Panorama
training catalogue
2024

Training center
CODRA
SOFTWARE LTD

Organize your training

Inter-company training (Face-to-Face or E-Training)

- Face-to-Face:
  The Inter-company training is planned at our head office or in our branch premises.
  The number of trainees is set at a maximum of 8 people.
  Codra provides one PC per person.
  Lunch and tea & coffee breaks are provided by Codra Software Limited for Face-to-Face.

- E-Training:
  The training is delivered remotely, via Microsoft Teams (no need to have a Teams account, we require only an internet connection).
  The number of trainees is set at a maximum of 6 people.
  Each participant should preferably have:
    - A PC with a webcam and a microphone (to allow interaction with the trainer)
    - 2 screens to follow both the presentation and carry out the manipulations
    - A good internet connection
  Codra provides a Panorama remote software infrastructure: each trainee will connect, through our training portal, to a VM of our infrastructure.

Intra-company training (Face-to-Face or E-Training)

- Face-to-Face:
  The Intra-company training is planned at your premises on the agreed date (Contact the training department to set a date).
  The number of trainees is set at a maximum of 5 people.
  The training room is provided by the company and must include:
    - One PC per person (at least one PC for two), see below for software requirements
    - A video projector or a large screen with HDMI connection
    - A whiteboard.

- E-Training:
  The training is delivered remotely, via Microsoft Teams (no need to have a Teams account, we require only an internet connection).
  The number of trainees is set at a maximum of 5 people.
  Each participant should preferably have:
    - A PC with a webcam and a microphone (to allow interaction with the trainer), see below for software requirements
    - 2 screens to follow both the presentation and carry out the manipulations
    - A good internet connection

- Software requirements for the machine:
    - Windows 10 64-bits
    - Panorama Suite (E2), Please download through our Customer Portal my.codra.net (registration required)
    - Microsoft SQL Server, express edition is enough (https://www.microsoft.com/en-US/download/details.aspx?id=101064)
    - Microsoft SQL Server Management studio, Please download through Microsoft website (here). Make sure you can create and configure a database before the training.

- Nota: Codra has a Panorama remote software infrastructure, which can be used for this type of training depending on this infrastructure availability (contact the training department for details).

Prepare your stay

Coming to Codra Software Limited ([Access to CODRA SOFTWARE Limited)](#)
Adamson House, Towers Business Park,
Wilmslow Road, Didsbury, Manchester,
Greater Manchester, M20 2YY
Tel: [+44 (0)161 955 4460](#)

Access to the premises
- Contact reception
- They will bring you to the training room

Staying near Codra Software
Codra has set up a list of Hotels near the office.

Procedure of your registration

- Upon receipt of the order or the registration form, the Company receives an acknowledgement of receipt by email.

- One month before the beginning of the training, the person in charge of the follow-up of the training receives:
  - An invitation to attend the training course, by email, accompanied by:
    - Access map
    - List of hotels near Codra Software

- On the last day of the training, the trainer gives the trainee an evaluation survey.

- At the end of the training course, the company receives the invoice accompanied by the training certificate and the signature sheet by post.

Our indicators for 2023:

- 568 participants.
- 102 trainings sessions (Inter / Intra).
- 435 trainings days.

- Average of 9,10 / 10 concerning the satisfaction of participants on the training offer.
- Average of 9,13 / 10 concerning the organisation of training sessions.
- Average of 9,34 / 10 concerning the trainers.

Panorama E2 - Basis

OBJECTIVE
This Panorama E2 training provides the basic skills and the development methodology for Panorama E2 monitoring software. Following this training, you will be able to develop and integrate an application using the basic concepts of supervision in a single PC environment.

PROGRAM

Theme 1: Data acquisition
Collect and process your real-time data and ensure the communication is working.
- Implement OPC DA acquisition
- Implement communication with an Modbus TCP/IP automate
- Keep an eye on all my communications
- Implement processes and corrections on acquired data

Theme 2: Create your HMI
Learn how to develop simple and effective HMIs. Set up management of your operators within the supervision:
- Design custom-made HMI
- Add animation and user controls
- Set up navigation and operation of the HMI
- Integrate operating controls
- Manage app users

Theme 3: Modeling an app
Create components adapted to your app's needs:
- Modeling the equipment to supervised
- Create components
- Automate objects configuration
- Use object library

Theme 4: Enrich an app
Incorporate functions into your app to use your data collection and drive your installation:
- Integrate advanced treatments by scripts
- Manage and display the defaults with the alarm
- Present the data to be exploited with curves
- Deploy your app on a multi-machine infrastructure

REQUIREMENTS
Participants should be familiar with the Windows environment and associated tools.

