

# **Open Source Backup with Amanda**

Bay Area Linux Users Group (Oct 2007)

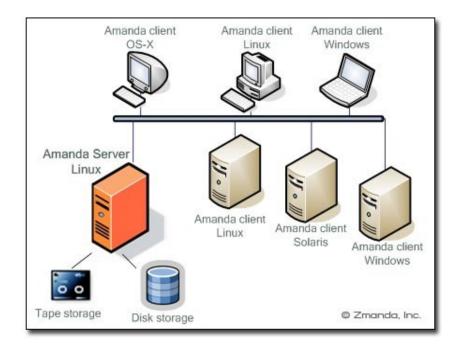
Paddy Sreenivasan paddy@zmanda.com

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#### Amanda network backup and recovery

- Easy to use
- Open source and no proprietary data formats
- Scalable and heterogeneous
- Designed for backup to disk, tape and optical devices
- Secure





### **Amanda community releases**

- Active developer and user community
- Open source (Amanda license similar to BSD license)
- Part of most Linux distributions and Solaris
- Compatible releases at regular intervals
- Latest release 2.5.2p1
- More recent builds and Linux packages for released versions available at http://www.zmanda.com/download-amanda.php
- Amanda documentation is available in http://wiki.zmanda.com/
- Amanda questions? http://forums.zmanda.com/



### **Amanda work in progress**

- Device API
  - Abstraction layer for backup device communication
  - Plugins for Tape, Disks, RAIT, Amazon S3
  - Part of next release
- Application API
  - Abstraction layer for application backups
  - All current backup programs (GNU tar, dump) will be supported as plugins
  - Under development
- Transfer architecture (Parallel data transfer)
- Concurrency and Messaging improvements
- Use of XML in protocol and messaging



# Amanda Enterprise simplifies SysAdmin life



- Zmanda Management Console
  - a web based service integrated with Zmanda network
  - management and visualization tools for all Amanda tasks
- Rapid Installer

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### ZMC design is based on web technologies

Amanda Backup Mon								
About   User Guide what where	when how verify	activate		admin   Log Out				
What would you like to add to the backup list?	Backup Set: TestGreg	View All Events						
Object To Backup Host Name:* Directory:* Exclude Files:	Encryption: Compression:							
Clear Add Done								
New entries being added to the Backup List								
Host Name	Directory	Exclude Files	Encryption	Compression				
compress.zmanda.com	/home		server	none				
secure.zman.da.com	/testdata01		server	none				
te st22.zmand a.com	/usr/local		none	client fast				
windows.zmanda.com	E:/		none	none				

- Object oriented PHP 5 with MySQL on the backend
- AJAX with Yahoo Java script libraries

Web service with hyperlinks to knowledge objects

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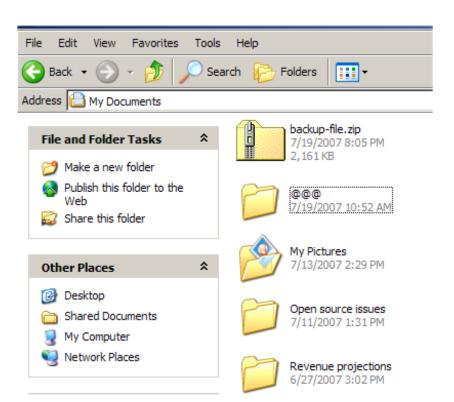
### **Amanda enterprise 2.6.2 release**

- Introducing the New Amanda Windows Client
  - Full support for Windows file systems
  - Back up and restore all file attributes
  - Back up open files
  - No need for external tools (SAMBA or Cygwin)
- Zmanda client for Microsoft Exchange
- Security Enhancements
  - Role based access to configuration changes
  - Support for SE Linux
  - HTTPS support



## Windows Client

- Uses and extends the existing Amanda architecture
  - Send backup to Amanda server in the usual way
  - Native Windows format (PKZIP)
  - Ability to restore without Amanda tools
- Provides full support for NTFS (and FAT32)
  - ACLs
  - Extended attributes
  - Open files via VSS
- Ease of installation
  - Typical "setup.msi" installation
- Ease of Restore





# **Security Enhancements**

- Role Based Access Control
  - Limit privileges for some users
  - Administrators and Operators
- Support for SE Linux
  - Amanda is a protected service
  - OS: RHEL5 / FC 6
  - Support for targeted policy in enforcing mode
  - All this makes Amanda even more secure
- HTTPS Support
  - All pages now protected by SSL
  - Protects passwords from being snooped or sniffed

About User Guide User management backup sets preferences									
Create users and	l assign password	0	Backu	p Set: backup	View All Events				
Zmanda Management Console user administration - create, edit, view and delete users									
Create ZMC Use User Name:* Email Address:* Password:* Confirm:* User Role:		Coperator	Register ZMC User with Zr Zmanda Network Usernar Zmanda Network Passwo	ne:					
Clear									
View, edit and delete users									
Edit   Delete	User Name	User Role	Email Address	Registration Date					
Edit	admin	Administrator	amandabackup	July, 06, 2007					



# **Amanda Enterprise Edition**

- Annual subscription with different support levels
- Zmanda Management Console demo
  - http://www.zmanda.com/ZMC-Short-Demo/ZMC-ShortDemo.htm
- Annual subscription with different support levels
- Join Zmanda Network for Amanda white papers
  - http://network.zmanda.com (free registration)