically defines the `samples` sub-directory as the working directory for your application (in Windows, the working directory is referred to as the start in property). Each `samples` sub-directory holds the "quick tour" files that users can use when they're first learning how to use an application.

Installing Applications on Windows

This section provides information about installing applications on Windows. These instructions may vary slightly depending on your Windows operating system version. The instructions in this guide are written for Windows 7.

Hardware and settings recommendations for Windows

This section provides information about recommended hardware and settings for Windows systems running Presort or Label Studio, beyond the basics listed in System Requirements. The following information is subject to change.

DLLs

Shared DLLs are installed in the following locations:

Type of DLL	Location
DLLs that are part of the OS (mostly older files, if needed for updating)	`\System32`
DLLs that are not part of the OS	`C:\ss\adm`

Processor

Your Windows applications require a supported Intel-based or compatible Windows-certified processor with a minimum 400 MHz clock speed (3 GHz recommended) for workstation versions of the operating system. While the application will run on older hardware, application performance is typically proportional to the hardware performance.

RAM

Many factors can influence the amount of RAM you need. If you install the application onto a server, it should have at least 256 MB of RAM. If you plan to process large databases or complicated jobs, you should have 512 MB to 24 GB of RAM for optimal server performance.

If you install the application onto a workstation, use an adequate amount of RAM for running job applications on Windows. For requirements for Remote Views client workstations, see Remote Views client.

Multi-tasking requires more RAM. For example, if you run a job application while using e-mail and a word processor, or simultaneously run more than one job program, you need at least the recommended amount of RAM to maintain acceptable performance.

SCSI hard drives

If you use SCSI hard drives, be sure to use the driver that matches your SCSI controller card. If you do not, your software may not run properly or, in some cases, not at all.

Printer drivers

Your application does not use the Windows printer drivers program output or reports. Instead, report format (lines, width, and header information) is controlled by settings in the report setup in the job file. The printer codes sent to the printer by the job program take precedence over print controls that are part of the Windows environment.

The job file programs generate reports in plain fixed-ASCII text format to be compatible with many different printers. You should periodically check with your hardware supplier for updated drivers.

Permissions

The network administrator is responsible for setting access permissions after completing installation. The installation program does not set network access or multi-user permissions. The network administrator must ensure that users have appropriate rights so that when a Views **Define Options** setting changes, Views can write changes to the registry. Users must have administrator permissions to support registry updates.

Users will need Read and Execute access to the `ss` directory and each subdirectory (`adm, dirs,` and so on). Normally, users should not have Write access to those directories. However, make sure that they do have Write access to the directories where they may write work files, output data, or reports.

Installing the application on a single computer or server

To install the application on a single computer or server, follow these instructions.

1. Install the application

2. Perform post-installation tasks

The step-by-step installation processes for single computer and server installations are nearly identical; the differences are noted throughout these instructions. You must be logged in as an administrator to install the software.

If you are installing software on a Remote Views client, follow these instructions. For more information, see Installing Remote Views.

Installing the application

For instructions to download and uncompress the software and USPS directories, refer to the email you received from BCC Software. If you do not have this email, contact BCC Software Support.

> **NOTE** You must be logged in as an administrator to install the software.

To install the application:

1. Double-click `setup.exe` from the uncompressed ZIP file.

2. Follow the on-screen prompts to start the software installation and accept the license agreement.

3. In the **Choose Destination Location** screen, specify the destination folder to install the application in. The default location is `C:\ss`. Click **Next** to accept the default destination folder of `C:\ss`, or click **Browse** to specify a different location.

   > **IMPORTANT** To avoid conflict with any Postalsoft applications you may have previously installed, the installation program may prevent Presort and Label Studio from being installed into any directory that contains Postalsoft applications, including any previous versions of Postalsoft Presort or Postalsoft Label Studio. If you attempt to install into a directory that contains Postalsoft applications, you will receive a warning and be prompted to select another location.

4. In the **Component Selections** screen, check the boxes next to the components you would like to install and click **Next**. A message will appear asking you whether you want to let the installer set up a client installation program to help with setting up client machines.

   - **For single computer installations:** Click **No**. This option does not apply to single computer upgrades.

   - **For server installations:** Click **Yes**. When the software installation is complete, see Installing the application onto a client to upgrade your client workstations.

5. In the **Select Program Folder** screen, select a folder to add icons into and click **Next**.

6. A message will appear asking if you want *PATH* and *PW_PATH* variables set up for you.

   - To let the program configure the variables automatically, select **Yes**.

     > **NOTE** If you already have *PATH* and *PW_PATH* variables set up for other

> BCC Software applications, you may get a message stating that the following screen contains important information about this particular installation and to please read it carefully. Click **OK** to continue. The **Start Copying Files** window appears with a message warning you that the *PATH* variable is rather long. You can continue with the installation, but you will have to set these variables manually after installing the software. See Setting environment variables for instructions.

- If you do not want the variables set up automatically, select **No**. See Setting paths manually after the software installation is complete to set the variables manually.

7. In the **Start Copying Files** screen, review the settings and click **Next**. You will see a series of screens that show the progress of the installation.

8. A message appears informing you that you must have Acrobat Reader to read the documentation. Click **OK**.

9. When the installation is complete, click **Finish**.

Performing post-installation tasks

After you have installed the software, perform these tasks to complete the installation process for single computers and servers. Some tasks apply to server installations only.

After installation do the following:

1. • If you chose to let the installation program configure the *PATH* and *PW_PATH* variables automatically, new entries have been added to your *PATH* and *PW_PATH* statements. To verify that the entries were added, see Verifying the environment variables.

   • If you chose not to let the installation program configure the *PATH* and *PW_PATH* variables automatically, or if you received a warning that your *PATH* statement was rather long, you will need to configure the variables manually. See Setting paths manually.

2. **For server installations only:** If you chose to have a client installation program set up, enable sharing on the server for the entire directory that the application was installed in (for example, `C:\ss`). Then follow the instructions in Installing the application onto a client to set up your client machines.

3. **Install the license key file (Presort only).** See Installing the License Key file for instructions.

4. **Install the USPS directories (Presort only)**. See Adding USPS directories (Presort only) for instructions.

The first time you install the application, the setup utility adds **BCC Software** to your **Start** menu. The appearance may vary depending on your applications and the version of your Windows operating system.

Installing the application onto a client

After you have installed the application onto the server, set up and install the application onto the clients. You must install the software on the server before installing the software onto the clients.

> **IMPORTANT**   These instructions do not apply to Remote Views clients. Follow the instructions for Installing the application onto a single computer or server to install the software on your Remote Views client machines. For more information about Remote Views, see Installing Remote Views.

To install the application onto a client computer:

1. Install the application on the server if you have not done so. See Installing the application on a single computer or server for instructions.

2. Verify that your new ...\ss directory on the server has been set up as shared.

3. Close all applications and restart the client so that you have a clean environment.

4. From the client, *map a new network drive* to the shared ...\ss directory that is on the server.

   > **CAUTION**   Do not use UNC paths with client installations and upgrades. You must use a mapped drive.

5. From that mapped drive on the client, navigate to the ...\ss\CLIENT directory on the server and double-click setup.exe. The client installation program installs a new folder named **BCC Software** onto the **Start** menu on the client that contains icons that point to applications on the server. (No applications are installed onto the client itself.)

   > **NOTE**   This process will not overwrite, uninstall, or update any existing desktop shortcuts on the client that you may have previously manually created.

6. Repeat steps 3 through 5 for each client that runs the application.

Once you have run the client installation program on all clients and you have performed all applicable post-installation tasks, you will be able to run the application and access the documentation from the **BCC Software** folder located on the **Start** menu.

Using an Adaptor (Presort only)

If you use an Adaptor product with Presort, you may need to install one set of directories for the Adaptor in one area of your computer, and another set for Presort in another area of your computer. For more information see your Adaptor documentation.

Avoiding conflicts

If the Adaptor and Presort are on the same machine, conflicts may occur. Your *PATH* and *PW_ PATH* environment variables point to product locations, but both products will try to use the software that is listed first in the environment variables.

