Quick Start Guide for System Backup

This document provides the steps necessary to create a *full system* backup and boot media necessary for system recovery. This document does not include all of the features and options available in the application; rather it's intended to be used as a quick reference in starting to use Storix SBAdmin. For more details and further documentation refer to the ***SBAdmin User Guide*** and the ***SBAdmin System Recovery Guides***.

Starting the SBAdmin interface

There are two interfaces you use to manage your backups and boot media. The instructions provided here will apply to either interface unless specified otherwise:

1. **Graphical (Xwindows) Interface**: If using Xwindows, you may start this interface by typing "`sbadmin`" at the command prompt within an X-terminal. You may also launch the GUI and have it display on a remote Xserver session by typing "`sbadmin -d DISPLAY:0`" (where *DISPLAY* is the hostname or IP address of the remote host). It may be necessary for you to type "*xhost +*" on the remote system to allow remote systems to use its display.

2. **Web Interface**: After starting your internet browser, type "`https://host:8080`" where host is the hostname or IP address of the system installed as the SBAdmin administrator, and 8080 is the default port number (replace this with the port number you chose during software install, if different).

The ***Main Screen*** will display. For *Network* and *TSM Edition*, this will show the **Clients, Servers and Devices**. For *Workstation Edition*, the **Jobs** will be displayed. You may change the display to display the **Jobs** or **Job Queues** using the Display drop-down at the top of the screen.

Quick Help

You may at any time move the cursor over any object (menu option, listbox, button or entry field) in the application and (if using the GUI interface) click the right mouse button. A popup message will appear on top of the object with information usage and any options, warnings or special instructions that might apply.

SBAdmin License Type

The remaining sections of this document are specific to the SBAdmin license type in use:

Network Edition Quick Start

The following steps are for SBAdmin *Network Edition*. It is assumed that the SBAdmin interface is running, and the SBAdmin *Client/Server* software is installed on the remote clients and servers. The following steps describe how to configure a client and a server, create a backup job which writes a system backup from a client to a server, and make CDROM ISO boot image to be used for performing system recovery.

1. Configure Clients

A *client* is defined as any system that will be backed up using SBAdmin. The local system running the SBAdmin interface (the Administrator) must also be configured as a client before it may be backed up.

Note: While the Administrator system may be configured as a backup server, it is not required. Any client may also be configured as a backup server.

a. To add a client, select Configure→Clients from the menu bar and the **Linux/AIX/Solaris Clients** screen will display.

b. In the **Client Hostname/IP** field type the hostname or IP address of the client you would like to backup.

c. **Local Disk or Tape**:
If, instead of sending system backups to a server, you want to backup to media directly attached to the client, select the tab with the type (**Disk**, or **Tape**) of device you wish to create. Within each tab is the configuration for each type of **Local System Backup Device**.

d. Press the **Save** button to update the client.

Refer to the section **Clients** in the *SBAdmin User Guide* for further documentation.

2. Configure Servers and Devices

A *server* is defined as any system on which backups will be stored. Backups are stored on the server in *devices* which may be either tape or directories.

Note that a server will not be needed if you chose to backup your client(s) to *local disk or tape*, as described above.

a. To configure a server select Configure→Servers from the menu bar and the **Configure Server** screen will display.

b. In the **Server Hostname or IP** field, enter the hostname or IP address of the server you would like to write the backup to.

c. Press the **New Server** button and the following default directory devices will be created:

d. /backups/data/%G/%C

e. /backups/system/%G/%C

f. /backups/system/%G/shared

g. The device names correspond to directory names on the server in which backups will be stored.

h. Press the **Save** button to update the server.

Refer to the sections **Servers** and **Backup Devices** in the *SBAdmin User Guide* for further documentation.

3. Create a System Backup Job

A *backup job* must be created before any backup may be performed. There are many features and options available when configuring backup jobs that are not included in this document. Refer to the section *Backup Jobs* in the *SBAdmin User Guide* for further documentation.

