

Sendio® Email Security Platform Appliance

# Backup & Restore Guide

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Comments, corrections and suggestions regarding this document should be sent to:

support @ sendio.com

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## Introduction:

Maintaining the integrity of your corporate information is key. That is why Sendio automatically backs up your data. This backup includes all system and user configuration settings (e.g. account contacts) as well as message queues. By default, the backup is generated daily at 10:00pm. It is imperative that these backup files are stored in a safe and secure location. In the unlikely event of a hardware failure, it is possible to restore the configuration and data to a replacement unit in a matter of minutes using the most recent available backup files.

All backup files should be treated with the same security policy and precautions as your company email. We recommend that backup data not be accessible to anyone but trusted company administrators.

The Sendio backup process supports 3 target destinations for the backup.

1. Local (on-board) storage (default) - a backup file is generated on the local storage of the appliance.
2. SMB/Windows Network Share - a shared folder on the network
3. USB Drive - a USB storage device (e.g. hard drive or thumb drive) directly connected to the appliance

When configuring the appliance, it is highly recommended to choose option #2 or #3. This ensures the backup is saved on separate media.

This document describes:

1. How to configure the backup/restore destination
2. How to access the on-board backup files using FTP
3. How to restore a system using backup files

## About the backup files

Sendio backups sets include two files - a .tar and .MD5. Both files are required to perform a restore of the Sendio configuration. No matter where the backup location is configured it is extremely important to confirm on a regular basis that both files are created with each scheduled backup. If both files are not created please contact Sendio support immediately.

No matter which backup location is configured Sendio will only maintain the most recent 3 backup sets, automatically overwriting all older backups. The number of backup sets maintained is not configurable.

Finally the Sendio backup files contain all the configuration information necessary to restore Sendio to the exact status at the time the backup was performed. This includes settings made by Sendio administrators as well as all User and System Contacts. The backups also save the last 24 hours worth of email in an attempt to keep the backup files of reasonable size. If it becomes necessary to restore from backup, any messages on Sendio which are older than 24 hours will still display the sender, recipient and subject but the body of the message will not be available. It is not possible to increase this setting.

**NOTE:** If option #1 is used ("Local storage"), it is imperative to access the appliance via an FTP connection and copy the backup files to separate media on a daily basis.

**NOTE:** If you have a clustered Sendio system and the primary node experiences a malfunction, it is not necessary to restore a system using the backup files. Instead, the secondary node should be promoted to act as the new primary node.

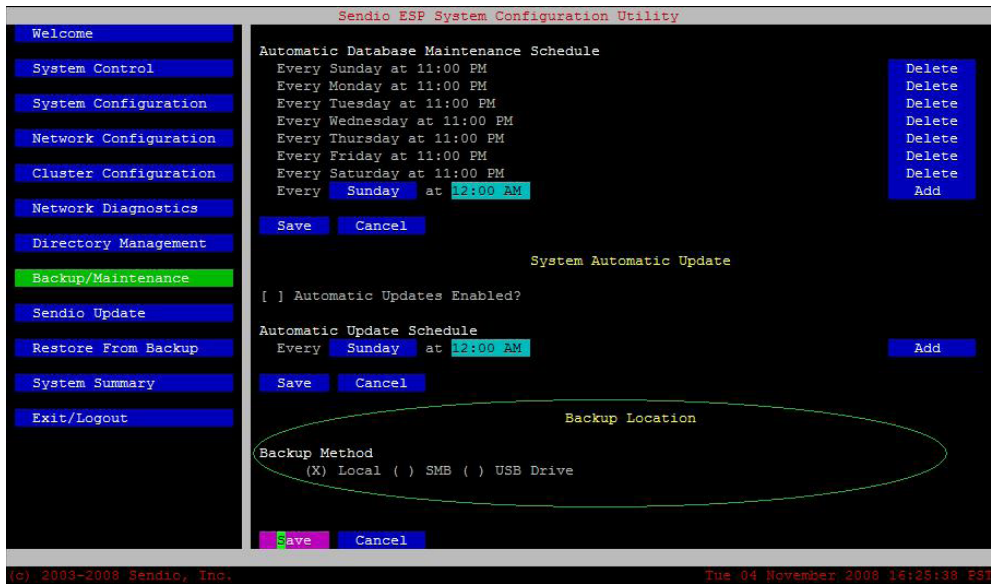
## How to configure the backup/restore destination

