PGP Universal Server 3.0 Administration

COURSE DESCRIPTION
The PGP Universal Server 3.0 Administration course for PGP Universal Server 3.0 and PGP Desktop 10.0 is designed to provide you with the fundamental knowledge and hands-on lab experience to install, administer, and troubleshoot the PGP Universal Management Server and primary client product. The hands-on labs include exercises for installation and configuration of the PGP Universal Server and PGP Desktop products, including policy-based messaging security, manual and directory-style user and group management, and PGP Desktop policy and usage, including for the PGP Whole Disk Encryption product.

The course also covers troubleshooting of PGP Desktop, including installation and enrollment problems, PGP Whole Disk Encryption and common files & services that may need to be manipulated or repaired.

Additionally, you are introduced to the following PGP encryption products: Key Management Services, PGP Support Package for BlackBerry, PGP Mobile, PGP Portable, and Endpoint Device Control.

Delivery Method
Instructor-led

Duration
Five days

Course Objectives
This course provides instruction on PGP Universal Server 3.0 and PGP Desktop 10.0. At the completion of the course, you will be able to:

• Describe the features, concepts, components, and terminology of both the PGP Universal Server 3.0 and PGP Desktop 10.0 products.
• Install PGP Universal Server 3.0 and complete setup using the most commonly configured options.
• Install a managed and customized PGP Desktop 10.0 client.
• Configure, complete administration tasks for, and use PGP Whole Disk Encryption and other PGP Desktop features.
• Configure policy-based messaging security for internal and external recipients.
• Create and modify users, user policies and groups using either manual or directory integration methods.
• Combine two or more PGP Universal Servers into a cluster.

Who Should Attend
This course is intended for those responsible for the installation, configuration, maintenance, or troubleshooting of PGP Universal Server or PGP Desktop.

Prerequisites
An understanding of information security concepts and terminology will help you succeed in this course. Also, this course requires familiarity with networking and computing concepts. It is recommended that those taking it have at least one year of Information Technology experience.

Hands-On
This course includes practical exercises that enable you to test your new skills and begin to transfer them into your working environment as well as several review exercises to help you remember what you’ve learned.

COURSE OUTLINE
Installing PGP Universal Server
• PGP Universal Server overview
• Installation tasks and options
• Completing the PGP Universal Server Setup Assistant
• Hands-On Labs: Install PGP Universal Server and complete the Setup Assistant.

Maintenance
• Server monitoring and logging
• Updates, backups and restoring
• Hands-On Labs: Configure updates and perform backups.

Consumers and Groups
• PGP product user definition
• Explanation of Consumer Groups
• Introduction to Consumer Policy
• How users, groups and policy work together
• Hands-On Labs: Create a custom policy and group and manually add users.

Administrative Keys
• A review of Trust and Verification
• The Organization Key
• The Organization Certificate
• Configuration and usage of the Additional Decryption Key
• An explanation of other certificates used for trust on PGP Universal Server
• Ignition key types and features
• Hands-On Labs: Learn how to add an ADK and change the SSL certificate on the PGP Universal Server.

Server Messaging
• An explanation of Learn Mode
• An in-depth look at Mail Proxy configuration
• Description of server mail flow and typical configurations

Default Mail Policy
• Definition of policy chains and rules
• An explanation of rule conditions, actions and key searches
• Default mail flow and message policy
• Special rules
• **Hands-On Labs:** Send messages and evaluate the message logs to determine message behavior.

Custom Mail Policy
• Adding custom chains to mail flow
• An overview of various types of policy chains
• Demonstration and detailed explanation of adding a rule
• Special messaging actions and dictionaries
• **Hands-On Labs:** Create and use custom mail policy and rules.

Key Not Found
• Explanation of the problems that cause a need for a Key Not Found policy
• Introduction of Key Not Found configuration

Web Messenger
• Definition of Web Messenger
• Description of functionality
• Demonstration of end-user inbox creation
• Inbox and service administration
• Inbox replication and backup
• Customization templates
• **Hands-On Labs:** Create and use a customized Web Messenger inbox.

Other External Options
• Basics of PGP public key directories
• Overview of the Smart Trailer invitation option
• Overview of the PGP Desktop / S/MIME option
• Introduction to the Regular Email option for Web Messenger
• Overview of PGP Universal Satellite
• Explanation of PDF Messenger statement and certified delivery
• How the Consumer Policy option: Out of Mail Stream functions
• **Hands-On Labs:** Configure and use PDF Messenger.

Directory Synchronization
• Introduction and definition of directory synchronization
• A high-level overview of LDAP
• How the server uses a directory to add and assign users to groups
• Configuration of PGP Universal Server Directory Synchronization
• **Hands-On Labs:** Enable Directory Synchronization and configure custom attributes and values to organize users.

Keys
• Managed key configuration
• Key modes
• Subkeys
• Key usage flags
• Smart card
• Key Management Services introduction and basics

Installation of PGP Desktop
• System requirements
• Citrix & TS compatibility
• Downloading a custom PGP Desktop installer
• Modifying installed components
• **Hands-On Labs:** Download a customized PGP Desktop executable and install it.