To configure a backup job:

a. Select Configure→Backup Jobs from the menu bar and the **Configure Backup Job** screen will display.

b. Enter a **Job ID** to identify this job.

c. Select the server from the from the **Server Name** listbox or
If you wish to backup a single client to its own *local tape or disk* (see *Configuring Clients*), select "*local (client tape/disk)*" from the list.

d. From the **Profile Name** listbox, select the *"FULL_SYSTEM"* profile.

e. In the **Volume Group Name(s)** or **Zpool Name(s)** field, enter *"all"* or the individual volume groups or ZFS pools you wish to include in the backup.

f. Select the **Client(s)** you want to include in the backup job. If backing up a client to its *local tape or disk*, you can only select one client for each job.

g. Select the device you want the backup written to from the **Backup Device** listbox. Only *SBTAPE* or *SBDIR* will be available if you selected "*local (client tape/disk)*" for the server above.

Note that when selecting a device that uses %C naming convention, only the original client will be able to restore from the backup.

h. Indicate the **Backup Schedule** for this backup job or select to run the job *"On Demand"*.

i. Press the **Save** button to update the job configuration and close the window.

4. Run the System Backup Job

The backup job will run according to the *Backup Schedule* specified when creating the backup job in step #3. You may also start any job at any time as follows:

a. Select Actions→Run Backup Jobs from the menu bar.

b. Select the **Job ID** created in the previous step at the top of the screen.

c. Press the **Run Now** button.

A messages screen will appear indicating the backup has started and will also display a message with any warning or error messages and to indicate when the job has completed.

While the backup is running, you can view the progress and messages of the job by selecting the **View Queues** button on the *Main Screen*. The **Queued/Running Jobs** screen will appear. You may then select the **Show Status/Output** button on this screen to display the **Backup Status Report**.

5. Create the SBAdmin Boot Media

A *SBAdmin System Backup* contains all of the backup data and the information needed to recreate the system and restore the data. However, to access the *System Recovery Process*, boot media must be created and used to boot the target client.

SBAdmin supports multiple boot media types: CDROM ISO, Hard Disk, Network or Tape (AIX or Linux on IBM System P only).

For the purpose of this *Quick Start Guide*, we will walk you through only creation of the CDROM boot media. Refer to the *System Recovery Guide* for more details on creating boot media.

Note: A full system backup written to tape on an AIX or Linux on an IBM System P system will automatically make the tape bootable. It is not necessary to create additional boot media.

To create CDROM Boot Media:

a.   Select Utilities→Create/Manage Boot Media→ CDROM Boot Images from the menu bar. The **Create CDROM Boot Image Media** screen will appear.

b.   Select the server on which to store the ISO CDROM image in the **Boot Server Name** listbox, or select "*Store on Client*" to save the image on the client.

c.   Enter a name for the boot image in the **CDROM Boot Image Name** (any descriptive name of the boot image system type, etc).

d.   Select the client from which the boot media will be created in **Client Name** listbox.

e.   Press the **Create/Update** button to create the boot media.

The **Create Boot Media Status** screen will display. When complete, a message informing you of the completion of the process and that you may now copy the image to a CDROM device.

You must copy the CDROM image to a CDR/CDRW device before it can be used for system recovery. For detailed instructions, press the **Yes** button when asked if you wish to view this README now.

When done, press the **Cancel** button to close and return to the prior screen.

It is good practice to test the SBAdmin boot media. This will not harm the system, but will ensure that you are able to bring the system up into the *SBAdmin System Recovery Process*. The system may boot from CDROM by default if it is available. If not, you should refer to your hardware system documentation for instructions on how to enter the BIOS or system firmware to select the proper device to boot from.

Refer to the AIX, Linux, or Solaris *System Recovery Guide* section ***Creating Boot Media for System Installation*** for further instructions.