Log on to the SSH (PuTTY) interface of the appliance using a monitor and keyboard directly connected to it, or by using an SSH (Secure Shell) client program (e.g. download Putty from <http://www.putty.org>). To do so, specify 'sysconfig' as the username and the password that was previously set:



If you are unable to login, please contact Sendio Support by sending an email to [support@sendio.com](mailto:support@sendio.com)

Using the keyboard arrows and ENTER key, choose BACKUP/MAINTENANCE on the left, then using the arrow keys, move to right and scroll down to the BACKUP LOCATION section:



Select the desired backup method using the arrow keys and the spacebar. Some selections may present you with method-specific configuration options. Once all settings are configured, navigate to the SAVE button and press ENTER to commit the settings.

The following sections provides more details for each available option.

### Local (onboard) Backup Method

Choosing this method will cause the daily backup files to be saved to the appliance’s local storage. These files are accessible over the network using FTP. For additional security and data protection, it is imperative that you copy these files from the appliance to another (offboard) location on a daily basis. A good target location is a directory on a server which is backed up daily to to secondary storage (e.g. tape media).

To copy the backup files off the appliance:

- Enable FTP access for the IP address you are connecting from by including it in the *FTP Accesss List* setting (located in the *System*

*Configuration* section). Multiple IP address can be specified using a comma as the separator.

- Use an FTP client to access the appliance using the username 'sysarchive' and password 'sendio'.
- Copy all files located under the 'backup' folder.

We recommend setting up an automatic daily backup "job" on another server to "pull" the backups from the Sendio appliance. For further details and recommendations, see Appendix A.

This guide details the steps involved with setting up access to the appliance, copying the backup files off the device using the File Transfer Protocol (FTP), a method for setting up a daily scheduled task and the procedure for restoring a backup to a replacement unit.

### SMB/Windows Backup Method

The SMB/Windows option configures Sendio to automatically move the backup files to a network location (i.e. Windows file server). This is the preferred method for backing up Sendio as it allows the Sendio backup files to be included in the regular, network backup routine that protects all the organizations data.

From the Backup/Restore Locations arrow to SMB/Windows and press the space bar. Upon pressing the space bar additional configuration options will become available:

- **Hostname:** This is the hostname or IP address (recommended) of the network server to which the Sendio backup files will be moved. If you specify host name Sendio must be configured to use an internal DNS server and the name must be the Fully Qualified Domain Name of the file server.
- **Share:** This is the file share name configured on the network server.
- **Path:** If there is a sub-folder in the network share where Sendio should place the backups files.
- **User Name:** User name for the account which has access to the network share specified above. If you are backing up to a Windows share enter the user name in one of 2 formats:
  - domain\user\_name
  - username@fully\_qualified\_domain\_name
- **Password:** Password for user account specified above

```

Backup/Restore Location

Backup/Restore Method
  ( ) Local (X) SMB/Windows Share ( ) USB Drive

Hostname: 192.168.3.30
Share:    ibx_push$
Path:
User Name: ad01\jrandall
Password: *****

[Test Connectivity] [Help]
[Save] [Cancel]
  
```

Once the configuration is complete arrow down to the Test Connectivity option and press Enter. This short test will confirm if the information entered above is

valid. If the test fails please review the information entered and retry until successful.

```

Testing connectivity:
mounting for verify
Write test successful
Contents of //192.168.3.30/ibx_push$//:
icebox_backup-20090416-2200.tar
icebox_backup-20090416-2200.tar.md5
icebox_backup-20090417-2147.tar
icebox_backup-20090417-2147.tar.md5
icebox_backup-20090417-2157.tar
icebox_backup-20090417-2157.tar.md5
SendioRemoteTest.txt

Done.
    
```

Once the configuration has been verified arrow down to Save and press Enter to save the configuration. All scheduled backups will now move the backup files to the specified network share location.

### USB Drive Backup Method

Sendio can be configured to move the backup files to a USB hard drive or flash drive. The USB drive must be formatted as FAT32. After connecting the USB drive, simply choose USB drive from the Backup Location and select Test Connectivity. Once the connectivity test is completed successfully choose Save.