To avoid conflicts:

1. Set up different user profiles: one for the Adaptor and one for Presort.

2. Set the environment variables in the Adaptor user profile to point to the location of the Adaptor software as specified in your Adaptor documentation. See Setting paths manually.

The environment variables in the Presort user profile should point to the location where the Presort application is installed.

Using batch files

You can use Windows batch files to run Presort and the Adaptor from the same system. When you use this procedure, Presort uses the environment that you set up in the batch file. All other applications that you run use the normal environment variables that are set up for the user who is logged in. A command-prompt window remains open until you close Presort.

> **IMPORTANT**   If you use any Postalsoft products, you need a batch file for each stand-alone application.

To use batch files:

1. Set up the environment variables for your Adaptor as specified in its documentation or in Setting environment variables.

2. Create a batch file that sets the proper environment variables for Presort.

> **EXAMPLE**
>
> ```
> @echo off
>
> set path=C:\ss\adm;C:\ss\pst;C:\ss\csgui;%path%
> ```

```
set pw_path=C:\ss\adm;C:\ss\pst;C:\ss\csgui;%pw_path%presort
C:\ss\pstjob.pst
```

The `set path` and `set pw_path` commands insert the appropriate paths to the Presort-related environment variables before the other paths. The presort `C:\ss\pstjob.pst` command launches the Presort job file program.

NOTE   You can create a shortcut to the batch files and place it on the desktop or **Start** menu. Just click the shortcut to run the batch file and launch the stand-alone job.

Setting environment variables

NOTE   The directions for setting environment variables will vary somewhat depending on the version of Windows that you are using. These instructions have been written for Windows 7.

Windows uses environment variables statements to know where to look for installed programs. This statement contains the path to all the directories that an executable file uses. For Windows to execute the software, the path statement must include the ...\ss directory location. The installation software can automatically set these paths for you. But if the path statements are too long, if you want set them manually, or if you need to change them, see Setting paths manually for instructions.

User and System variables

You can set paths and other environment variables as user or system variables.

Variable type	Discussion
User	A user variable is applicable only to a specific user. That is, it applies only when the appropriate user name logs into the system.
System	A system variable is applicable to everyone who logs into the system. (Only a system administrator can set system variables in a supported Windows operating system.)

If you set *PATH* and *PW_PATH* as user environment variables rather than as system variables, be sure to do so for each user who accesses applications.

Setting paths manually

The installation program prompts you to automatically add the *PATH* and *PW_PATH* variables to the path statement. However, at times you may need to enter or adjust them manually. So, after you install the software, you must edit the path statement to add the *PW_PATH* statement.

The installation program updates the system registry, but *PATH* and *PW_PATH* must be set manually.

After you set *PATH* and *PW_PATH*, you don't need to set them again for revisions or updates. If you add another product, you need to add only that product's directory to the *PATH* and *PW_PATH* statements.

Product path settings

The table below lists the syntax for the location of each product to enter in the *PATH* and *PW_PATH* statement (assuming that you installed in the default directory).

Product	*PATH* and *PW_PATH*
All products	adm
Presort	pst
Label Studio	ls; ls\system (Label Studio requires two settings for *PATH* and *PW_PATH*)
Remote Views	CSGUI
ZIPCount	la

Separate entries with a semicolon (;)

> **EXAMPLE**
>
> ```
> C:\ss\adm;C:\ss\pst;C:\ss\CSGUI;C:\ss\la;C:\ss\ls;C:\ss\ls\syst
> em
> ```

Setting the path variable

To set the path variable:

1. Click **Start** > **Control Panel**.

2. Click the **System** icon.

3. In the left side navigation pane, click **Advanced System Settings**. The **System Properties** window appears.

4. Click **Environment Variables**. The **Environment Variables** window appears.

5. In the **System variables** pane, scroll down until you see **Path** in the **Variables** column. Highlight the path and click **Edit**. The **Edit System Variable** window appears.

   If the **Path** variable does not appear in the **Variables** column, click **New**. The **New System Variable** window appears. In the **Variable Name** field, type `PATH`.

6. In the **Variable Value** field, add a product directory name for each product. Separate values with a semi-colon and no spaces.

   > **EXAMPLE**
   >
   > ```
   > C:\ss\adm;C:\ss\pst;C:\ss\CSGUI;C:\ss\la;C:\ss\ls;C:\ss\ls\system
   > ```

7. Click **OK**.

Setting the pw_path variable

To set the pw_path variable:

1. Click **Start** > **Control Panel**.

2. Click the **System** icon.

3. In the left side navigation pane, click **Advanced System Settings**. The **System Properties** window appears.

4. Click **Environment Variables**. The **Environment Variables** window appears.

5. In the **System variables** pane, click **New**. The **New Variable Name** window appears.

6. In the **Variable Name** field, type `PW_PATH`.

7. In the **Variable Value** field, add the same set of product directory names that are in the path variable. Separate values with a semi-colon and no spaces.

EXAMPLE

```
C:\ss\adm;C:\ss\pst;C:\ss\CSGUI;C:\ss\la;C:\ss\ls;C:\ss\ls\s
ystem
```

8. Click **OK**.

9. Click **OK** in the **Environment Variables** window to activate your changes. Close and re-open any running programs for the environment variable changes to take effect.

Verifying the environment variables

To verify the environmental variables:

1. Click **Start**.

2. In the **Search programs and files** field, type `System Information` and press **Enter**. The **System Information** window appears.

3. In the **System Summary** tree in the left side navigation pane, double-click **Software Environment** (or click the plus box next to it) to expand it.

4. Select **Environment Variables**. System variables, values, and user names are displayed.

5. Look for *PATH* and *PW_PATH* in the **Variable** column. Verify the entries in the **Value** and **User Name** columns.

Uninstalling an application

These instructions may vary slightly depending on your version of the Windows operating system. These instructions are written for Windows 7.

To uninstall an application:

1. Choose **Start** > **Control Panel**.

2. Click **Programs and Features**.

3. The **Uninstall or change a program** pane appears.

4. Select the application and related items to uninstall from the **Name** column, click **Uninstall**, and follow the on-screen prompts.

5. Clean up any remaining folders or files by using **Explorer**. If user directories or data files are stored in the directory structure, they won't be completely removed by the Uninstall utility.

Troubleshooting and tips for Windows

Long file names

In batch files and some text files, a long file name that contains a space must be enclosed in quotes.

Bookmarks

When we distribute an update to an online help file, it might not retain bookmarks that you have placed in the previous help file. You may need to re-enter bookmarks in the updated file.

Network troubleshooting

Some customers have reported intermittent problems accessing work files when the files are stored on a network drive. If you use a PC-based server, consider the following tips to ensure proper work-file storage on your network:

- **Verify network operation.** System performance can be affected by your hardware component combination and how well they work together. Because work-file storage on a network is a high-speed input/output process, your network server must be able to handle this task.

- **Correct hardware deficiencies.** Data issues can result from network connectivity problems, such as defective hard drive cables, terminators, network cable, network cards, and related accessories. By correcting a problem with any of these components, you may prevent losing valuable data.

- **Separate read and write directories.** For better performance, store the input files, output files, work files, and USPS directory files in separate folders.

- **Service Pack.** Make sure you are using the correct Service Pack on your Windows operating system.

- **Memory.** Make sure that enough memory is installed.

Installing applications on UNIX

This section provides information about installing applications on UNIX or Linux platforms and tips and troubleshooting information.

Hardware recommendations for UNIX

UNIX servers vary widely in the available combinations of processor and memory configurations available. Therefore we cannot provide you with a specific recommendation in a multi-platform administrator's guide. Contact one or more hardware vendors to compare the range of system choices available to you and choose accordingly.

The following table contains guidelines for selecting system components:

Component	Recommendation
Operating system	For information about supported UNIX platforms and versions, see System requirements.
Processor	Minimum: Use a minimum approximate processor speed of 400 MHz.
RAM	Use 2 GB or more of RAM. This is the minimum in most current UNIX systems.