Workstation Edition Quick Start

The following steps are for SBAdmin *Workstation Edition*. It is assumed that the SBAdmin interface is running. The following steps will describe how to configure a backup device for writing, a backup job to create a full system backup, and make a CDROM ISO boot image to be used for performing system recovery.

1. Configure a Backup Device

A *backup device* is the tape drive or filesystem directory where your backups will be stored.

Tape Device
To use a tape drive for any backup type, you must first configure it for use with SBAdmin.

a. Select Configure→Backup Devices->Tape from the menu bar. The **Devices & Tape Libraries** screen will display.

b. Type the name of the drive or another descriptive name of the tape drive (i.e. "st0" or "tape1").

c. Select the tape drive from the list of tape drives detected on the system.

d. Press the **Save** button.

System Backup Device
Although SBAdmin allows any backup to be written to a directory "device", a *System Backup* to a directory requires a configured **System Backup Device**. This special device may be either a dedicated disk(s), which will be made bootable for system recovery, or a NFS mount.

To configure a **Disk System Backup Device (SBDIR)**:

a. Select Configure→Backup Devices->System Backup Disk/NFS from the menu bar. The **Configure System Backup Devices** screen will display.

b. Select the **Disk** tab.

c. In the **Disk(s) for Local System Backups** listbox, select the disk to be used. Note, only unused disks are listed.

d. Press the Save button.

When configuration is complete, you may close this window.

To configure a **NFS System Backup Device (SBNFS)**:

a. Select Configure→Backup Devices->System Backup Disk/NFS from the menu bar. The **Configure System Backup Devices** screen will display.

b. Select the **NFS** tab.

c. You must enter information in the **NFS Server**, **Share on NFS Server**, and **Local Mount Point** fields. The other fields are optional but may be required for your system.

d. Press the Save button.

When configuration is complete, you may close this window.

Refer to the sections *Local System Backup Devices* and *Backup Devices* in the *SBAdmin User Guide* for further documentation.

2. Create a System Backup Job

A *backup job* must be created before any backup may be performed. There are many features and options available when configuring backup jobs that are not included in this document. Refer to the section **Backup Jobs** in the *SBAdmin User Guide* for further documentation.

To configure a backup job:

a. Select Configure→Backup Jobs from the menu bar and the **Configure Backup Job** screen will display.

b. Enter a **Job ID** to identify this job.

c. From the **Profile Name** listbox, select the *"FULL_SYSTEM"* profile.

d. In the **Volume Group Name(s)** or **Zpool Name(s)** field, enter *"all"* or the individual volume groups or ZFS pools you wish to include in the backup.

e. Select the device you want the backup written to from the **Backup Device** listbox. Only the tape, *SBDIR,* or *SBNFS* devices configured in step 1 will be shown.

f. Indicate the **Backup Schedule** for this backup job or select to run the job *"On Demand".*

g. Press the **Save** button to update the job configuration and close the window.

3. Run the System Backup Job

The backup job will run according to the *Backup Schedule* specified when creating the backup job in step #3. You may also start any job at any time as follows:

a. Select Actions→Run Backup Jobs from the menu bar.

b. Select the **Job ID** created in the previous step at the top of the screen.

c. Press the **Run Now** button.

A messages screen will appear indicating the backup has started and will also display a message with any warning or error messages and to indicate when the job has completed.

While the backup is running, you can view the progress and messages of the job by selecting the **View Queues** button on the *Main Screen*. The **Queued/Running Jobs** screen will appear. You may then select the **Show Status/Output** button on this screen to display the **Backup Status Report**.

4. Create the SBAdmin CDROM Boot Media

A *SBAdmin System Backup* contains all of the backup data and the information needed to recreate the system and restore the data. However, to access the *System Recovery Process*, a bootable CDROM must be created and used to boot the to the system installation process.

Refer to the *System Recovery Guide* for more details on creating boot media.

Note: If you are using a **Disk System Backup Device** (**SBDIR**), the disk was made bootable at the time of configuration. Therefore, it may not be necessary for you to create the CDROM media.