### FTP Access List Configuration

For security reasons, access to the appliance’s FTP Backup Archive is limited to connections that originate from specific IP addresses as defined by the “**FTP Access List**” option available through the console interface. If you choose Local as your backup location you will need to configure the FTP Access List in order to copy the backup files from the Sendio appliance. To set this option:

- First determine the IP address of the PC or Server you are connecting from. This can sometimes be determined by examining the TCP/IP settings of the Network control panel. Alternatively, when running Microsoft Windows™, you can do so by issuing the IPCONFIG command in a command window. For example:
- Log on to the SSH (PuTTY) interface of the appliance using a monitor and keyboard directly connected to it, or by using an SSH (Secure Shell)

```

C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\jrandall>ipconfig

Windows IP Configuration

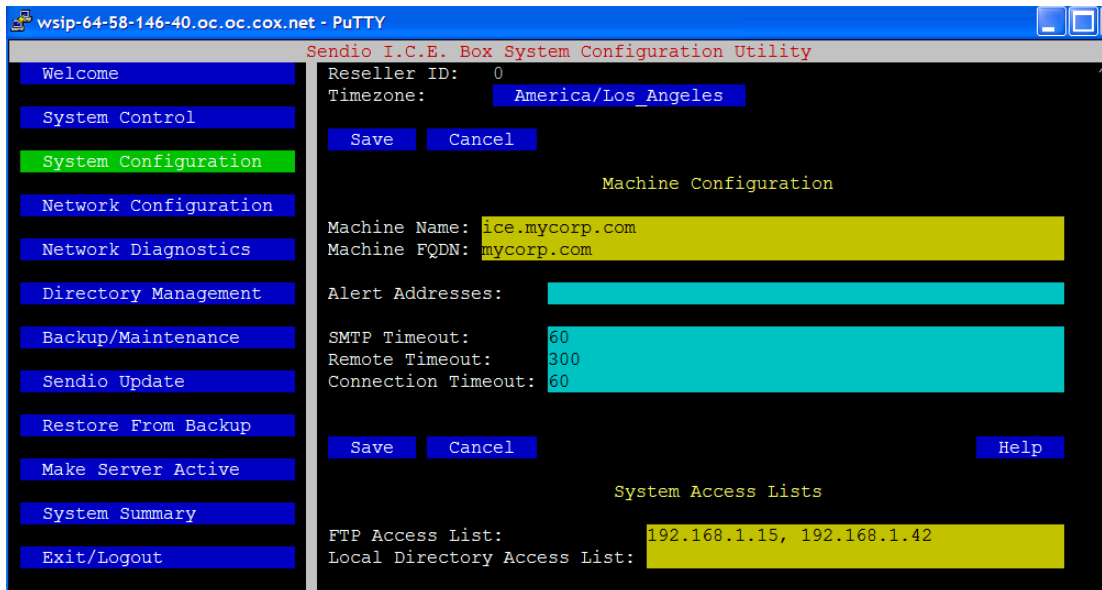
Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : AD01
    IP Address. . . . . : 192.168.3.138
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.3.1
C:\Documents and Settings\jrandall>
    
```



client program (e.g. download Putty from <http://www.putty.org>). To do so, specify 'sysconfig' as the user name and the password that was previously set.

- Once you are logged on, using the arrow keys and Enter key, navigate to the System Configuration section, then enter one or more IP addresses (comma separated) in the **FTP Access List** option and choose **Save**. For example, to enable FTP access from 192.168.1.15 and 192.168.1.42, configure the setting as follows:
- Choose Save.



- Choose "Exit/Logout" to log out of the console session.

## Fetching

### backup files from the Sendio appliance

If you chose Local as your Backup Location you will need to copy the backup files from the Sendio appliance using FTP. This can be done either manually or using an automated process such as an FTP client with schedule capabilities or using a scheduled task from Microsoft Windows.

Before establishing an FTP connection and copying files, create a local folder where you intend to store the backup files (e.g. "C:\Sendio\_Backup").

When using one of the methods below to establish an FTP connection from a trusted IP address as configured above, using these login credentials for FTP access:

**Note:** If you have difficulty establishing a connection, make sure there is no firewall blocking connections on port TCP/UDP 21. If you are running Windows, consider temporarily disabling the Windows Firewall or configuring it to allow such connections.

FTP user: **sysarchive**  
FTP password: **sendio**

Once an FTP connection is established, copy all files from the appliance's FTP "backup" folder to the local folder you previously created for this purpose. Note that the FTP folder will contain the 3 most recent daily backups, each comprised of 2 files (.tar and .md5). The data files (.tar) can range in size from a few megabytes to several gigabytes depending on the number of users and volume of email that your system typically handles.