TARGET AUDIENCE
Technicians, developers, engineers or automation engineers.

EDUCATIONAL METHOD
Learning, concrete exercises, questions/answers.
PowerPoint presentation.
Training manual.

EVALUATION
No evaluation.

EXECUTION AND RESULTS FOLLOW UP
Continuous checking: none.
Registration & training certificate.

DURATION AND SCHEDULES
5 days / 35 hours
INTER
- Monday 9:00 am to Friday 1:00 pm
INTER / INTRA (E-Training)
- Monday 9:00 am to Friday 12:00 am
INTRA
- - Monday 1:00 pm to Friday 1:00 pm

DATES
Visit our website

PRICES
INTER: Contact our sales department
(Lunch and tea & coffee breaks are provided by Codra Software Limited for Face-to-Face).

INTRA: Contact our sales department
(Trainer's expenses not included for Face-to-Face).

Panorama E2 - Advanced

OBJECTIVE
This training will allow you to develop your knowledge and skills regarding corrective or evolutive maintenance for Panorama E2.

PROGRAM

Theme 1: Anticipate
Anticipate Panorama version update and integrate new functionalities in the application:
- ➢ Panorama version update methodology
- ➢ Settings gallery optimization
- ➢ Alarm windows migration to PS2020
- ➢ Use of HMI component

Theme 2: Connect
Getting a more connected application: access to the application from smartphone, connected with IoT objects with worldwide dimension:
- ➢ Activate HMI mobile function
- ➢ Develop a multilingual application
- ➢ Communicate with IoT device

Theme 3: Optimize
Optimize an application to ease its development and maintenance.
- ➢ Use advanced functions of Panorama to facilitate development
- ➢ Use perfecting tools of application to find out settings errors
- ➢ Use diagnostic tools to fix your Panorama application

Theme 4: Reliable
Make the application functionality reliable by increasing its availability, by improving the infrastructure monitoring, and by anticipating application maintenance functions.
- ➢ Increase application availability
- ➢ Monitor the application executive infrastructure
- ➢ Simplify application maintenance

REQUIREMENTS
Participants must, at least, have completed the Panorama E2 version 5 training and be familiar with the Windows environment and associated tools.

TARGET AUDIENCE
Technicians, developers, engineers or automation engineers.

EDUCATIONAL METHOD
Learning, concrete exercises, questions/answers.
PowerPoint presentation.

EVALUATION
No evaluation.

EXECUTION AND RESULTS FOLLOW UP
Continuous checking: none.
Registration & training certificate.

DURATION AND SCHEDULES
2 days / 14 hours
9:00 am – 5:00 pm

DATES
Visit our website

PRICES
INTER: Contact our sales department
(Lunch and tea & coffee breaks are provided by Codra Software Limited for Face-to-Face).

INTRA: Contact our sales department
(Trainer's expenses not included for Face-to-Face).

Panorama E2 - Cybersecurity

OBJECTIVE
Acquire the basics to secure a Panorama SCADA application.

PROGRAM

Theme 1: Definitions
Basics of Cybersecurity:
- ➢ Aims of Cybersecurity
- ➢ Threats or hackers definition

Theme 2: Be used to the concepts
Understand the concept of Cybersecurity:
- ➢ Infrastructure prerequisite to implement panorama application
- ➢ Identify users' roles on the application
- ➢ Define accesses rights for application folders

Theme 3: 1st security level
- ➢ Methodology to create a secure application
- ➢ Secure the application and objects library
- ➢ Secure exploitation from the application (white list, integrated connection to databases, use of an external directory)
- ➢ Practice: Apply this 1st level of security to an existing application

Theme 4: 2nd security level
Secure your execution infrastructure:
- ➢ Prerequisite on application posts and good practices
- ➢ Reduce exposition surface
- ➢ Secure the different posts profiles: functional servers, exploitation post, database server, archiving, historian server
- ➢ Practice: Secure an executive infrastructure to integrate a distributed application

REQUIREMENTS
Participants should be familiar with:
- • Panorama E2 environment
- • Panorama Studio tool
- • Panorama E2 executive infrastructure and get in place an exploitation application
- • Windows environment and associated tools

TARGET AUDIENCE
Technicians, developers, engineers or automation engineers.

EDUCATIONAL METHOD
Learning, concrete exercises, questions/answers.
PowerPoint presentation.

EVALUATION
No evaluation.

EXECUTION AND RESULTS FOLLOW UP
Continuous checking: none.
Registration & training certificate.

DURATION AND SCHEDULES
2 days / 14 hours
9:00 am – 5:00 pm

DATES
On request, please contact the sales department.