If you plan to support a large number of users or if you plan to multi-task, we recommend that you use high processor speed and advanced memory configurations. For best performance, separate the input, output, and directory locations. See Hard-drive space requirements and Performance tips for more information.

Installing the application

This section describes how to install the application using the installation utility.

For instructions to download and uncompress the software, refer to the email you received from BCC Software Support announcing that the release is available. If you do not have this email, contact BCC Software Support.

To install the application with the installation utility:

1. If you are running the Remote Views server on the machine you want to install the application on, stop the server before starting the software installation. See Stopping the Remote Views

[Server](#).

2. Initiate the installer by running `./install.bin` from the uncompressed ZIP or TGZ file.

3. Read the introduction information and press **Enter** to continue.

4. When asked to read the license agreement, type `Y` or `N`. Press **Enter**.

5. To accept the terms of the agreement, type `Y` and then press **Enter**.

6. Specify an installation directory. Press **Enter** to install to the default directory, which is `/disk_n/ss` (where `/disk_n` refers to the file system or disk where you choose to install the software), or type an installation directory name. If you specify a different location, do not include "ss" as part of the path; an `ss` subdirectory is automatically created in the directory you specify.

    > **IMPORTANT** To avoid conflict with any previously installed Postalsoft products, the installation program will prevent the application from being installed into any directory that contains Postalsoft products. If you attempt to install the application into a directory that contains Postalsoft products, you will receive a warning message and be prompted to select another location.

7. Type `Y` to verify the path and then press **Enter** to continue.

8. Select the products to install. By default, all products are selected. To install all products, press **Enter**. If you want to install only certain products, type a comma-separated list of numbers representing the features to *deselect* (and therefore *not install*), and then press **Enter**.

9. When the installer prompts you to preview the list of products you want to install, confirm your selection and press **Enter** to continue. Type `back` to go to the previous screen to change your selection.

10. When all products are successfully installed, press **Enter** to exit the console.

    > **IMPORTANT** Do not remove or rename the `.../ss` directory or its subdirectories. If you remove or rename these directories, the application may not work. In addition, do not move files from their subdirectory after installation.

Installing the USPS directories (Presort only)

To complete the installation of your product, you must also install the USPS directories. See [Adding USPS Directories](#).

Setting Permissions

It's the responsibility of the network administrator to set access permissions after installing programs. Users need read and execute access to the …`/disk_n/ss` directory and each subdirectory (`adm, dirs,` and so on). Normally, only users who store their data, jobs, and other files here should have write access to these directories.

Permissions

It's the responsibility of the network administrator to set access permissions after installing programs. Users need read and execute access to the …`/disk_n/ss` directory and each subdirectory (`adm, dirs,` and so on). Normally, users should not have write access to those directories; only to those that house their data, jobs, and so on.

Setting environment variables

Your operating system uses the *PATH* environment variable to know where to look for installed programs. The path lists all the directories in which the operating system will search for an executable file. In addition to an operating system path, our products use *PW_PATH*, which also must include the name of the directory for each of the installed programs.

Setting paths manually

You must manually set program directories to the operating system's *PATH* and *PW_PATH*. After installing our programs, you will need to edit the *PATH* statement and add the *PW_PATH* statement into the login script file using the product names shown in the next section.

Setting PATH and PW_PATH

The *PATH* lists all the directories in which the operating system will search for an executable file.

In addition to an operating system *PATH*, our products use *PW_PATH*, which also must include the name of the directory for each of the installed programs. If this is the first time that you have installed a product that uses the *PW_PATH* statement, you will need to add the statement. If you have another product that uses this statement, add the product directories for the product to the existing *PW_PATH* statement.

After you set *PATH* and *PW_PATH* for your programs, you do not need to set them again for program updates. If you must maintain two versions of a program simultaneously (for example, during a transition in postal regulations), you may need to change *PATH* and *PW_PATH* statements. Be careful that only one version is active at a time.

Product path settings

The table below lists the syntax for each product to enter in the *PATH* and *PW_PATH* statements.

> **IMPORTANT** We strongly recommend that you keep data and jobs separate from program directories.

Product	Directory name
All products	adm
Presort	presort
Label Studio	ls; ls/system (Label Studio requires two settings for *PATH* and *PW_PATH*)
Remote Views	csgui
ZIPCount	la

To set the PATH and PW_PATH statements

The exact syntax used to set *PATH* and *PW_PATH* statements will be different based on the shell you use. The following table contains examples of statements in the Bourne shell and C shell. Separate entries with a colon (:). The examples also include shared library environment variables.

If this is the first time that you have installed any application, add the *PW_PATH* line. Then, if you purchase another product later, just add the entry for that product to the existing lines.

> **IMPORTANT** If you run Remote Views on this machine, you must be logged in as *root* when setting these variables.

Shell	Example

Bourne shell	Add to your `.profile` or `.login` file:
	
	 ```PW_PATH=/disk_n/ss/adm:/disk_n/ss/csgui:/disk_n/ss/la:disk_n/ss/presort```
	
	 ```PATH=$PATH:$PW_PATH```
	