## Using Command Line (Interactive)

Open a command window (aka “command shell”) and use the “ftp” command to copy the files. See sample session below:

```
C:\>ftp 10.1.1.5
Connected to 10.1.1.5.
220 (vsFTPD 2.0.4)
User: sysarchive
331 Please specify the password.
Password: <type password here. It will not appear
on screen>
230 Login successful.
ftp> cd backup
250 Directory successfully changed.
ftp> bin
200 Switching to Binary mode.
ftp> prompt off
Interactive mode Off .
ftp> lcd c:\sendio_backup
Local directory now C:\sendio_backup.
ftp> mget *.*
200 Switching to Binary mode.
200 PORT command successful. Consider using PASV.
150 Opening BINARY mode data connection for
icebox_backup-20080612-2200.tar (175542403 bytes).
226 File send OK.
ftp: 175542403 bytes received in 30.85Seconds
5690.93Kbytes/sec.
200 PORT command successful. Consider using PASV.
150 Opening BINARY mode data connection for
icebox_backup-20080612-2200.tar.md5 (82 bytes).
226 File send OK.
ftp: 82 bytes received in 0.00Seconds
82000.00Kbytes/sec.
ftp> quit
221 Goodbye.

C:\>
```

## Scheduling a daily FTP job using Windows Scheduled Task

To schedule a daily backup using Windows command line method, create the following two text files in the same directory (e.g. C:\sendio\_backup):

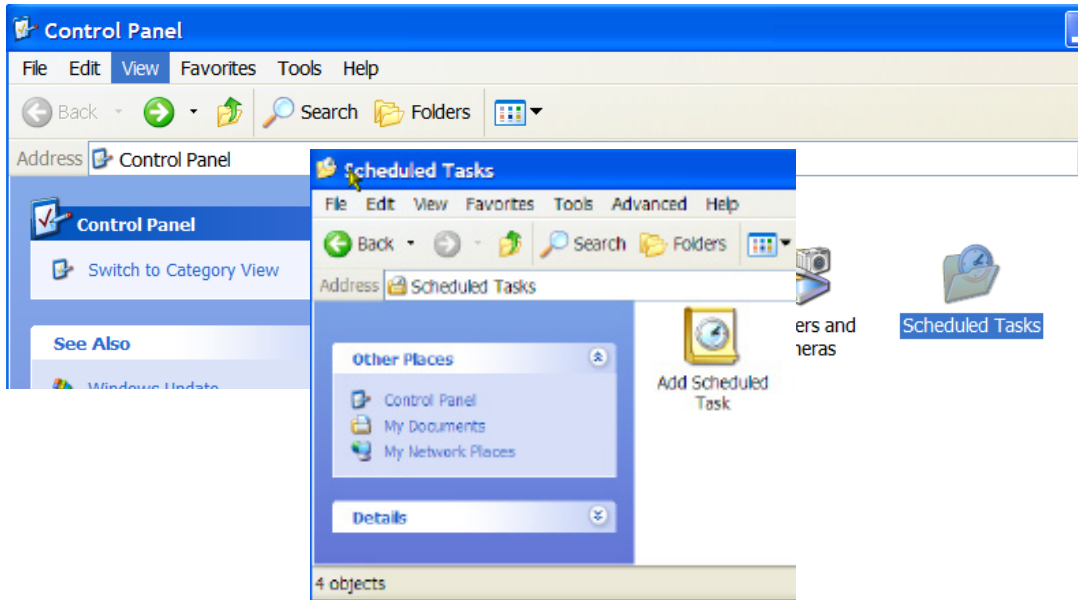
Create a text file called **DailyBackup.bat** containing the following one line of text:

```
ftp -s:FTPScript.txt <IP Address of ESP appliance>
```

