

Educagen

Educagen is specialist in CA Gen and Education with an experience in consultancy and training of 20 years.

We deliver training and other consultancy services world wide in the English, German, French and Dutch language.

Educagen offers a complete set of Gen courses.

The students will get all necessary knowledge and skills for all Gen functions and tasks.

Our unique training methodology guarantees that on completion of the training the student can start immediately as a developer in a Gen project.

Delivery can take place in the following ways:

Individual - Live Online training in a virtual class room

each student may have his own education programme. A trainer takes care that the programme will be completed correctly.

Traditional training in a group

in a class room with a group of students.

Educagen has developed a unique training methodology for the delivery of individual training. Individual presentation and instruction is given to the student using training materials and new multimedia facilities. Electronic media enable the trainer to give live support at a distance.

More information about this methodology can be found on the web site.

The price of the training will depend on the

- training programme
- number of students and
- delivery method.

Who is Educagen?

What?

**Training
Objective and
Methodology**

Price

Information ?

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Training Methodology

The objective of our training methodology is to enable the student to start as a developer in a Gen project immediately after completion of the training. Therefore the student will get very much practical experience and skills after the presentation of the theory.

Objective

The student will be capable of developing applications using the best practices.

All training programmes provide many hands on exercises to prepare the student for the future project task.

Delivery method

Together with the student's manager the objective of the training and the programme is defined.

Before the training starts

The training methodology focusses on the individual student. The programme can be composed in a way that it includes all the skills the student needs to have after the training.

The definition of the training objective will include following aspects :

Execution of the programme

- the student's background
- details of the training programme, (composed using the list of modules)
- method of presentation: **classical** or **individual**
- time schedule, location of the training

All courses can be presented to individual students using online facilities. The course is **not** a self study course. The trainer will always present the theory topics in a live way. Hands on tasks will be checked by the trainer.

Our customers are very happy with this live-online method. Read their experiences on www.educagen.com .

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Functions and Training Programme

Educagen has developed a list of modules that enables us to compose any training programme for Gen.

Standard training programmes have been defined for the regular functions in Gen development projects.

All courses can be presented for all versions of the Gen software.

For standard functions in Gen development projects Educagen has defined standard training programmes:

- Introduction in Gen
- Basic Developer 1 and 2
- All Round Developer
- Developer Block Mode Systems
- Developer Batch Systems
- Gen for the Tester
- Gen for the Designer-Analyst
- Model Manager
- Version Control
- Subsetting
- Gen for the Database Administrator (DBA)
- Component Based Development (CBD)
- DB2 for the Gen Developer
- Other courses

For each function the training programme has been described on a page in this document. It describes the training objectives, contents, duration and prerequisites.

Special programmes are defined. Among them are programmes for:

- Performance
- Refresh Training
- Component Based Development

Other programmes can be arranged according to your request.

The standard programmes are also described in detail on our web site.

Functions

**Other
courses**

Web site

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Introduction to Gen

Training programme

This course will give an introduction to Gen and the way it is used in application development.

On completion of this course the student will understand the concepts, techniques and diagrams of Gen. The student will have learned how an application is built using Gen. He will have built a simple application by himself. This will enable the student to communicate with the developers using a common Gen language.

The programme gives an introduction in developing using Gen.

- What is Gen?
- Why and how is it used?
- Concepts of Gen
- Data Modeling diagrams,
- Process modeling
- System Design
- Database design and generation
- Procedures and Views
- Windows and Action Diagrams
- Generation of an application
- Gen encyclopedia
- Projects using Gen
- The role of the business user

After discussion of the theory many hands on exercises guarantee that the student has achieved a good level of practical skills.

The standard duration is 2 days.

This training is meant for anyone who is involved in application development using Gen, like business users, project leaders, analysts etc.

The student has to be familiar with the concepts of system development.

Objective

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Duration

For Whom?