	 ```export PATH PW_PATH```

Shell	Example
Bourne shell (Label Studio)	Add to your `.profile` or `.login` file: ``` LS_INSTALL_PATH=/disk_n/ss/ls export LS_INSTALL_PATH LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/disk_n/ss/adm export LD_LIBRARY_PATH PW_PATH=/disk_n/ss/adm:/disk_n/ss/csgui:/disk_ n/ss/ls:/disk_n/ss/ls/system export PW_PATH PATH=$PATH:$PW_PATH export $PATH ```
C shell	Add to your `.cshrc` file: ``` setenv PW_PATH/disk_n/ss/adm:/disk_n/ss/csgui:/disk_ n/ss/la:/disk_n/ss/presort setenv PATH ${PATH}:${PW_PATH} ```
C shell (Label Studio)	Add to your `.cshrc` file: ``` setenv LS_INSTALL_PATH=/disk_n/ss/ls setenv LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/disk_n/ss/adm setenv PW_PATH=/disk_n/ss/adm:/disk_n/ss/csgui:/disk_ n/ss/ls setenv PATH ${PATH}:${PW_PATH} ```

Setting the shared library path

In addition to setting *PATH* and *PW_PATH*, you must also set the shared library path environment variable for each user in the appropriate login script. The shared library path ensures that the application uses the correct files from the product folders in the `.../disk_n/ss` directory.

> **IMPORTANT**   If you run Remote Views on this machine, you must login as *root* to set these variables.

Setting the shared library environment variable

To set the shared library environment variable:

1. Determine the appropriate shared library path syntax for your operating system from the following table:

Platform	Environment
Red Hat	LD_LIBRARY_PATH
Solaris	LD_LIBRARY_PATH
SUSE	LD_LIBRARY_PATH

2. If there is no existing shared library path in the login script, create one referring to `.../disk_n/ss/adm`.

    If there is an existing shared library path, append a path to `.../disk_n/ss/adm` at the end of your existing entries, if it is not there already. For example, if you run your application on Red Hat, Solaris, or SUSE, your shared library path using a Bash shell may look like this:

    ```
    LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/disk1/ss/adm

    export LD_LIBRARY_PATH
    ```

Troubleshooting and tips for UNIX

If you are using Solaris and running `install.bin` does not work, try one of the following methods:

- Set file permissions to a minimum of 755 before you run install.bin. For example: `chmod 755 *`

- Install using Java Runtime Environment (JRE). If you have a JRE version 1.4.2 or newer on your system, run `install.bin` with the **LAX_VM** env variable, and pass in the path to the JRE executable.

  EXAMPLE `./install.bin LAX_VM <path to java>/java`

Installing Remote Views

This section contains information about installing Remote Views, setting up multiple instances of the server, and using the Remote Views client.

Remote Views is an additional module that is included with the UNIX job-file versions of these products:

- Presort

- Label Studio

Introduction to Remote Views

Remote Views is a client/server application. The Remote Views module allows a Windows client to configure and run jobs on a UNIX machine. You set up jobs through the Views interface on a Windows client and take advantage of powerful batch processing on a UNIX server. (Remote Views supports batch-processing only.) Using the Remote Views interface, you can create the job file, which is a text file that contains the instructions used by batch versions of applications. You don't need to use UNIX editors and command-line telnet or ssh sessions for anything other than to create DEF and FMT files.

Remote Views server

Remote Views installs one Remote Views Server (**vserve_ss**), which spawns a process for each product. These child processes split the processing workload among Views applications.

Product	Process
Presort	vservepst_ss
Label Studio	vservels_ss

The server side (**vserve_ss**) is activated with root permissions. Root is needed so that **vserve_ss** can use key UNIX system services, such as user and password authentication (for network security reasons, information known only to root). After the login authentication process is complete, **vserve_ss** changes the user from root to the user who requests a task.

Remote Views supports 64-bit applications.

Remote Views client

Your users need to learn only the client side of Remote Views. After they create and verify a job file in their Views interface, they issue the Run Job command, still from within Views. The UNIX server processes their instructions and issues progress messages to the Windows client.

System requirements for Remote Views

Remote Views requires a UNIX server and Windows client that meet these minimum requirements.

UNIX server

Use a UNIX server that has a supported operating system. For the most up-to-date information about supported versions and patches, see Operating systems.

Your UNIX server should meet the following system requirements (in addition to the system require-ments listed in the Windows section of this documentation):

- TCP/IP enabled

- Adequate disk space for Remote Views: approximately 12 MB, plus space for the job file soft-ware. See Hard-drive space requirements and Performance tips.

- Adequate disk space for directories. See Adding USPS directories.

Windows client

Your client workstation should meet the following minimum system requirements:

- TCP/IP enabled

- The minimum recommended RAM for your operating system

Preparing to install Remote Views

Remote Views is included in all UNIX installations, so when you install or update an application on UNIX, the Remote Views server is installed or updated at the same time. When you receive an update of your Remote Views application, you need to reinstall your application and the server and client.

To install Remote Views:

1. If you are already running Remote Views in the location where you are installing another Remote Views product, stop the Remote Views server.

2. If you have not installed the software on the UNIX server (which includes Remote Views), do so now as instructed in Installing Applications on UNIX.

3. Configure the Remote Views Server.

4. Set up the Remote Views client on Windows machines.

Configuring the Remote Views server

There are four tasks to perform to configure the Remote Views Server:

1. Edit the params_ss.cs.new configuration file.

2. Configure the root environment.

3. Start the Remote Views server.

4. Set up multiple instances of the server (optional).

Editing the params_ss.cs.new configuration file

With your Remote Views server application on UNIX, BCC Software supplies a template for the configuration file (named `params_ss.cs.new`). This file does the following:

- Controls how the Remote Views server opens the TCP/IP communication ports that clients use to activate the Remote Views server.

- Sets locations for the Run Job log file.

- Controls whether open job files are saved when the network connection is lost.

To edit params_ss.cs.new

1. Locate `params_ss.cs.new` in the …`/disk_n/ss/csgui` directory.

2. Save the file as `params_ss.cs` in the same …`/disk_n/ss/csgui` directory.

   IMPORTANT   With every software installation, the setup program places a new `params_ss.cs.new` file in the …`/disk_n/ss/csgui` directory. If you edit the parameters in `params_ss.cs.new` without saving it as `params_ss.cs`, it will be overwritten during

> the next software installation.

3. Edit the parameters in `params_ss.cs`. The parameters are described in the following table, and an example of an edited `params_ss.cs` file follows the table.

> **IMPORTANT**   If your file contains commented lines, `params_ss.cs` will not run.

Parameter	Discussion
SERVER PORT NUMBER	Enter the port number that the Remote Views server "listens" to into this parameter. The Windows Views client machine will use this port to connect to the Remote Views server. You will need to enter this port number in the `vws_hsts_ss.dat` file located on the Windows Remote Views client. This port number **MUST be different** than the port your previous version of Postalsoft Remote Views uses.
ENGINE PORT NUMBER RANGE	Enter the range of port numbers that will support the **Run Job** menu option from the client. The engine sends progress messages and needs a range of available port numbers for multiple instances of the **Run Job** command. We recommend that you start by reserving 10 ports. If you define an inadequate number of ports, the client may fail to connect. It is rare, but possible, for the client to connect under these circumstances but to still receive incorrect progress messages. Although the screen display would be incorrect in this case, the job will actually process correctly. To prevent this, calculate the number of multiple instances of **Run Job** that is likely to be initiated in a multi-user environment and reserve one port per instance. Select different port numbers for the server and engine ports.

Parameter	Discussion
ACTIVE/COMPLETED JOBS FILE LOCATION	Type the name of the directory on your UNIX server in which to store the Run Job status log. This location must be accessible to all users (for example, `…/disk_n/ss/csgui/`status). If the content that is output by **vserve_ss** exceeds preferred application disk space, you may place the status directory elsewhere, provided that it has permissions accessible to all Remote Views users.
	The first time the client activates the Run Job option, the server creates a single Run Job status log file per user. It names the file using the format *username*`.jobslog.log`. It appends entries to the file regardless of which Views product you run. In the status log file, you'll find the following data:
	• status (A, active; C, completed; F, failed; T, Terminated)
	• user name
	• product
	• job name
	• job log-file name
	• date
	Remote Views client users can view their own status logs only within the application. However, by specifying a central directory, you can view all status logs, if necessary, with any UNIX text editor. Do not edit the file; if you do, Run Job status messages may not appear properly in the Remote Views client.
JOBFILE SAVE SETTING ON LOST CONNECTION	This parameter controls the disposition of job files that are open when a network connection between client and server is lost. If you want to save any pending changes to such job files, type **1**. To discard any changes and revert to the last saved version of the job file, type **0**.

EXAMPLE

Here is an example of a configuration file:

```
SERVER PORT NUMBER = 2050


ENGINE PORT NUMBER RANGE (STARTING RANGE OF PORTS FOR ENGINES
TO CONNECT TO) = 2150


ENGINE PORT NUMBER RANGE (ENDING RANGE OF PORTS FOR ENGINES TO
CONNECT TO) = 2160


ACTIVE/COMPLETED JOBS FILE LOCATION (PATH) =…/disk_
n/ss/csgui/status


JOBFILE SAVE SETTING ON LOST CONNECTION (1-SAVE;0-NO SAVE) = 1
```

If you want to create multiple instances of the server, see Setting up multiple instances of the server.

> **IMPORTANT**   Be sure to add the port information into the `vws_hsts_ss.dat` configuration file on each Remote Views client so that the clients will connect to the Remote Views server(s). See Guidelines for editing the vws_hsts_ss.dat file for instructions.

Configuring the root environment

You can add *PATH* and *PW_PATH* information to your root profile so that **vserve_ss** can be started without setting up the environment. You do this by creating an environment file and adding the path information to that file. For syntax examples, see To set the PATH and PW_PATH statements.

If you already have an environment file set up, proceed to Step 3 to add the specific path information for your application.

To create the environment file:

1. Log in as root. Type `cd $HOME`

2. Create a file called `.flprofile`.

3. Type the appropriate information for the application, depending on the shell you are using, as shown in the following table.

Shell	Example
Bourne shell	Add to your `.profile` or `.login` file: ``` PW_PATH=/disk_n/ss/adm:/disk_n/ss/csgui:/disk_ n/ss/la:disk_n/ss/presort PATH=$PATH:$PW_PATH export PATH PW_PATH ```
Bourne shell (Label Studio)	Add to your `.profile` or `.login` file: ``` LS_INSTALL_PATH=/disk_n/ss/ls export LS_INSTALL_PATH LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/disk_n/ss/adm export LD_LIBRARY_PATH PW_PATH=/disk_n/ss/adm:/disk_n/ss/csgui:/disk_ n/ss/ls:/disk_n/ss/ls/system export PW_PATH PATH=$PATH:$PW_PATH export $PATH ```

Shel-l	Example
C shel-l	Add to your `.cshrc` file: ``` setenv PW_PATH/disk_n/ss/adm:/disk_n/ss/csgui:/disk_ n/ss/la:/disk_n/ss/presort setenv PATH ${PATH}:${PW_PATH} ```
C shel-l (Lab-el Stu-dio)	Add to your `.cshrc` file: ``` setenv LS_INSTALL_PATH=/disk_n/ss/ls setenv LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/disk_n/ss/adm setenv PW_PATH=/disk_n/ss/adm:/disk_n/ss/csgui:/disk_ n/ss/ls setenv PATH ${PATH}:${PW_PATH} ```

Starting the Remote Views server

Currently, Remote Views is not a daemon. So, to ensure that the **vserve_ss** process does not stop when the root logs out, do one of the following:

- Use `su` to change to the root.

- Invoke **vserve_ss** with the `nohup` command.

We recommend that you start the Remote Views server manually first. When you are sure that the server is ready to accept connections, add it to your UNIX server startup script so that it will start the Remote Views server automatically.

Starting the Remote Views server manually

Be sure you are logged in as root on the UNIX server before you start the Remote Views server.

To start the Remote Views server manually:

1. Create a `.flprofile` script and enter the information appropriate to the Remote Views products that you use. (For instructions, see Configuring the root environment.)

2. • If you use C shell, type **`source ./.flprofile`**

    • If you use Bash, Korn, or Bourne shell, type . **`./.flprofile`**

    • If you don't want messages to appear on the console, you can start with the `nohup` command.

3. Change the directory to …`/disk_n/ss/csgui`.

4. At the command prompt, type **`vserve_ss params_ss.cs &`** or **`./vserve_ss params_ss.cs &`**

When the manual instance of the server starts properly, you may see the following message echoed in the shell: `Views Server ready to accept connections.`

Viewing the error report

If the Remote Views server detects an error during processing, it writes an error report to a server log file. This log file is located in the current working directory where **vserve_ss** is initiated (for example, …`/disk_n/ss/csgui`). Remote Views does not create the log file when the server is initialized; it does so only when it records a processing error.

The server names the log file as follows: `vserve_ss.log.`*XXXXXX*`.mmddyyhhmmss` (where *XXXXXX* is a random string).

Correcting errors

If you encounter difficulties in correcting an error, see Troubleshooting and tips for Remote Views for diagnostic information.

Starting the Remote Views server automatically

You can set up the Remote Views server to start automatically whenever the server is rebooted and to continue to operate when the root logs out.

To start the Remote Views server automatically:

1. Make sure you are logged in as root.

2. Make sure that the *PATH* and *PW_PATH* variables have been set for root. See Configuring the root environment.

3. Add the path name (.../`disk_n/ss/csgui`) and the following appropriate command line instruction to the server start-script.

> **IMPORTANT** On some systems, `./` must precede the command. For example, `./vserve_ss` or `nohup ./vserve_ss`.

Shell	Command
C shell	`vserve_ss params_ss.cs &`
Bourne shell	`nohup vserve_ss params_ss.cs &`

> **EXAMPLE**
>
> ```
> . ./.flprofile
>
> cd …/disk_n/ss/csgui
>
> ./vserve_ss params_ss.cs &
> ```

> **NOTE** If **vserve_ss** fails to start, type **ENV** to review the environment set by `.flprofile` and compare against the information in Configuring the root environment. See also Troubleshooting and tips for Remote Views.

Stopping the Remote Views Server

Before you can restart automatically, stop the **vserve_ss** process that you started manually. You will receive this message if **vserve_ss** is not stopped first:

```
vserve_ss: gis_init failed... program terminated.
```

To stop the Remote Views server:

1. Make sure you are logged in as root.

2. Find the process ids for any active, running **vserve_ss** instances (for example, `ps -ef|grep vserve_ss` to find the pid) and issue the UNIX kill command to stop the process(es), for example:`kill -9 <pid>`).

Setting up multiple instances of the server

Editing files from the client is not a resource-intensive task. Therefore, one instance of the Remote Views server is generally sufficient for good performance.

However, if the Remote Views server experiences a high volume of simultaneous Run Job commands issued from Windows clients, you may need to create multiple instances of the Remote Views server to accommodate the traffic. Each additional instance opens another TCP/IP port for traffic between the server and workstations. This port primarily supports packets that contain progress messages.

> **NOTE**   You may set up additional instances of the server only if your license agreement accommodates multiple users.

To set up additional server instances, you must create a `params_ss.cs` file for each instance.

To set up additional server instances:

1. Open `params_ss.cs` in `…/disk_n/ss/CSGUI` and save it with a different name, such as `params2_ss.cs` for the second instance, `params3_ss.cs` for the third instance, and so on.

2. Edit each `params<#>_ss.cs` file to specify new TCP/IP ports for Server Port and Engine Port and to identify the range for Engine Start and Engine End ports. See Editing the params_ss.cs.new configuration file for information on setting up this file.

3. Add a new line to your UNIX server's system start instructions to start the multiple instances.

   EXAMPLE

Shell	Command
C shell	`vserve_ss params<#>_ss.cs &`
Bourne shell	`nohup vserve_ss params<#>_ss.cs &`

   On some systems, `./` must precede the command, for example: `./vserve_ss` or `nohup ./vserve_ss`.

   > **IMPORTANT**   Be sure to add the additional server instance and port information into the `vws_hsts_ss.dat` configuration file on each Remote Views client so that the clients will connect to the Remote Views server(s). See Configuring vws_hsts_ss.dat for multiple servers or instances for instructions.

Setting up the Remote Views client on Windows

To upgrade the Remote Views clients (Windows machines):

1. Install the application onto each Remote Views client

2. Configure each Remote Views client

Installing the application onto a Remote Views client

After you install the Remote Views server software on UNIX, install the application on each of the Windows clients that will be running Remote Views. See Installing the software on a single computer or server. Do not use the instructions to install applications onto a client PC; they do not apply to Remote Views client installations.

> **IMPORTANT** We do not currently support the client setup utility from within Views, nor do we support shared use of the Views software for Remote Views users. As a result, you must install the software on each workstation.

> **NOTE** In the Windows environment, the directory structure is referred to as ...`\ss` rather than the .../`disk_n/ss` convention used on UNIX.

Configuring the Remote Views client

To configure the Remote Views client, you must edit the vws_hsts_ss.dat.new configuration file. There is a template file installed in .../`disk_n/ss/CSGUI` called `vws_hsts_ss.dat.new` that you edit and save as `vws_hsts_ss.dat`.

The `vws_hsts_ss.dat` file is used to store the information that the Remote Views client needs to connect to the Remote Views server. Server names cannot be added from within the Views client application. Each line in `vws_hsts_ss.dat` contains a port in it that the Remote Views server communicates through to the client. When you start a Views application, a drop-down list appears in the **List of Servers** window from which you select the appropriate server port. The drop-down list reflects each line of connection data that you configure in this file.

Editing vws_hsts_ss.dat.new

To edit vws_hsts_ss.dat.new:

1. Locate `vws_hsts_ss.dat.new` in the .../`disk_n/ss/CSGUI` directory on the Remote Views client.

2. Save the file as `vws_hsts_ss.dat` in the same place.

> **NOTE** With every software installation, the setup program places a new `vws_hsts_ss.dat.new` file in the …`\ss\csgui` directory. If you edit the parameters in `vws_hsts_ss.dat.new` without saving it as `vws_hsts_ss.dat`, it will be overwritten during the next software installation.

3. Edit the `vws_hsts_ss.dat` according to the Guidelines for editing the vws_hsts_ss.dat file.

Guidelines for editing the vws_hsts_ss.dat file

When you edit the `vws_hsts_ss.dat` file, follow these guidelines:

- Each line in the file identifies one server or server instance. If you have only one server to connect to, you need only one line. If you have multiple servers or multiple instances of a server to connect to, add a line for each server or instance.

- For each server or server instance, define these three parameters in the following format:
  `<Hostname description>,<Hostname>,<Port number>`

Parameter	Type this
Hostname description	Type a user-friendly description for the hostname. This need not be the network host alias. (This description is not actually used by the Remote Views client.)
Hostname	Type the hostname or IP address of the Remote Views server as it is known to the network.
Port number	Type the port number on which the Remote Views server is listening. This is the same number that you entered for the SERVER PORT NUMBER in the `params_ss.cs` file.

- Type a comma to separate each value. You can add spaces for legibility, but they will be truncated in processing.

- For multiple instances of a Remote Views server, use the host information for each server instance as configured in each `params<#>_ss.cs` file (as set up in Setting up multiple instances of the server).

- To add a comment to the file, place an asterisk at the beginning of the line. Remote Views will not process this line. Blank lines are ignored.

  > **EXAMPLE** If you have one server with the *hostname description* of **Solaris10**, a *hostname*

> of **solaris10_64**, and a *port number* of **2060**, enter the following line into your `vws_hsts_ss.dat` file:
> **Solaris10,solaris10_64,2060**

Configuring vws_hsts_ss.dat for multiple servers or instances

If you have multiple UNIX servers or multiple instances of the Remote Views server, add a line for each instance. Your `vws_hsts_ss.dat` file will look something like this (in this example, there are three servers or three instances):