Note: A full system backup written to tape on an AIX or IBM PowerLinux system will automatically make the tape bootable. It is not necessary to create the CDROM media, but usually a good idea as a secondary boot media.

To create CDROM Boot Media:

a. Select Utilities→Create/Manage Boot Media→ CDROM Boot Images from the menu bar. The **Create CDROM Boot Image Media** screen will appear.

b. Enter a name for the boot image in the **CDROM Boot Image Name** (any descriptive name of the boot image system type, etc).

c. Press the **Create/Update** button to create the boot media

The **Create Boot Media Status** screen will display. When complete, a message informing you of the completion of the process and that you may now copy the image to a CDROM device

You must copy the CDROM image to a CDR/CDRW device before it can be used for system recovery. For instructions, press the **Yes** button when asked if you wish to view this README now.

When done, press the **Cancel** button to close and return to the prior screen.

It is always good practice to test the SBAdmin boot media. This will not harm the system, but will ensure that you are able to bring the system up into the *SBAdmin System Recovery Process.* The system may boot from CDROM by default if it is inserted. If not, you should refer to your hardware system documentation for instructions on how to enter the BIOS or system firmware to select the proper device to boot from.

Refer to the AIX, Linux, or Solaris *System Recovery Guide* section **Creating Boot Media for System Installation** for further instructions

TSM Edition Quick Start

The following steps are for SBAdmin *TSM Edition*. It is assumed that the SBAdmin interface is running, and the SBAdmin *Client/Server* software is installed on the TSM nodes. It is not necessary to install SBAdmin software on the TSM server (unless it is also a node to backup). The following steps describe how to configure a client (node) and a TSM server, create a backup job which writes a system backup from a node to the TSM server, and make CDROM ISO boot media to be used for performing system recovery.

1. Create the SBADMIN Management Class

All SBAdmin backups will be stored under a TSM management class named *SBADMIN*. This management class is created on the TSM server (not within SBAdmin) and must not allow versioning.

To create the management class:

a. Login to the TSM server using *dsmadmc*.

b. Define the SBADMIN **Management Class** by typing:

    DEFINE MGMTCLASS policydomain policyset
     SBADMIN

    (where *policydomain* and *policyset* are names defined in your TSM server configuration)

c. Define a new **Copygroup** by typing:

    DEFINE COPYGROUP policydomain policyset
     SBADMIN type=backup destination=backuppool
     verexists=1 retonly=0

d. Activate the **Policyset** by typing:

    ACTIVATE POLICYSET policydomain policyset

2. Configure Clients/Nodes

A *client is* a system that will be backed up using SBAdmin. Each client should already be registered as a TSM node on the TSM server.

Note: The Administrator must be configured as a SBAdmin client so that it may manage all backup operations.

To add a client:

a. Select Configure➔Clients from the menu bar. The **TSM Clients (nodes)** window will appear.

b. In the **Client Hostname/IP** field, type the hostname or IP address of the client.

c. The **NODEname** field will default to the hostname you entered, but you may change it if the nodename is different.

d. If the TSM server will be using "*PASSWORDAccess PROMPT*" then you must provide the **Node Password** when configuring the client/node.

Refer to the *SBAdmin TSM Edition User Guide* section **Configuring Clients** for further documentation.

3. Configuring TSM Servers

When configuring a TSM server, you will need to know the following:

- *PASSWORDAccess* method
- *TSM Administrator* UserID (must have *System* or *Policy privilege)*
- *TSM Administrator* Password
- *TCPPort* used by TSM server

a. Select Configure➔Servers from the menu bar. The **Configure TSM Servers** window will appear.

b. In the **TSM Server Name** field, type the name you wish to use to identify this server. This may be any name you like.