Prerequisites

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Basic Developer 1 and 2

Training programme

The objective is to train the student to become an application developer using Gen. He will get a good knowledge of Gen and the principles of modelling in Gen. Starting from the analysis and design diagrams an application is built. The most important Gen diagrams will be discussed.

Objective

The training consists of two parts.

In part 1 the student will learn the necessary basic Gen concepts to build an elementary application. After completion of part 2 the student will be able to build and maintain a standard client-server application. He will get comprehensive practical skills. On completion of the training he will be able to start in a Gen development project immediately, performing general design and construction tasks.

The training includes the following subjects:

Contents

Part 1

Introduction in Gen
 Data Modeling in Gen
 Transformation of the Data Model
 Generation of a test database
 Design and generation of a basic application
 Test of an application (developer test)
 Procedures and action diagrams
 Maintenance functionality
 Error handling
 Views and View Matching
 Local views, work views
 Designing for client-server
 Reading the database

Part 2

Controlling the database actions
 Explicitly indexed group views
 Complex READs
 Window Design, block mode or batch
 Extended READs
 Flow between procedures
 Action on entity types and relationships
 Statements for repetition and condition
 User defined events
 Interfacing to external code
 Working with subsets
 Expert READ exercises
 Load Module Packaging

The contents can be adapted for other environments (block mode, batch, web).

The standard duration is 10 days. You may subscribe separately for part 1 and 2. Part 1 and part 2 are both five days.

Duration

This training is meant for those who will build applications using Gen.

For Whom?

The student has to be familiar with the concepts of system development.

Prerequisites

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All Round Developer

Training programme

The objective of the course is to train the student as an All Round Developer who has a very profound knowledge of Gen and the principles of modeling in Gen. He has more and better practical skills than the Basic Developer. A greater Gen area is part of his competence so that he is immediately available for different aspects of a Gen project.

On completion of the training he will be able to start in a Gen development project immediately, performing general design and construction tasks.

The programme starts with the Basic Developer 1 and 2 programme and is extended with the following subjects:

- Data modelling, Details of ET, attributes and relationships
- Data Structure List, Data Store List
- System design, Procedures and procedure steps
- Windows, dialog boxes
- More client server design
- Client server load module packaging
- Activity Hierarchy diagraming
- Functional design in Gen
- Other analysis products and its origin
- More complex database actions
- Performance aspects of DB actions
- Gen Encyclopedia
- Procedure copy with substitution
- Advanced GUI features (statements and events)

Specific environments (block mode, batch, web) can be done in addition to or instead of standard modules of this training.

After presentation of the theory many hands are performed.

The standard duration is 15 days.

If the student has attended the training for Basic Developer the duration of the addition training is 5 days.

This training is meant for those who will build applications using Gen.

The student has to be familiar with the concepts of system development.

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Objective

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Duration

For Whom?

Prerequisites

Developer Block Mode Systems

Training programme

The objective of the course is to train the student as a Developer Block Mode Systems (3270-type). He will learn the concepts of modeling in Gen. All stages of development will be discussed.

On completion he will be able to perform design and construction tasks. He has got much practical experience and can be a member of a Gen project team.

The course includes the following subjects:

- System design of Block Mode systems
- Dialog flow
- Screen design
- Action diagrams of a BM system
- Design of a server module
- List-maintenance procedure
- Load module packaging,
- Generation and test of BM system

After discussion of the theory many hands on exercises guarantee that the student has achieved a good level of practical skills.

The standard duration is 2 days, if the student has completed the Basic Developer course.

This training is meant for those who will build Block Mode (3270) applications using Gen.

The course duration is 10 days if the student did not attend the Basic Developer course. Then the course will include the Basic Developer programme, based on developing block mode applications.

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For Whom?

Prerequisites

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Developer Batch Systems

Training programme

The objective is to train the student to build batch applications. He will learn how batch systems are developed. Batch concepts are discussed. This training will especially emphasize the batch concepts which are general for all environments.

Some aspects typical for the MVS/DB2 environment will be discussed.