```
server1,s4259,2050

server2,172.41.110.131,2051

Solaris10,solaris10_64,2060
```

As the Remote Views client reads each line, it skips over the hostname description, and passes hostname and port number values to its Windows client to connect to the Remote Views server.

Copying vws_hsts_ss.dat onto each client

If you have more than one Remote Views client, you can complete one `vws_hsts_ss.dat` file and then copy it to `…\ss\CSGUI` on each of the remaining Remote Views client machines to save some time and to ensure that all clients use the same server information.

Using the Remote Views client

For instructions on operating a Remote Views application, see the *Views Quick Start Guide* and the *Quick Reference for Views and Job File Products* guide or help file.

For instructions on operating Label Studio, see the *Label Studio User Guide* or help file.

Login by individual

Each user should use their own login when working on a Windows workstation. If users share a login, it may result in a job's log file that is too large for that "shared" user for the UNIX server to manage.

In addition, it's recommended that users edit their own jobs. If they share jobs, you must review directory and permission rights on the UNIX server.

Editing jobs

Before you can edit or create jobs using the client interface, the server must be active. See Starting the Remote Views server.

Remote Views client users edit jobs in remote mode much like Windows users edit their jobs, with the following exceptions:

- If the Windows system is set up for Remote Views, select **Remote mode** from the **Select Views Connection** window. If Local Mode is not licensed, the Remote Views client assumes remote processing. It will skip the **mode** selection screen, and proceed directly to the **List of Servers** window.

- In Remote mode, Remote Views prompts users for their UNIX username and password to login to the server.

- The browse command finds and selects UNIX-path style names on the UNIX server.

- Jobs are saved on the UNIX server.

- **Run Jobs** will activate the UNIX server's job file software.

- **Job Status** enables the user to view and manage the contents of the Run Job status file. The user's view is restricted to his or her own status log. Each user may opt to delete a log entry, delete a log entry with the corresponding job file's log file, or terminate a job in progress.

- **File Transfer** is a handy, simplified tool useful for transferring small files between the server and client (for example, if a client session creates a job locally). However, it can transfer ASCII files only. If a user needs to transfer other file types or large files, we recommend using the FTP utilities enabled on your UNIX server's operating system.

If the server and client do not communicate, see Troubleshooting and tips for Remote Views.

Troubleshooting and tips for Remote Views

If you need to contact BCC Software Support, be ready to provide the contents of the following files:

- The most recent `vserve_ss.log.*` file (if it exists) from the UNIX server

- `params_ss.cs` from the UNIX server

- The client configuration file `vws_hsts_ss.dat` (if you have completed the client installation)

> **NOTE** When this guide uses the term "Windows" in this section, it refers to the workstation edition of the operating system because, generally, a Windows client would be a workstation running Remote Views rather than a server.

Server connection failure

Problem: You don't receive **Ready to accept connections** from the Remote Views server (**vserve_ss**).

Symptom	Solution
vserve_ss not found	Be sure that .../`disk_n/ss/csgui` is set in PW_PATH and check whether your system requires this syntax: ```./vserve_ss params_ss.cs &```
pwsysmsg_ss.4b not found	Be sure that .../`disk_n/ss/adm` is set in PW_PATH. Also, check if the system requires this syntax: ```./vserve_ss params_ss.cs &```
gis_init failed... program terminated	This occurs if you attempt to restart **vserve_ss** while the Remote Views server is still running. Either stop **vserve_ss** (see Stopping the Remote Views Server) or configure an additional **vserve_ss** instance (see Setting up multiple instances of the server).

Client connection failure

Problem: A Remote Views client fails to connect or work with the Remote Views server.

Symptom	Solution
pvmsg_ss.txt not found	This message can occur when two servers try to address the same port numbers. Check the client and server configuration files (`params_ss.cs` and `vws_hsts_ss.dat`) to ensure that you have assigned the TCP/IP port numbers correctly.

Symptom	Solution
Unable to locate vws_hsts_ss.dat	Check that you have properly set up the `vws_hsts_ss.dat` file and placed it in the proper location. Check that you have included `…\ss\c-sgui` in PW_PATH on the client.
Hostname not found	One of the following options may solve your problem: • You need to enter your hostname in this format: `hostname.domain`. You need to register your hostname with the IP alias in the client hosts file or the UNIX hosts file. Some systems require hosts to be registered for UNIX to non-UNIX communication. • Ping the UNIX server from the Windows client to ensure that the TCP/IP network communication is working.
Invalid password	If, on remote login, the user name works, but the password fails, **vserve_ss** might not be able to find the shadowed or hidden password files on the UNIX server. Ensure that **vserve_ss** started as user root. Provide **vserve_ss** with read privileges to the password file.
Unable to open job file	In Remote Views, job files edited from the client carry UNIX directory and file permissions. One user cannot open another user's jobs unless the UNIX system administrator provides shared permissions. Start the server from root; it will change to the proper user permissions as it receives requests to edit files.

Verifying hostnames

To find the local hostname of your UNIX system, type `hostname` at a UNIX command prompt and press **Enter**.

Verifying domain names

The Domain Name System (DNS) provides a standard naming convention for machines on IP-based systems. As networks grow, your company may develop a variety of domain names, usually in a hierarchical arrangement.

Remote Views uses a higher-level domain name (for example, yourcompany.com). Increasingly, Windows-based systems refer to this higher-level domain name as your DNS suffix.

Verify the higher-level domain name of the UNIX server, and then test the hostname.domain server name from the Windows client with **Ping**, a network communication utility (for detailed instructions on using Ping, see your operating system documentation). Type **`ping <hostname>`** and press **Enter**.

In most cases, a successful ping responds with a result in the format of *hostname.domain*, as in the following example.

EXAMPLE

```
PING hostname.yourcompany.com: (111.11.1.1): 56 data bytes


64 bytes from 111.11.1.1:icmp_seq=0 ttl=255 time=5ms


64 bytes from 111.11.1.1:icmp_seq=1 ttl=255 time=0 ms
```

NOTE   You may need to press **Ctrl**+**C** to stop the ping test. If hostnames fail, you might be able to achieve suitable results by substituting the IP Address. If you substitute the IP address, exercise care, because some networks use dynamic addressing, which changes the IP Address of a system to meet system requirements.

Verifying communication between systems with Ping

You can verify data on the system that you are working from or from a remote system by using **Ping** to test communication between systems.

In general, you can verify the communication activity of your own hostname or the remote host that you are trying to connect to from Remote Views. You can also verify the address and existence of the remote host when you receive an error message from Remote Views.

To communicate with the remote UNIX server from the Windows client to verify that the *hostname.domain* construction in `vws_hsts_ss.dat` is a live connection, type **`ping <hostname>`** or **`ping <IP address>`** and press **Enter**.

If Ping is enabled and the command is successful, you will see a result similar to the following:

```
Pinging hostname.yourcompany.com [111.11.111.111] with 32 bytes
of data: Reply from 111.11.111.111: bytes=32 time<10ms TTL=128

Reply from 111.11.111.111: bytes=32 time<10ms TTL=128
```

```
Reply from 111.11.111.111: bytes=32 time<10ms TTL=128

Reply from 111.11.111.111: bytes=32 time<10ms TTL=128

Ping statistics for 111.11.111.111:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

When Ping cannot locate the remote host, it responds with an error message (for example, **Bad IP address hostname**).

