



File



Backup



Restore



Verify



Admin



Setup



Schedule

Unscheduled Full Backup

Backup Single Dir

Backup Multiple Files

Expert Backup

Run Scheduled

*Backup***EDGE**

Media Kit

Quick Installation Guide

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*Backup**EDGE*** Installation Guide - Revision 03.04.0x

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Microlite Corporation

2315 Mill Street
Aliquippa, PA 15001-2228 USA
(724) 375-6711 - Technical Support
(724) 375-6908 - Fax

<https://www.microlite.com> - Web
<ftp://ftp.microlite.com> - FTP
support@microlite.com - Support
sales@microlite.com - Sales

Introduction

Thank you for investing in or evaluating Microlite *BackupEDGE™* (referred to in this manual simply as *BackupEDGE*). As one of the most comprehensive data storage, retrieval and recovery products available for *UNIX®* and *Linux®* systems, *BackupEDGE* has many features and options that can help you effectively protect *and manage* your data. This guide will help you to install the product.

NOTE: Understanding the core concepts of the *BackupEDGE* architecture is the key to the most effective use of the product. Please download and read the **User Guide** to gain a full understanding of the capabilities of the product.

BackupEDGE combines the following features:

- a powerful internal backup formatter which can archive and restore all of the file types typically encountered on a UNIX/Linux system, at very high speeds.
- a hardware reporting and control layer capable of taking maximum advantage of the features of today's most powerful storage *Devices*, while disappearing when legacy *Devices* are used.
- network capabilities that make *Remote Storage Resources* respond and function as if they were attached to the local system.
- *Disaster Recovery* capabilities allowing bare metal crash recovery on supported platforms.
- a scheduler allowing the user to easily craft and manage multiple backup strategies.
- a secure encryption algorithm, to protect archives from unauthorized use (requires a separate license).
- A user interface that functions identically in character, graphical and *Web Services* modes. It is sophisticated enough to define advanced backup strategies, while simple enough to be used by persons without years of *Linux* training.

Media Support

BackupEDGE can create and manipulate archives on any of the following media types...

- Tape.
- Optical Media, (Blu-ray Disc BD-RE, DVD-RAM, DVD-RW, DVD-R, DVD+RW, DVD+R, DVD+R Dual Layer).
- CD-Recordables and Re-Writable Media (CD-R, CD-RW).
- Removable Hard Disk and Cartridge disk systems via legacy or SharpDrive™ access.
- NAS systems through FTP/FTPS/NFS/CIFS¹.
- Internet cloud storage via the S3 Cloud Storage API or FTP/FTPS.

In addition, *BackupEDGE* can manipulate SCSI/SAS *Autochangers* and *Libraries*, providing for near-enterprise level backups.

User Interface

BackupEDGE is designed to be run via the *EDGEMENU* menu-driven user interface, which may be launched in one of three ways:

- in graphical mode as a *Web Service* from any client system supporting Sun Java 1.4.2 or later, such as a Windows PC.
- in graphical mode on X11 consoles or clients equipped with Sun Java 1.4.2 or later (Linux Only).
- in character mode on system consoles, terminal emulators or xterm clients.

1. Operating System Dependent

Simplified Installation Instructions

Installation Pre-requisites

Prior to beginning a *BackupEDGE* installation, the system and devices should be set up properly.

- All prior releases (02.0x, 01.0x) of *BackupEDGE* **must be removed** before installing an 03.0x release.
- All storage devices should be properly recognized by the operating system, including tape drives, changers/libraries/ autoloaders and optical devices.
 - Linux users wanting to use hardware-attached storage devices must make sure that:
 - they appear under a “`cat /proc/scsi/scsi`” command when run as root.
 - **All daemons or programs which attempt to automount or autorun programs when media is inserted must be disabled.**
 - Under OpenServer 6, OpenServer 5.0.5, and UnixWare 7.1.4 (and later), all attached storage devices must be recognized by the operating system. The latest Maintenance Packs and a full **patchck** update should be performed.
- All devices (except floppies) must have media inserted during autodetection. Optical drives may not have a blank inserted. It must contain some data (even a music CD is acceptable).
- If the Java GUI is to be used under X11, The latest Java must be installed prior to installation so that the *BackupEDGE* installer can find it ¹.

Installation From The Downloaded Executable.