The course includes the following subjects:

- Introduction of Batch concepts
- System design of Batch systems
- Output to File
- Batch techniques,
- Checkpoint, Restart
- Input to Table
- Cross Table Processing
- On-line No Display
- Action diagrams of a Batch system
- MVS
- Packaging, generation and test of Batch systems

After discussion of the theory many hands on exercises guarantee that the student has achieved a good level of practical skills.

The standard duration is 1 day.

This training is meant for those who will build batch applications using Gen.

The student must have completed Basic of All Round Developer training.

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For Whom?

Prerequisites

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Gen for the tester

Training programme

The objective of the course is to provide testers of Gen applications with a good understanding of the concepts, terminology and diagrams which are used when a Gen application is developed. On completion of the training they will be able to use the system specifications in an optimal way.

The student will learn how a system is developed using Gen. He will practise to use the Gen terminology to optimize a good communication with the developers of the system.

His own test environment will be discussed during the course.

The course includes the following subjects:

- What is Gen?
- How is Gen used?
- Which concepts play an important role?
- Data Modeling in Gen
- Database design and installation
- Procedures
- Windows, Views
- Action Diagrams
- Functional specifications in Gen
- How to test a Gen application?
- Generation of an application
- Gen encyclopedia

After discussion of each theory topic hands on tasks will make the tester familiar with the Gen concepts and diagrams. He will have a good overview knowledge of Gen applications and how to test them.

The standard duration is 3 days.

The course is meant for testers of Gen applications.

The student has to be familiar with the concepts of system development.

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Gen for the Designer - Analyst

Training programme

Analysts and designers transform the business and user needs into a system design. The functional design of a business system is modeled in Gen, using the analysis and design diagrams.

The objective of this course is to train the student to model the results of analysis and functional design in Gen. Then the programmers will have a perfect start to build the systems.

To enable excellent communication with other Gen developers, an overview of the whole Gen area is included in the course.

The contents of the course is:

- Overview Gen
- Data Modeling using Gen:
entity types, attributes, relationships, identifiers etc.
- Data Model and database design
- Generation of a test database
- Process modeling using Gen:
functions and business processes in Gen
- Views, group views
- System design:
procedures and views
- Action diagramming, View matching
- Client server design
- Production environments
- Design and construction of a basic application

At your request the course can be tailored to include and discuss only the diagrams which are really used in your projects.

The standard duration is 5 days.

This training is meant for designers and analysts of applications using Gen.

The student must have a general knowledge of analysis and design of business systems. The student must be familiar with concepts of data modeling (ERD).

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Model Manager

Training programme

The Model Manager is responsible for all actions with the model. He will take care that all model users will treat the model correctly. The model manager will take care of the version control activities.

The objective of this course is to train the student to become a model manager.

This is mainly concerning subsetting and version control and model management strategy.

The student will also learn which housekeeping activities exist and how they should be executed.

The course includes the following subjects:

- Definition and control of subsets
- Up and download of models
- Model user types
- Version control: common ancestry
- Trial migration and migration
- Trial adoption and adoption
- Comprehensive exercises about subsetting, version control, adoption and migration
- Model management strategy. What are the possibilities and the decisions to make?

After discussion of the theory many hands on exercises guarantee that the student has achieved a good level of practical skills.

The duration of the course is 4 days.

This training is meant for model managers.

The student must have completed Basic of All Round Developer training.

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For Whom?

Prerequisites

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Version Control

Training programme

The objective of the course is to train the student to understand, plan and execute version control activities.

He will learn which model management strategies exist, what the (dis)advantages of such strategies are. He will be able to apply the strategy and manage the models and additional tasks.

Housekeeping tasks are discussed and how they should be performed.

The course includes the following subjects:

- Version control
- Common ancestry
- Model analysis
- Trial migration and migration
- Trial adoption and adoption
- Comprehensive exercises on adoption and migration
- Model management strategy: what are possibilities and choices?

After the theory presentations many hands on tasks are performed.

The duration of the course is 2 days.

