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## Pervasive Encryption on z/OS

**Duration: 3 Days**    **Course Code: ESS10G**

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### Overview:

In this course you will learn how to implement Pervasive Encryption in your z/OS installation. The course explores in detail, the various technologies that are involved in z System and z/OS Cryptographic Services, ICSF, RACF and DFSMS access method Services. In the hands-on exercises, you begin with the setup of your hardware crypto environment (CCA crypto express and CPACF), then you will load and activate your AES master keys, setup ICSF and its Key datasets (CKDS PKDS TKDS), then define your data encryption keys, activate your data set encryption policy, and encrypt your data sets and zFS filesystems. These exercises reinforce the concepts and technologies being covered in the lectures. This course consists of several inter-dependent modules. The modules, including the lab exercises, depend on the other previous modules content.

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### Target Audience:

This class is intended for z/OS system programmers and security specialists in charge of designing, implementing and monitoring Pervasive Encryption on z/OS.

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### Objectives:

- In this course, you will learn how to:
  - Describe the components of Pervasive Encryption on z/OS
  - Explain the role of encryption for data protection
  - Implement hardware crypto on your z System
  - Load and activate AES Master Keys
  - Implement and start ICSF
  - Understand the differences between secure keys clear keys and protected keys
  - Describe how are key values used for encryption and decryption
  - Generate, maintain and manage Keys
  - Setup access to key labels
  - Setup policy to supply key label (RACF SMS JCL)
  - Access data in encrypted data sets
  - Create encrypted data sets - Supplying key labels
  - Convert existing data sets to encryption
  - Verify encryption status
  - Encrypt Data in Transit
  - Encrypt Data at Rest
  - Manage data sets, data keys, and key labels
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### Prerequisites:

You should have the following prerequisites:

- General z/OS knowledge, including basic UNIX System Services skills
  - Basic knowledge of RACF
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### Content:

Please see the course objectives

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## Further Information:

For More information, or to book your course, please call us on 00 966 92000 9278

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