If the connection fails, verify the *hostname.domain* string as you have identified it in `vws_hsts_ss.dat` and try again. If the connection fails again, confirm that the remote host is active and that your TCP/IP is properly configured on both the remote host and local client.

Post Installation Tasks (Presort only)

After you install Presort onto each machine, you must install the license key file and
USPS directories.

Installing the License Key File

After the application is installed, you need to install the license key file on each standalone
machine, server, and Remote Views server. You should have received an email from BCC Software
with your license key file attached to it. Contact BCC Software Support if you have not received
your key file or if you need it resent.

The key file is called **ss_prods.txt**. This key file contains one license key, which provides access to
Presort and any add-on features that you have purchased. Your organization needs only one license
key; you do not need a separate key for each user, nor for each add-on feature.

To Install the License Key File

Place the `ss_prods.txt` file into the following location on each standalone machine, server, and
Remote Views server that Presort is installed on. (It is not necessary to install the key file on Win-
dows client or Remote Views client machines.)

- Windows: ...`\ss\adm`

- UNIX: `<disk>/ss/adm`

The `ss_prods.txt` key file MUST be located in the `adm` subdirectory of the `ss` directory. Other-
wise Presort will not be able to locate the key file and you will receive an error.

> **IMPORTANT**   Do not change the name of the key file or any contents within the key file.

Troubleshooting License Key File Issues

If you receive either of the following error messages, there is an issue with the license key or key file.

Error Message	Problem	Solution
This job uses the following add-on features, but no key was found for them in "<pathname>\ss_prods.txt."	The key inside the key file doesn't include access to the add-on products you are trying to use, or there is something wrong with the key itself (it's corrupt or missing from the file, for example).	• If you already own the add-on feature you are attempting to use, you may need a new key. Contact BCC Software Support for assistance. • If you have not purchased the add-on feature you are trying to use, contact your BCC Software sales representative for assistance.
This job uses the following add-on features, but no keyfile "ss_prods.txt" could be found for them.	The keyfile was not found in the expected location.	• If you have a key file, verify that the keyfile is in the **adm** subdirectory of the **ss** directory as described in the installation instructions above. • If you do not have a key file, Contact BCC Software Support for assistance. • If you do not own the add-on feature you are trying to use, contact your BCC Software sales representative for assistance.

Adding USPS directories (Presort only)

After Presort is installed, download and install the USPS directories.

About USPS Directories

Directories are lookup files that contain data such as ZIP Codes, change of address information, etc. Directories are required for Presort to run. Label Studio does not require directories.

The `.tgz` or `.zip` files that are available for download contain the following directories:

- Zip City File (`YYMM_zcf.dir`)

- Delivery Statistics File (`YYMM_dsf.dir`)

- Zone Directory File (`YYMM_zone.dir`)

- Facility directory (`YYMM_facility.dir`)

- Mail Direction file (`YYMM_maildirect.dir`)

- Labeling lists (`YYMM_mpc.dir`)

We recommend installing the directories in a common area, such as in `C:\ss\dirs` on Windows, or `/disk_n/ss/dirs` on UNIX, where `disk_n` is the name or number of the disk where you installed the software. When users become familiar with Presort, you may want to define the data directories folder as the working directory, rather than the samples directory.

> **IMPORTANT** For best performance, we strongly recommend that you keep data and jobs separate from the data directories. Be sure to use valid directories. Incompatible or expired directories can prevent Presort from running. You must install monthly directory updates to ensure that they are compatible with the software.

Downloading USPS Directories

When new directories are available each month, the designated contact person at your organization will receive an email notification from BCC Software, including directions for download.

Installing USPS Directories

After you download the directories, unzip them and install them in the appropriate location. We recommend that you install the directories in a common location, such as `C:\ss\dirs\<-filepath>`. See Hard-drive space requirements and Performance Tips for more information about setting up your file structure.

Unzipping and installing directory files on Windows

To unzip and install directory files using WinRAR:

1. Locate and double-click the file `BCCPresort-`*MonYY*`-Directories.zip` (where *Mon-YY* represents the month and year of the directories, for example, `Feb20` for the February 2020 directories).

2. When prompted, browse to the folder where you want WinRAR to place the zipped directory file and click **Install**.

To unzip and install directory files using WinZip:

1. Locate and double-click the file `BCCPresort-`*MonYY*`-Directories.zip` (where *Mon-YY* represents the month and year of the directories, for example, `Feb20` for the February 2020 directories).

2. Click **Extract**.

3. Select the folder where the files will be unzipped.

4. When the unzip process is finished, exit the unzip program.

To unzip and install directory files on Windows with a different tool:

Refer to the instructions for your tool to extract and install the directory files.

Unzipping and installing directory files on UNIX/Linux

To install the directory files on UNIX:

1. Locate the file `BCCPresort-`*MonYY*`-Directories.zip` (where *Mon-YY* represents the month and year of the directories, for example, `Feb20` for the February 2020 directories).

2. To extract the `.zip` file to the location where you keep your directories, type `unzip -d` *destination pathfilename*`.zip>`+

> **NOTE**   You must have `unzip` installed in order to extract a `.zip` file. Contact your system administrator if you do not have this tool.

Updating and Maintaining the Software

To keep the software current, you need to download and install updates regularly for Presort, and periodically for Label Studio.

- Monthly: Directory updates for Presort occur once a month, according to the USPS directory update schedule.

- Periodically: Service Pack and Fix Pack updates for Presort and Label Studio are issued as needed for regulatory updates and bug fixes, and when our development team adds new features and enhancements to the software.

Downloading Software Updates

Whenever a software update is released, the designated contact person at your organization will receive an email from BCC Software. The email will direct you to the download page on the BCC Software Customer Portal ⇨.

Each month, Presort users will receive an email from BCC Software when the monthly directories have been updated and are available online from the BCC Software Customer Portal ⇨. It is important to update your directories as soon as they are available.

Installing Directory Updates (Presort only)

Each month, Presort users will receive an email from BCC Software when the monthly directories have been updated and are available online from BCC Software Customer Portal. It is important to update your directories as soon as they are available.

The 2020 USPS directory update schedule can be found here:
https://postalpro.usps.com/2020LabelingListandMDFSchedule ⇨.

To install the new monthly directories:

Follow the same process that you would when installing directories for the first time; see Installing USPS Directories for instructions.

Installing (upgrading) a Service Pack for Presort or Label Studio

The following sections describe the process to upgrade to a new Presort or Label Studio Service Pack.

> **IMPORTANT**   If you are installing the software for the first time or installing it into a different folder than where your current installation of the software is located, please see the directions for first-time installation, beginning with the section Preparing for Installation.

Upgrading a Windows Standalone Machine, Server, or Remote Views Client

> **IMPORTANT**   These instructions do not apply to Windows Clients. See Upgrading a Windows Client for instructions.

To upgrade a Windows standalone machine, server, or Remote Views client:

1. Double-click `setup.exe` from the uncompressed ZIP file.

2. Follow the on-screen prompts to begin the upgrade and accept the license agreement.

3. On the **Choose Destination Location** screen, specify the folder where your existing Presort software is installed. The default location is `C:\ss`. Click **Next** to accept the default destination folder of `C:\ss`, or click **Browse** to specify a different location.