This training is meant for those who deal with version control using Gen.

The student must have completed Basic of All Round Developer training.

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For Whom?

Prerequisites

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Subsetting

Training programme

The objective of the course is to provide the student with all knowledge and skills to be able to work with all aspects of subsets.

The student will learn how subsets for specific project tasks have to be defined and how they can be used effectively.

Housekeeping tasks will be discussed and how they should be done.

The course includes the following subjects:

- Definition of project tasks for developers
- Definition of the subsets
- Up and download of models and subsets
- Hints and tips for working with subsets
- Subset management
- Comprehensive exercises with subsets

After the theory presentations many hands on tasks are performed.

The duration of the course is 2 days.

This training is meant for those who create model subsets.

The student must have completed Basic of All Round Developer training.

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Prerequisites

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Gen for the Database Administrator

Training programme

The objective of this course is to teach the Database Administrator (DBA) all important aspects of role of the database. This concerns the design and generation of the database and the down stream effects of the application design. The DBA will get an introduction in Gen to become familiar with the whole Gen area.

He will learn how the database performance of the generated system can be influenced and improved by a good design.

On completion the DBA will be competent to discuss with the developers about the DB-action statements.

The course includes the following subjects:

- Overview Gen
- Design of a database in Gen
- Generation of a database using Gen
- Design and generation of a basic application
- Design of entity action statements to achieve a good performance
- Factors influencing the application's performance
- Views and performance
- Persistent views
- Gen and DB2

After discussion of the theory many hands on exercises guarantee that the student has achieved a good level of practical skills.

The standard duration is 5 days.

If the student has completed the Basic or All Round Developer course, the duration is 3 days.

This training is meant for database administrators.

The student must have experience as a database administrator.

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Component Based Development (CBD)

Training programme

The objective of the course is to train the student to develop according the principles of Component Based Development (CBD).
He will learn to specify components, to implement and publish them. Moreover he will be able to develop applications using predefined components.

On completion of the course the student is well prepared to start in a CBD project.

The course includes the following subjects:

- What are components in Gen?
- Definition of components
- Specification of components
- Implementation of components
- Mapper action diagrams
- Application assembly
- Publishing of components

After the theory presentations many hands on tasks are performed.

The standard duration of the course is 2 days.

This training is meant for those who will build CBD applications using Gen.

The student must have completed Basic of All Round Developer training.

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DB2 for the Gen Developer

Training programme

The objective of the course is enable the student to build applications with well performing database actions. The concepts and features of the database management system DB2 are discussed. He will learn which features are available for Gen and how Gen makes use of these features. Because of many exercises the student will learn to write well performing READ statements. On completion the developer of Gen applications will be able to build more effective and efficient DB actions in Gen.

The course includes the following subjects:

- Introduction DB2
- Generation of DB objects
- Data integrity
- Generated embedded SQL
- SQL restrictions and special features
- DB2 application performance
- DB2 physical design and performance
- Additional DB2 topics
- RPROF and the Gen application
- Scrolling in Gen applications
- Batch design considerations

After the theory presentations many exercises are performed.

The duration of the course is 3 days.

This training is meant for developers who work with applications generated for DB2.

The student must have completed Basic of All Round Developer training and have some knowledge of SQL.

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Other courses

1. Performance

Many performance issues can be prevented by correct modelling in Gen. The student will learn which aspects are responsible for the bad performance. He will know how to model them. Hands on exercises provide him with practical skills. (1 day).

2. Refresher course

Developers which did not work with Gen for a long time may have to refresh their knowledge. A programme to give them back their Gen knowledge and skills can be arranged.

3. Developer Web System

Gen has the opportunity to offer the functionality of legacy systems to their users using web technology.

The objective of this course is to train the student to develop applications having a browser interface, generated for the java or .Net environment.

4. Your tailored training programme

Our list of Educagen modules is very comprehensive and flexible. Any programme of your choice can be arranged using this list of modules to meet your training needs.

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