    Note: The **TCPServeraddress** will default to the server name you enter. If you did not use the hostname or IP address of the TSM server in the **Server Name** field, you must enter the hostname or IP address of the server here.

c. Select the **PASSWORDAccess** method.

d. Enter the **TSM Admin UserID** and the **TSM Admin Password**.

e. Change the default **TCPPort** of 1500 to another value only if configured differently for your TSM server.

Press the **Add/Change** button to save the server information. Then you may close the **Configure TSM Servers window**.

Refer to the *SBAdmin TSM Edition User Guide* section **Configuring TSM Servers** for further documentation.

4. Creating a System Backup Job

A *backup job* must be created before any backup may be performed. There are many features and options available when configuring backup jobs that are not included in this document. Refer to the section *Backup Jobs* in the *SBAdmin User Guide* for further documentation.

To configure a backup job:

a. Select Configure➔Backup Jobs from the menu bar and the **Configure Backup Job** screen will display.

b. Enter a **Job ID** to identify this job.

c. Select the TSM server from the from the **TSM Server Name** listbox

d. From the **Profile Name** listbox, select the *"FULL_SYSTEM"* profile.

e.   In the **Volume Group Name(s)** or **Zpool Name(s)** field, enter *"all"* or the individual volume groups or ZFS pools you wish to include in the backup.

f.   Select the **Client(s)** you want to include in the backup job.

g.   Indicate the **Backup Schedule** for this backup job or select to run the job *"On Demand"*.

h.   Press the **Save** button to update the job configuration and close the window.

5.   Run the System Backup Job

The backup job will run according to the *Backup Schedule* specified when creating the backup job in step #3. You may also start any job at any time as follows:

a.   Select Actions➔Run Backup Jobs from the menu bar.

b.   Select the **Job ID** created in the previous step at the top of the screen.

c.   Press the **Run Now** button.

A messages screen will appear indicating the backup has started and will also display a message with any warning or error messages and to indicate when the job has completed.

While the backup is running, you can view the progress and messages of the job by selecting the **View Queues** button on the *Main Screen*. The **Queued/Running Jobs** screen will appear. You may then select the **Show Status/Output** button on this screen to display the **Backup Status Report**.

6.   Create the SBAdmin Boot Media

A *SBAdmin System Backup* contains all of the backup data and the information needed to recreate the system and restore the data. However, to access the *System Recovery Process*, boot media must be created and used to boot the target client.

SBAdmin supports CDROM ISO or Network boot media. Boot media can be stored on a central server or on the client from which it was created.

For the purpose of this *Quick Start Guide*, we will walk you through only creation of the CDROM boot media and store on the client from which it was created. Refer to the *System Recovery Guide* for more details on creating boot media.

To create CDROM Boot Media:

a.   Select Utilities➔Create/Manage Boot Media➔ CDROM Boot Images from the menu bar. The **Create CDROM Boot Image Media** screen will appear.

b.   In the **Boot Server Name** listbox, or select "*Store on Client*" to save the image on the client.

c.   Enter a name for the boot image in the **CDROM Boot Image Name** (any descriptive name of the boot image system type, etc).

d.   Select the client from which the boot media will be created in **Client Name** listbox.

e.   Press the **Create/Update** button to create the boot media.

The **Create Boot Media Status** screen will display. When complete, a message informing you of the completion of the process and that you may now copy the image to a CDROM device.

You must copy the CDROM image to a CDR/CDRW device before it can be used for system recovery. For detailed instructions, press the **Yes** button when asked if you wish to view this README now.

When done, press the **Cancel** button to close and return to the prior screen.

It is good practice to test the SBAdmin boot media. This will not harm the system, but will ensure that you are able to bring the system up into the *SBAdmin System Recovery Process*. The system may boot from CDROM by default if it is available. If not, you should refer to your hardware system documentation for instructions on how to enter the BIOS or system firmware to select the proper device to boot from.

Refer to the AIX, Linux, or Solaris *System Recovery Guide* section ***Creating Boot Media for System Installation*** for further instructions.