4. In the **Component Selections** screen, check the boxes next to the components to upgrade and click **Next**.

5. A message will appear asking you whether you want the installer to set up a client installation program to assist with setting up client machines.

   - For single computer and Remote Client upgrades: Click **No**.

   - For server upgrades: Click **Yes**. When the software upgrade installation is complete, see Upgrading a Windows Client for instructions on upgrading your client workstations.

6. In the **Select Program Folder** screen, select a folder to add icons into and click **Next**.

7. A message will appear asking if you want *PATH* and *PW_PATH* variables set up for you. Select **No**. These variables were set up for you in a previous Presort installation.

8. In the **Start Copying Files** screen, review the settings and click **Next**. You will see a series of screens that show the progress of the upgrade installation.

9. A message appears informing you that you must have Acrobat Reader 6.0 or later to read the documentation. Click **OK**.

10. When the upgrade installation is complete, click **Finish**.

   > **IMPORTANT**   Do not remove or rename the ...\ss directory or its subdirectories. If you

remove or rename these directories, Presort may not run. In addition, do not move files from their subdirectory after installation.

Post-installation Tasks

After you have installed the software, perform these tasks to complete the upgrade process for single computers and servers.

1. For server installations only: If you chose to have a client installation program setup in step 5, follow the instructions for Upgrading a Windows Client.

2. Verify that you have the latest USPS directories installed. If you need update your directories, see Installing Directory Updates for instructions.

Upgrading a Windows Client

After you have upgraded Presort or Label Studio on the server, upgrade it on the client workstation (s) by running the client installation that was created in step 5 of the server installation.

> **IMPORTANT**   These instructions do not apply to Windows standalone machines or Remote Views clients. See Upgrading a Windows standalone, server, or Remote Views client for instructions. For more information about Remote Views, see the *System Administrator Guide.*

To upgrade a Windows client:

1. Upgrade Presort or Label Studio on the server if you have not done so. See Upgrading a Windows standalone, server, or Remote Views client for instructions.

2. From the mapped drive on the client workstation (that you set up during the initial installation of Presort), navigate to the ...`\ss\CLIENT` directory on the server and double-click `setup.exe`.

3. Repeat step 2 for each client that runs Presort.

Once you have run the client installation program on all clients, performed all applicable post-installation tasks, and restarted all systems, you will be able to run the application and access the documentation from the **BCC Software** folder located on the **Start** menu.

Upgrading a UNIX Machine

These instructions are for upgrading all UNIX machines, including Remote Views servers.

To upgrade a UNIX machine:

1. Stop the Remote Views server if applicable.

2. Run `./install.bin` from the uncompressed ZIP or TGZ file.

3. Read the introductory information and press **Enter**.

4. When asked to read the license agreement, type **Y** or **N** and press **Enter**.

5. To accept the terms of the agreement, type **Y** and press **Enter**.

6. Specify the directory where your current version of Presort is installed, either by pressing **Enter** for the default directory, which is `/disk_n/ss` (where `/disk_n` refers to the file system or disk where you choose to install the software), or by typing the directory name. (Do not include "ss" as part of the path; an `/ss` subdirectory is automatically added to the directory you specify.) Press **Enter** to continue.

7. Type **Y** to verify the path and press **Enter**.

8. Select the products to upgrade. By default, all products are selected. To upgrade all products, press **Enter**. If you want to upgrade only certain products, type a comma-separated list of numbers representing the products to deselect (and therefore not install) and then press **Enter**. For example: 1, 3, 4 will install only the product represented by 2.

9. Review the list of products you want to upgrade. Type **back** to go to the previous screen if you want to change your selection. Press **Enter** to continue.

10. When all products are successfully upgraded, press **Enter** to exit the console.

    > **IMPORTANT**   Do not remove or rename the .../`ss` directory or its subdirectories. If you remove or rename these directories, Presort may not run. In addition, do not move files from their subdirectory after installation.

Upgrading Remote Views

To upgrade a Remote Views UNIX server, follow the instructions in Upgrading a Windows standalone machine, server, or Remote Views client.

To upgrade a Remote Views Windows client, follow the instructions for Upgrading a Windows Client.

Installing (upgrading) a Fix Pack for Presort or Label Studio

The following sections contain instructions to install a Presort or Label Studio Fix Pack on Windows and UNIX machines.

Installing the Fix Pack on Windows

Install the fix pack onto every standalone machine, server, and Remote Views client that runs Presort or Label Studio. Do not install this fix pack onto Windows client machines in a Windows Server-/Client configuration.

To Install the Fix Pack on Windows:

1. Make sure you are not processing any jobs and that you close Presort and/or Label Studio.

2. Download the fix pack according to the instructions in the email you received from BCC Software announcing that the fix pack is available.

3. Save the `.zip` file to the parent directory where the software is installed (e.g. `C:\ss`).

   > **CAUTION**   Do *not* install the `.zip` file into the `\pst` or `\ls` directory (not, for example, in `C:\ss\pst` or `C:\ss\ls`).

4. Navigate to the directory where you saved the `.zip` file.

5. Right-click on the `.zip` file and click **Extract all**.

6. At the **Extract Compressed (Zipped) Folders** screen, specify the directory where the software is installed (for example, `C:\ss`).

7. You will be asked if you want to merge the folder. Click **Yes** for all folders.

8. Click **Copy and Replace** in the **Copy File** screen.

9. Verify the software version now reflects the update by doing one of the following:
   - From the Command prompt window, run `presort /rev`.
   - Open Presort or Label Studio Views, go to **Help** > **About Presort Views** or **Help** > **About Label Studio Views**. The version number appears near the top of the screen. Click **Engine Version**, and the **Revision** screen appears. Verify that the version number is the same as what appears on the **About Presort Views** or **About Label Studio Views** screen.

10. Delete the `.zip` file from the `\ss` directory.

Installing the Fix Pack on UNIX and Linux

Install this fix pack onto every UNIX or Linux machine that runs Presort or Label Studio.

> **CAUTION**   Do not install the file into the `/presort` or `/label` directory (not, for example, in

> /<disk_n>/ss/presort or /<disk_n>/ss/label).

To Install the Fix Pack on UNIX and Linux:

1. Make sure you are not processing any jobs and that all instances of Remote Server are stopped (if applicable).

2. Download the fix pack according to the instructions in the email you received from BCC Software announcing the fix pack.

3. Save the .tgz or .tar file to the parent directory where the software is installed (for example, /<disk_n>/ss).

4. Navigate to the directory where you saved the file.

5. Extract the file using the ss directory as the destination (for example, /<disk_n>/ss) using one of the following commands:

   - For .tgz files: gunzip <filename>.TGZ

   - For .tar files: tar -xvf <filename>.tar

6. Verify the software version is correct. From a UNIX prompt, run presort -rev.

7. Remove the .tgz or .tar file from the ss directory.

Additional Resources

The following resources are available to help you with your software.

Documentation Updates Available Online

Presort documentation is updated on a regular basis and available in PDF format via the BCC Software Customer Portal. Documents are posted in the Manuals & Quick Guides ⇨ section of the portal—except for release notes, which are available in the Presort section of the Product Downloads ⇨ page.

You can access the most current versions of Label Studio documentation from the following links:

- *Label Studio User Guide* ⇨
- *Label Studio Inkjet Reference* ⇨
- *Label Studio Release Notes* ⇨
- *System Administrator Guide* ⇨
- *Edjob User Guide* ⇨
- *Quick Reference for Views and Job Files* ⇨
- *Views Quick Start Guide* ⇨
- *Database Prep Guide* ⇨

Knowledge Base

BCC Software offers tips, tricks, and best practices for using our products. Knowledge Base articles can help empower both experts and new users.

- To learn more, visit the BCC Software Knowledge Base on the BCC Software Customer Portal ⇨.

How to Contact Support

- BCC Software Technical Support online:
  https://bccsoftware.com/customer-center/customer-support/ ⇨

- Email: support@bccsoftware.com ⇨