Enrollment
• Definition of enrollment
• Overview of the Email, LDAP, and Silent enrollment types
• **Hands-On Labs:** Enroll a PGP Desktop client.

General PGP Desktop Policy
• Explanation of the options available on the General Card of the PGP Desktop Settings of a Consumer Policy
• Licensing managed PGP Desktop clients
• Updating settings for managed installations
• **Hands-On Labs:** Change some settings and update policy to see changes.

PGP Desktop Messaging
• How PGP Desktop affects messaging infrastructure
• Explanation of the options available on the Messaging Card of the PGP Desktop Settings of a Consumer Policy
• Notable among these settings are the MAPI encrypt / sign buttons and offline mail processing
• **Hands-On Labs:** Use PGP Desktop messaging features including the MAPI buttons.

PGP Whole Disk Encryption Basics
• An overview of PGP Whole Disk Encryption for Windows and Mac OS X systems
• System requirements and miscellaneous information about the PGP Whole Disk Encryption process

PGP Whole Disk Encryption Administration
• An introduction to the pgpwde command line tool
• Logon failure and reporting
• The WDE-ADMIN group for large-scale administration
• Explanation of the options available for PGP Whole Disk Encryption in the PGP Desktop Settings of a Consumer Policy, including authentication methods and end-user permissions
• Mac OS X exceptions and differences
• **Hands-On Labs:** Encrypt a disk using PGP Whole Disk Encryption.
PGP Whole Disk Encryption Recovery
• An explanation of potential problems with encrypted hard drives
• Using the Whole Disk Recovery Token for forgotten passphrases
• Demonstration of Local Self Recovery
• The Bootg Recovery ISO
• Lenovo recovery partition support
• Using Intel AMT for recovery
• Using a Windows PE disk to facilitate recovery
• Using the Additional Decryption Key for decryption of hard drives
• **Hands-On Labs:** Use the PGP Whole Disk Recovery Token to authenticate at BootGuard.

PGP Whole Disk Encryption for Linux
• PGP Whole Disk Encryption for Linux system requirements and restrictions
• Installing and enrolling the PGP Whole Disk Encryption client
• Differences and frequently asked questions about the PGP Whole Disk Encryption client for Linux

PGP NetShare
• Defining PGP NetShare
• Encrypted folder creation
• Configuration of the PGP Universal Server Consumer Policy options for NetShare, including automated folder protection and application-based protection of files
• Client-side administration features for PGP NetShare
• Miscellaneous compatibility and feature information about PGP NetShare
• Demonstrations of Active Directory Group integration and usage of PGP NetShare

Other PGP Desktop Utilities
• PGP Zip file and folder protection
• Securely erasing information using PGP Shredder and the Shred Free Space features
• PGP Virtual Disk secure volumes
• Usage cases and definition of PGP Portable
• A brief explanation of the PGP Endpoint product
• The PGP Support Package for BlackBerry devices
• PGP Mobile client features
• **Hands-On Labs:** Use PGP Zip, PGP Shredder, and Virtual Disks.

Clustering
• How PGP Universal Server Clustering works
• Utilizing the DMZ Clustering Zone
• Cluster failover
• Web Messenger inbox replication
• Demonstration of cluster creation

PGP Support Tools
• An introduction to the PGP Support Knowledgebase
• The Quick Reference Document
• Utilizing product documentation

PGP Desktop Commands & Services
• Common PGP Desktop services
• Policy, preference, logging and other file locations
• PGP Desktop debug logging
• **Hands-On Labs:** Experiment with PGP Desktop files & services.

PGP Desktop Installation & Enrollment
• Installation of PGP Desktop Fails
• PGP Desktop will not enroll
• Enrollment error messages
• Credentials problems
• **Hands-On Labs:** Troubleshoot and solve problems with deploying the PGP Desktop client.

PGP Whole Disk Encryption
• Boot record and user record information
• PGP Whole Disk Encryption won’t start
• Using the recovery ISO and Windows PE
• Authentication problems
• Policy and Single-Sign-On issues
• Disk errors
• Enrollment problems
• **Hands-On Labs:** Resolve PGP Whole Disk Encryption errors.

PGP Universal Server Overview
• Architecture and services of the server
• VMWare tools
• Custom reporting
• Files & folders locations
• Expanded logging, including debug information
• **Hands-On Labs:** Setup an SSH connection and debug logging.

PGP Universal Server Installation
• Server hardware
• Installation failure troubleshooting
• Installation disk error
• Licensing issues

PGP Universal Server General Troubleshooting
• Ignition Key errors
• “Server is not functioning” (Datalayer is down)

PGP Universal Server Messaging
• Messages not being encrypted
• Mail queuing
• Open relay
• Mail routes
• Certificate expiring

**Web Messenger**
• Web Messenger login issues
• Web Messenger non-delivery
• Certificate problems

**Clustering**
• Architecture
• Common problems