PRICES
INTER: Contact our sales department
(Lunch and tea & coffee breaks are provided by Codra Software Limited for Face-to-Face).

INTRA: Contact our sales department
(Trainer's expenses not included for Face-to-Face).
(*need to use Codra's Panorama remote software infrastructure)

Panorama H2

OBJECTIVE
This training allows the implementation of Panorama's data historian. From installing the Historian server, function to creating your reports: this training covers all steps of panorama H2 implementation.

PROGRAM

Theme 1: The Historian Server
Install and set up the Historian server to perfectly meet your needs:
- Advanced installation of the H2 server on an existing database.
- Set up the Historian server for an optimal use.
- Use the Configuration and Administration tool on the Historian Server

Theme 2: Application H2
Collect, process and structure your H2 data:
- Collect and process installation data
- Structure, Identify and Describe your H2 data and Alarms
- Define the types of H2 treatments to apply to data.
- H2 data from ready-to-use reports

Theme 3: Reporting H2 Clients
Explore, analyze and create your dashboards in H2 reporting:
- Introducing the various solutions available to view H2 data
- Create your own dashboards to analyze your data
- Use publishing and reporting functions

Theme 4: Pairing with Panorama E2
Easily integrate H2 function into an existing E2 application:
- E2 alarms in H2
- Exporting data from business objects to H2
- Display data from the Historian server in the Panorama app
- Use the Archive transfer to H2 tool

REQUIREMENTS
Participants should be familiar with the Windows environment, associated tools and the SQL language.

TARGET AUDIENCE
Technicians, developers, engineers or automation engineers.

EDUCATIONAL METHOD
Learning, concrete exercises, questions/answers.
PowerPoint presentation.

EVALUATION
No evaluation.

EXECUTION AND RESULTS FOLLOW UP
Continuous checking: none.
Registration & training certificate.

DURATION AND SCHEDULES
3 days / 21 hours
9:00 am – 5:00 pm

DATES
Visit our website

PRICES
INTER: Contact our sales department (Lunch and tea & coffee breaks are provided by Codra Software Limited for Face-to-Face).

INTRA: Contact our sales department (Trainer's expenses not included for Face-to-Face).
(*need to use Codra's Panorama remote software infrastructure)

Panorama E2 – User Classes (Plugins)

OBJECTIVE
This training allows you to create your own objects (HMI elements, web services…) to integrate as a native elements of Panorama.

PROGRAM

Theme 1: Definitions
Presentation of training concepts:
- What is an user class ?
- What are the prerequisites
- Reminders on C# programing

Theme 2: Develop a user class
Be familiar with development tools:
- Facilitate user class integration by using descriptor class assistant generator
- Knowledge to create a simple user object
- Adjust your user class

Theme 3: Advanced functions
Exploit the entire Panorama infrastructure in your user class:
- Implement proprieties notifications
- Implement timed-qualified script
- Generate external events
- Follow application proprieties
- Manage the objects life-cycle

Theme 4: Practice
From specification to user class development:
- Define treatments for initialization and stop of the class
- Generate external events
- Put exit priority notifications in place
- Collect and treat the quality and date of proprieties
- Dimension Panorama license

REQUIREMENTS
Participants must have completed the Panorama E2 training and be familiar with the Windows environment, associated tools and the C# programming language.

TARGET AUDIENCE
Technicians, developers, engineers or automation engineers.

EDUCATIONAL METHOD
Learning, concrete exercises, questions/answers.
PowerPoint presentation.

EVALUATION
No evaluation.

EXECUTION AND RESULTS FOLLOW UP
Continuous checking: none.
Registration & training certificate.

DURATION AND SCHEDULES
2 days / 14 hours
9:00 am – 5:00 pm

DATES
On request, please contact the sales department.

PRICE
INTRA: Contact our sales department
(Trainer's expenses not included for Face-to-Face).

Panorama E2 - Persist (API)

OBJECTIVE
This training allows you to get competencies to access Panorama E2 through an external program. You will be able to interface with Panorama "Persist" motor to create, browse or modify a panorama application.

PROGRAM

Theme 1: Create a Panorama application
Correctly use Persist interfaces:
- ➢ Model object persist
- ➢ Prerequisites
- ➢ Create an application using API persist

Theme 2: Access to objects
Access to units, objects and proprieties while your application is running:
- ➢ Create object in an application
- ➢ Modify objects proprieties values or links
- ➢ Access to sub-objects

Theme 3: Export application objects
Export your application structure in a random format:
- ➢ Export objects from application
- ➢ Browse objects collections
- ➢ Get objects proprieties configuration

Theme 4: Graphic objects
Designate your HMIs from an external tool:
- ➢ Object model HMICtrl
- ➢ Create a graphic object
- ➢ Create an animation or an order on a graphic object

REQUIREMENTS
Participants must have completed the Panorama E2 training and be familiar with the Windows environment, associated tools and the C# programming language.

