PANASAS® GLOBAL SERVICES

TECHNICAL EDUCATION: SYSTEM ADMINISTRATOR CERTIFICATION

COURSE DESCRIPTION

This instructor-led course, offered at a Panasas facility or at a customer site, delivers a complete introduction to the Panasas® ActiveStor® storage system and allows the student to earn certification as a Panasas System Administrator. Topics covered include ActiveStor hardware, the PanFS® parallel file storage operating system, and the DirectFlow® data access protocol. The course provides a System Administrator or IT team member with the knowledge to install, configure, and maintain a Panasas ActiveStor system. Each student will gain a firm understanding of configuration, operation and maintenance of the Panasas suite of products as well as obtain instructions on how to diagnose and resolve various software and hardware errors.

The redundant components of the Panasas hardware solution are discussed and reinforced with lab exercises and hands-on activities demonstrating how to service each field-replaceable unit. Object-based file-system theory, software upgrades, and configuration scenarios will be also discussed.

The instructor will focus on the fundamentals of the PanFS storage operating system, the DirectFlow client access software for Linux®, the Panasas storage virtualization model, and the PanActive® management interface (both CLI and GUI). Students will be introduced to the features available when deploying a Panasas storage system and how to best configure the system to obtain optimal redundancy and performance.

TARGET AUDIENCE

- Storage Network Engineers
- Storage Specialists
- Storage Administrators and/or Data Center Operators

PREREQUISITES

This course is designed for attendees who possess a basic understanding of:

- General IP Networking
- Disk RAID concepts
- Familiarity with NFS and/or file-system usage
- Experience interfacing with UNIX® and/or Linux

Students are responsible for complying with all prerequisite material. Students who demonstrate a gap in the prerequisite knowledge may be asked to limit questions during class time so as not to impede the overall progress of the class.

CERTIFICATION

Successful completion of the Panasas System Administrator course ensures that your staff has been trained on daily system operation, configuration and maintenance of the Panasas ActiveStor storage system. Students who attend all presentations, complete all practical application exercises, and pass the final exam are awarded the *Panasas System Administrator Certificate of Completion* by Panasas Global Services.

PANASAS ON-SITE COURSE DETAILS

Course Title	Panasas System Administrator Training and Certification
Course Number	EDU-SYSADM-PAN
Delivery Method	Instructor-led
Location	Panasas offices in either Pittsburgh, Pennsylvania or Sunnyvale, California
Content	Training book, hands-on labs, technical papers
Duration	Three days
Price	email: training@panasas.com for quote
Min. Students per Class	4
Max. Students per Class	12
Class Frequency	Once every 2-3 months
Equipment	Supplied by Panasas

CUSTOMER ON-SITE COURSE DETAILS

Course Title	Panasas System Administrator Training and Certification
Course Number	EDU-SYSADM-CL
Delivery Method	Instructor-led
Location	Customer site
Content	Training book, hands-on labs, technical papers
Duration	Three days
Price	email: training@panasas.com for quote
Min. Students per Class	1
Max. Students per Class	12
Class Frequency	As required
Equipment	Remote access to Panasas equipment required

panasas

Beyond Storage

MODULES INCLUDED

Day 1
- PanFS Overview
- Classic ActiveStor Hardware
- ActiveStor Director
- PanActive Manager GUI
- Realm Managers
- Adding Enclosures
- Network Connectivity
- Object-based RAID

Day 2
- Bladesets
- Volumes
- DirectFlow Client
- DirectFlow Ports
- DirectFlow Client for Mac®

Day 3
- PanCLI
- Volume Services
- Volume Quotas / Available Space
- User Quotas
- Snapshots
- System Monitoring
- Troubleshooting OSDs

Day 4
- Reconstruction
- OSD Drain
- Capacity Balancing
- NFS Client
- DirectFlow and NFS Exports
- CIFS
- Name Resolution

Day 5
- Replacing Hardware
- Shutting Down the Realm
- Upgrading PanFS OS
- Working with Panasas Technical Support

INSTRUCTOR-LED TRAINING

Courses are taught at Panasas' facilities in Pittsburgh, Pennsylvania and Sunnyvale, California. Customer site training sessions are available upon request, provided specific accommodations are made for equipment and facilities. Please ask for a quote. Regardless of location, all training classes are facilitated by Panasas personnel with diverse, hands-on technical backgrounds. Content used for this course has been developed by the Panasas Global Services team.

EQUIPMENT

Panasas will provide equipment for use by students in hands-on lab exercises. In addition, students are required to bring a laptop or suitable portable device with wireless capability and an installed SSH client (such as PuTTY).

CLASS PARTICIPATION

Attendance is the responsibility of the registrant. In order to successfully complete the course, 100% attendance is required. If a registrant fails to appear for a scheduled class, or fails to complete the entire course, the full course fee is charged and certification is not guaranteed.

CONFIRMATION

Panasas will send you a confirmation letter upon registration. We recommend that you bring it to class to confirm class attendance eligibility.

STUDENT CANCELLATION POLICY

Individual training registrants cancelling a scheduled class at a Panasas facility have the option to transfer their registration to a future class or receive a full refund, provided Panasas is notified of the cancellation at least 14 calendar days prior to the course start date. Full charges apply if the cancellation is made fewer than 14 calendar days before the course start date. Registrations may be transferred to another student, provided they meet the course prerequisites.

CUSTOMER SITE TRAINING SESSION CANCELLATION POLICY

Customers may cancel or reschedule customer site training sessions without penalty up to 14 calendar days prior to the course start date. Full charges will apply if the cancellation is made fewer than 14 calendar days before the course start date.

PANASAS COURSE CANCELLATION POLICY

Panasas requires a minimum of four students per class for training delivered at a Panasas facility. We reserve the right to change course schedules, modify course content, or cancel a class when necessary. If we elect to cancel a class, we will make every effort to notify all registrants a minimum of 14 days prior to the scheduled start date. Panasas is not responsible for airline or hotel penalties incurred because of canceled courses.

CONTACT

For questions about this or any other Panasas training programs:

Email: training@panasas.com
Ph: 1.888.PANASAS
www.panasas.com