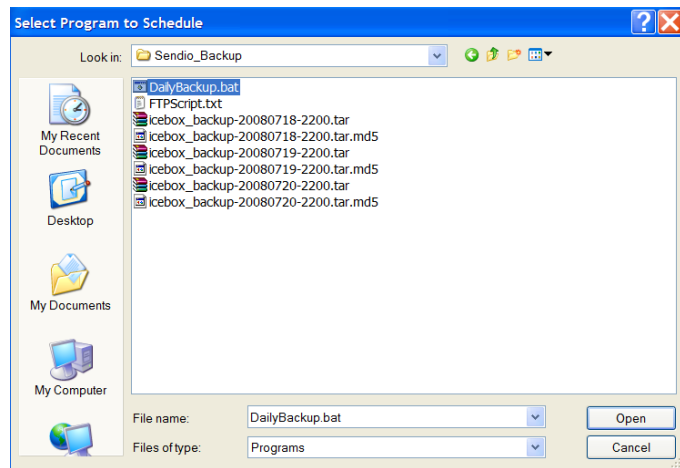
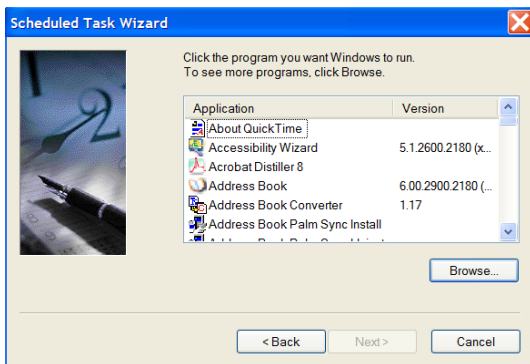
Create a text file called **FTPScript.txt** containing:

```
sysarchive
sendio
bin
prompt off
cd backup
lcd c:\sendio_backup
mget *.*
quit
```

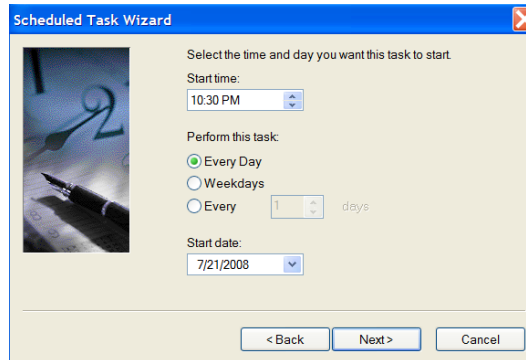
Open the *Scheduled Tasks* Control Panel and then double-click on *Add Scheduled Task*:



Browse to the Batch File you previously created:



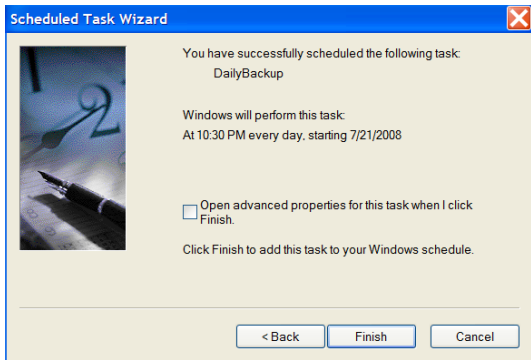
Specify a daily schedule to occur after the onboard backup takes place (by default, at 10:00pm):



Finally, specify your Windows password in the following step and click Next:



You will receive a confirmation that the daily task has been scheduled:

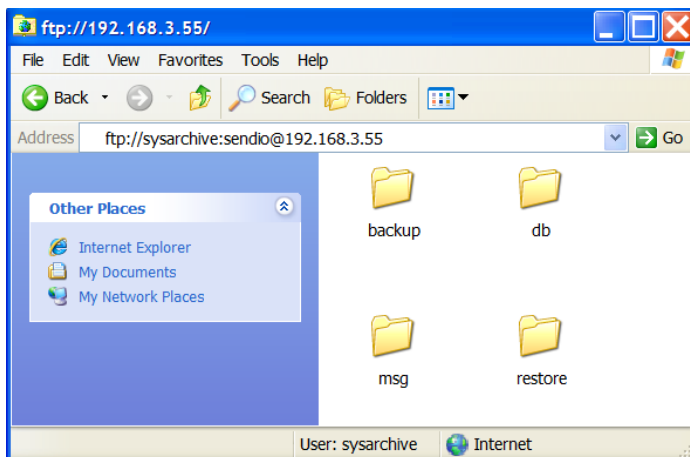


### Using Windows Explorer (interactive only)

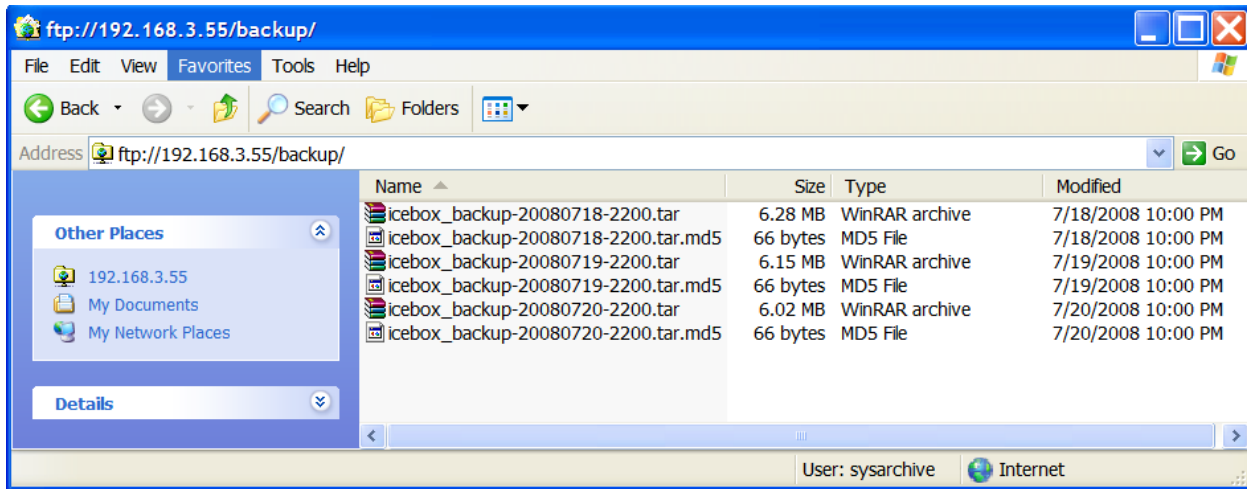
Open a Windows Explorer window and type the following URL in the address field:

```
ftp://sysarchive:sendio@<IP Address>
```

For example, if the Sendio appliance is configured with IP address 192.168.3.55:



Double-click on the 'backup' folder and then drag n' drop all files (or the latest pair) to the local destination:



### FTP Client Program

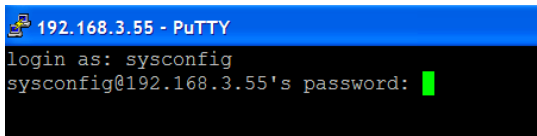
There are many FTP Client programs available. Some are public domain (freeware) while others are shareware or commercial products. When considering an FTP program, we recommend choosing one that has scheduling capabilities. This will allow you to set up an automatic recurring FTP "job". For details on setting this up, please refer to the documentation of the FTP program you are using.

## Restoring a backup to replacement hardware

Follow the steps outlined below in the event that it is necessary to restore a backup to replacement hardware. With the availability of recent backup files, you can have the replacement unit up and running in a matter of minutes. At the conclusion of this procedure, the replacement unit will acquire/operate using the IP address of the original unit.

Rack and power up the replacement unit. For details, see Appendix B of the Installation Guide.

Using the monitor and keyboard connected to the unit, log in to the console interface using the following credentials:

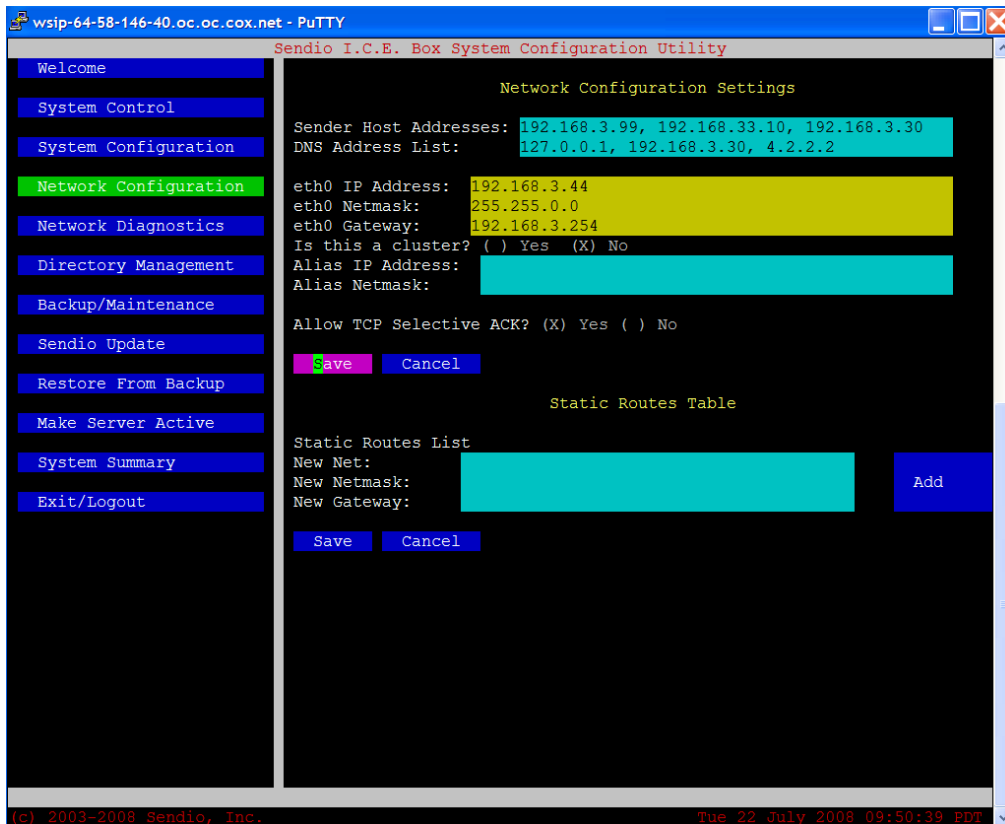


```
192.168.3.55 - PuTTY
login as: sysconfig
sysconfig@192.168.3.55's password: █
```

```
Username: sysconfig
Password: admin
```

Note: the password will not be displayed as you type.

Using the arrow keys and ENTER key, navigate to the Network Configuration section, configure the IP address, Network Mask and Gateway and then choose Save. Configure the IP address to be the same as the one used by the failed unit:



## SMB/Windows or USB Backup Location

If the backup location of the failed Sendio appliance was **SMB/Windows** or **USB**, navigate to Backup/Maintenance and configure the appropriate location with the exact same information as the failed unit. Once the location is configured and connectivity confirmed proceed to **Restore From Backup** and follow the instructions later in this document. When you *Test Connectivity* the popup screen will display the available backup files from which Sendio can be restored. If you do not see any .tar and .MD5 files the backup location is incorrect.

## Local Backup Location

If the backup files were stored locally on the Sendio appliance it is necessary to configure the FTP Access List. Navigate to the **System Configuration** section, set the **FTP Access List** to the IP address of the computer you will be using to copy the backup files to the ESP appliance, then choose **Save**.

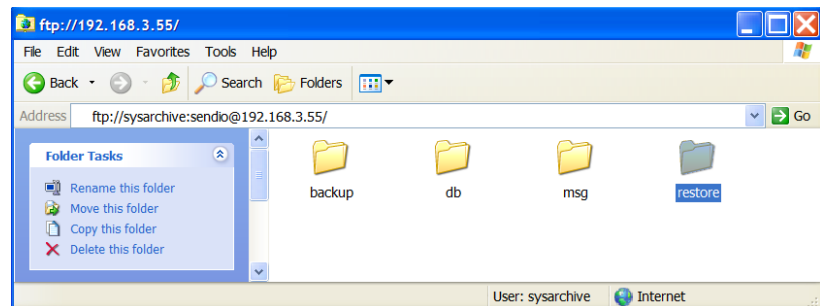
Using one of the FTP methods described in the previous section (Command Line, Windows Explorer or FTP Client Program), establish an FTP connection to the Sendio appliance. Do so by specifying the IP address assigned to the appliance and log in using the following credentials:

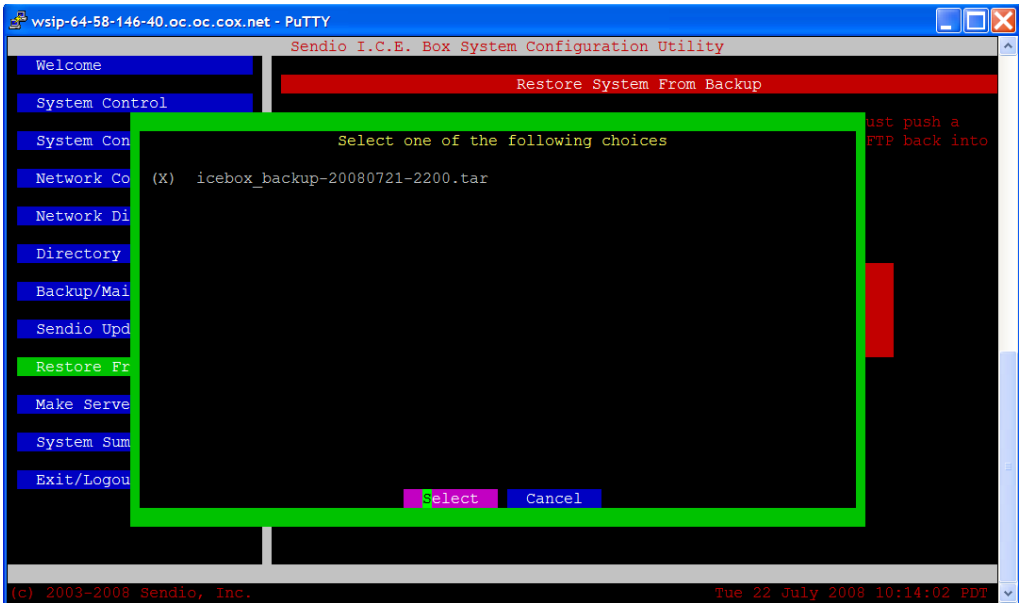
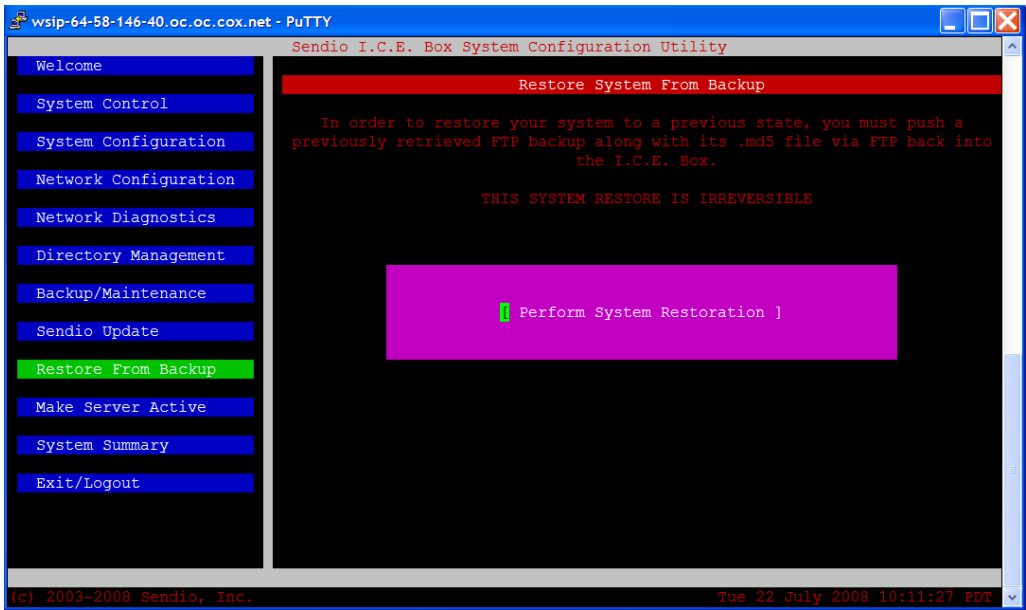
```
FTP user:      sysarchive
FTP password:  sendio
```

Once connected, copy the most recent backup files (a .tar and .md5 file) to the FTP 'restore' folder. For example, using Windows Explorer, you can drag n' drop the backup files as follows:

Navigate to the **Restore From Backup** section and choose **Perform System Restoration**:

A popup window will appear showing all backup files that are available in the FTP 'restore' folder or the Backup Location specified. Use the spacebar to select the desired file, then using the arrows and ENTER key, choose **Select**. This will cause all configuration and data in the selected backup file to be restored. Note that the IP address of the original ESP appliance will be restored but will not take effect until the Network (Ethernet) interface is restarted (see next step).





**Note:** You must **Exit/Logout** and log back into the console interface once the restore process completes.

Verify that email is flowing as expected by logging into the web interface and examining the SMTP LOG section. The text will scroll as new inbound SMTP connections are made to the appliance.