TARGET AUDIENCE
Technicians, developers, engineers or automation engineers.

EDUCATIONAL METHOD
Learning, concrete exercises, questions/answers.
PowerPoint presentation.

EVALUATION
No evaluation.

EXECUTION AND RESULTS FOLLOW UP
Continuous checking: none.
Registration & training certificate.

DURATION AND SCHEDULES
1 day / 7 hours
9:00 am – 5:00 pm

DATES
On request, please contact the sales department.

PRICE
INTRA: Contact our sales department (Trainer's expenses not included for Face-to-Face).

Panorama P2

PEGAGOGICAL OBJECTIVE

This training allows you to acquire basic competencies on supervision software Panorama P2. These competencies will allow you to develop and/or integrate an industrial supervision application

PROGRAM

Presentation and concept
Environment WINDOWS
Panorama Concept

Panorama view editor
Fundamental notions of the Panorama view editor
Organization of the Panorama views

Database
Process database
Principle of the network setting

Animation of the views
Creation of the views
Configuration of the views
Creation of action lists
Calendars of actions
Creation internal variables and formula variables
Generic objects
Using property replacement
Use of instantiations

Users
Creating Panorama users

Alarm management
Basic Principles
Configuration of alarms, templates presentation, alarm windows
Interactive control of treatments
Examples of alarm management
Example of consignment status in an alarm history window

Archiving - drawing curves
Run-of-river archiving
Selective archiving
Drawing curves

Recipes
Configuring recipes
Recipes usage

REQUIREMENTS

Participants should be familiar with the Windows environment and associated tools.

TARGET AUDIENCE

Technicians, developers, engineers or automation engineers.

EDUCATIONAL METHOD

Learning, concrete exercises, questions/answers.
PowerPoint presentation.
Training manual.

EVALUATION

No evaluation.

MEANS OF FOLLOWING UP EXECUTION AND RESULTS

Continuous checking: none.
Registration & training certificate.

DURATION AND SCHEDULES

5 days / 35 hours
INTRA Monday 1:00 pm to Friday 2:00 pm

DATES

On request, contact the sales department.

PRICE

INTRA: Contact our sales department
(Trainer's expenses not included for Face-to-Face).

CODRA
SOFTWARE LTD

Course registration form
Your order reference: ....

Training organization	**Your company**
Codra Software Limited Adamson House, Towers Business Park, Wilmslow Road, Didsbury, Manchester, Greater Manchester, M20 2YY UNITED KINGDOM Registered in England 5998131 VAT GB 894 0440 15	Company name: .... Address: .... Postal code/City: .... Contact person: .... Phone number: .... E-mail:...
Course title	....
Date – Duration	From .... to .... Week no. …… - Duration …… hours
Location **(On site training)**	☐ Inter-company training on Codra premises: Adamson House, Towers Business Park, Wilmslow Road, Didsbury, Manchester, Greater Manchester, M20 2YY, UNITED KINGDOM ☐ Intra-company training (specify if a different address is used): ....
Training dispensed in	☐ On site ☐ Remotly (On Teams)

Participant(s)	Last name / First name	E-mail
	....	....
	....	....
	....	....
	....	....
	....	....

Pricing	Training .... ex VAT ....All included Lunch is provided by Codra when "Codra onsite training" is chosen. Expenses .... ex VAT ....All included Concerning "Company onsite training", trainer's expenses shall be charged to the Company - quote on request

Terms and conditions:

This registration form is an order; by returning the completed the Company accept the terms and conditions mentioned below.

The invoice is due within 30 days following the training. The full amount for the course shall be due immediately for any cancellation, even in the event of force majeure, less than 10 working days prior to the start of the session.

Codra reserves the right to cancel a course if there are not enough participants; in this case, participants will be informed and another date proposed.

This agreement goes into effect upon its signature by the Company, for the duration of the training activity in question.

Any dispute that cannot be settled via an amicable agreement shall be under the jurisdiction of the Evry Commercial Court (91).

For the Company
Name and signature of responsible, date and stamp of the Company

Codra Software Ltd. - Business Office
Adamson House - Towers Business Park
Wilmslow Road - Didsbury - Manchester M20 2YY – UK
+44 (0) 1 244 893221 - sales-panorama@codra.fr - https://codra.net

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