Versions of *BackupEDGE* in multiple distribution formats for:

Operating System	32bit	64bit
Linux (IA32 / EM64T / AMD64 Architecture, 5.x.x kernels)		edgelx50_64.elf
Linux (IA32 / EM64T / AMD64 Architecture, 4.x.x kernels)	edgelx40_32.elf	edgelx40_64.elf
Linux (IA32 / EM64T / AMD64 Architecture, 3.x.x kernels)	edgelx30_32.elf	edgelx30_64.elf
Linux (IA32 / EM64T / AMD64 Architecture, 2.6.x kernels)	edgelx26.elf	-
XinuOS/SCO OpenServer 6 (6.0.0, 6.0.0V, 6 Definitive D2M0/D2M1)	edgesc06.elf	-
XinuOS/SCO OpenServer 5 (5.0.5 - 5.0.7 , 5.0.7V, 5 Definitive D1M0/D2M1)	edgesc05.elf	-
XinuOS/SCO UnixWare 7 (7.1.4 ,7.1.4+ and 7 Definitive D2M0 / D2M1)	edgesc71.elf	-

Installation Instructions

- 1 Download the proper executable (.elf) file as listed above from <https://www.microlite.com/downloads>. Place it in the /tmp directory.
- 2 As root, type
 - # `chmod 755 /tmp/edge[name].elf`
 - # `/tmp/edge[name].elf`

The Installation Manager

The *Installation Manager* is presented in a “Wizard” format. The *Installation Manager* will warn you before it causes your old installation to be overwritten. Enter is the appropriate response for most prompts.

You may install and configure the base product using the following steps. If you wish to enable or configure features that require a separate serial number, such as Encryption, then you must consult the section of the manual on that particular feature.

Navigation

Use the [Arrow Keys] and / or [Tab] to **switch** fields. [Enter] generally selects things / presses buttons / etc. If you want to change a text field, simply highlight it and start typing. On color screens the current window will have red border lines and the inactive windows will have white border lines. Pressing a button means using the arrow or [Tab] keys until the indicated text is highlighted, then pressing [Enter].

1. Linux only. The Java interface is no longer available under SCO / XinuOS operating systems.

Screens with multiple choice answers use **FastSelect**. The [Up-Arrow] and [Down-Arrow] keys can be used while the cursor is on the [Next] button to choose between possible responses.

This section describes a typical installation, screen-by-screen with possible responses.

Installation Steps

Installation Manager Screen

Press [Begin] to continue or [Exit] to terminate without installing.

End User License Agreement

Installation of and upgrades to this product are subject to acceptance of an End User License Agreement (EULA). You may use the up and down arrow keys to scroll through the agreement. Press [Accept] to accept the terms (press [Enter] while [Accept] is highlighted). Press [Decline] to terminate the installation or upgrade. If you press [Decline] here, some distribution files will remain in /usr/lib/edge but no files will be installed or overwritten.

Update Warning

If this is an update, you will be prompted to exit without updating. Press [Exit] to exit without over-writing the old version (or installing this version), or [Next] to begin copying files.

Upgrade Warning

If there is a version of *BackupEDGE* installed which would require a new serial number and activation (for instance a chargeable upgrade), you'll be given the option of continuing or aborting the installation.

Activation Notice

Unless this is an upgrade to a licensed and activated release of *BackupEDGE* 03.00.00 or later, the product will be enabled in 60 day demo / evaluation mode and you'll be shown the date by which you must register and activate the product. Press [Next].

Network Settings

If you are asked to enter your system's Fully Qualified Host Name (FQHN), you should do so. This name must have both a host name and a domain name, such as "mlitedfs.microlite.com".

After you have done this, select [Next] to continue with the installation.

NOTE: If the machine is not on a network and only the hostname appears, simply add "localhost.com" or "yourcompany.com" to give it a usable domain name.

Network Transport

This screen allows to change the way that *BackupEDGE* sends data across the network. If you do not create backups across the network, this setting is irrelevant. Just press [Next]. Otherwise, select the appropriate connection type (options are currently *Remote Shell* or *Secure Shell*) and press [Next].

Device Autodetection

The next option is whether to perform or skip automatic device detection. During first-time installation you should always insert media in each device as described above, then select "Perform Autodetection". *BackupEDGE* will scan your system and create *Resource* entries for each of your *Optical* and *Tape* drives, as well as for any Autochangers. Press [Next] for each device detected.

If for any reason no devices are detected and *Resources* created, and you are not doing *Network Backups*, proceed with the installation. When you schedule your first backup job, you will have to create a new *Resource* to use with it. Refer to “Defining Resources Manually” in the User Guide for information on manually defining *Resources*.

NOTE: USB and Removable Storage Devices are seen as regular hard disk devices and not auto-detected as BackupEDGE devices. Please see the *User Guide* sections on *Configuring SharpDrive Backups* and *Configuring Legacy Disk-to-Disk Backups* for more information.

URL Creation for FTP Backups

The installer will ask whether to create a default *URL* (Uniform Resource Locator) for FTP backups. Answer [Yes] if you wish to do so. This prompt will not be shown if you are re-installing or updating and at least one URL exists.

See “*Configuring FTP/FTPS Backups*” in the *User Guide* for additional information on the network attached storage (NAS) capabilities of BackupEDGE.

SharpDrive Creation for Disk-to-Disk Backups

On supported systems, the installer will ask whether to create a *SharpDrive Resource*. Answer [Yes] if you wish to do so. This prompt will not be shown if you are re-installing or updating and SharpDrive Resources have already been configured. See “*Configuring SharpDrive Backups*” in the *User Guide* for additional information on the removable disk capabilities of BackupEDGE.

Other Storage Resources

Other supported *Resources* such as *S3CLOUD* backups, *NFS* backups, and *CIFS* backups, are not set up as part of initial installation. See the *User Guide* for additional information the other storage *Resources* available in BackupEDGE.

Autochanger and Device Association

If you have an *Autochanger*, you must establish a relationship between it and any tape drive *Resources* may have. This allows BackupEDGE to know which tape drive(s) are attached to the *Autochanger*, and which are stand-alone *Resources*. When BackupEDGE needs to load a tape, this information allows it to do so. The User Guide provides additional autochanger information.

Scheduling A Default Backup

After all *Resources* have been defined, the installer will allow you to create or modify your unattended backup *Schedules*. We **highly recommend** that you allow the installer to create a default backup schedule. This schedule may be modified, or even enabled and disabled, at a later time.

To proceed:

- Select [Next] when prompted to create a default schedule.
- Select the *Resource* to be used for scheduled backups.
- Select the default times and dates for the scheduled backups, or choose the default time and days of the week desired.
- Select [Save] to save the default backup schedule.

See “*Scheduling*” in the User Guide for additional information on the basic and advanced scheduling capabilities of BackupEDGE.

Virtual File Check

The last phase of the installation is the *Virtual File Check*. BackupEDGE contains a scanner that will run as a *Background Task*, checking each file on your system and adding it to a list of files to be treated specially if it appears to be a *Virtual*, or *Sparse* file. Most users do not need to run this check. The default is to [Skip] the check. See “Virtual File Identification” in the User Guide for more information on this subject.

MySQL / MariaDB Backup Setup

If a MySQL or MariaDB installation is detected, the installer will ask whether to configure *BackupEDGE* for MySQL database backups. Select (X) `Perform MySQL backup Setup` if you wish to do so. See “Setting up MySQL Backups” in the User Guide for additional information on the MySQL backup and restore capabilities of *BackupEDGE*.

NOTE: MySQL/MariaDB Hot Backups are not supported in the XinuOS SCO OpenServer 5 release of *BackupEDGE*.

Finishing The Installation

The installer will congratulate you on your successful installation and ask you to press the [Exit] button. Remember to un-mount the CD-ROM and eject it.

Removing BackupEDGE

OpenServer 5 / OpenServer 6 Platforms

BackupEDGE is removed by typing `custom` from a character interface or running **Software Manager** from the *GUI* or `scoadmin`. From the full-screen interface, make sure that BackupEDGE for SCO OpenServer 5 (or BackupEDGE for SCO OpenServer 6) is highlighted, then use the `Software -> Remove Software` option or, from a root prompt, type:

```
custom -p misc:edgesco5 -r  
or
```

```
custom -p misc:edgesco6 -r
```

All Other Operating Systems

From a root prompt, simply type the following command...

```
/usr/lib/edge/bin/edge.remove
```

Launching EDGEMENU

EDGEMENU is the name of the main menu program that provides an interface to all *BackupEDGE*-related operations. During installation, *BackupEDGE* will populate the `root` desktop of most operating systems with a *BackupEDGE Icon*. Simply double-click on the *Icon* to launch *EDGEMENU*. The character or Java version will launch as appropriate. OpenServer and UnixWare systems running the graphical Desktop can launch *EDGEMENU* from the `ScOAdmin` menu. The character or Java version will launch as appropriate.

From a character login, type:

```
edgemenue [Enter]
```

To launch *EDGEMENU* as a Web Service, refer to the User Guide for information on starting the Web Services daemon.

First Time Execution

The first time you launch *EDGEMENU* after a new installation, you'll get a pop-up menu that says:

```
No Primary Backup Resource Selected!
```

This is because *EDGEMENU* doesn't know which backup *Device* to use when running attended backups and restores. Acknowledge the message (press `[OK]`) and then **Fast Select** the device to use for attended backups.

Fastest Way To Perform a Full System Backup

The quickest way to do a backup is simply to press `[B] [U] [Enter]`. This chooses the `[Backup]` drop down menu, selects the `[Unscheduled Full Backup]` option, and does an `[Execute Backup]` with all defaults intact.

Best Way To Perform a Full System Backup

We recommend selecting the `[Backup]`, `[Run Scheduled]` option, choosing the `Basic Schedule`, and `[Run]ning` it. This takes one extra keystroke, but it runs the same nightly backup *Scheduled Job* that you defined during installation. It also keeps *Sequence* information intact.

Additional Resource Setup

Other supported *Resources* such as *S3CLOUD* backups, *NFS* backups, and *CIFS* backups, are not set up as part of initial installation. See the *User Guide* for additional information the other storage *Resources* available in *BackupEDGE*.

EDGEMENU Main Menu (Java / Web Interface)

EDGEMENU Main Menu (Character Mode Interface)