

## **PAPILLON-8 AFIS Database Administrator Training**

**Course duration:** 8 training days (or 12 calendar days, incl. days of arrival and departure and two days off)

### **Admission requirements to learners:**

- Certified PAPILLON-8 AFIS operator
- At least 1 year of experience in using PAPILLON AFIS

<b>Form of Classes</b>	<b>Qty</b>	<b>Hours</b>
<b>Lectures, lectures-presentations, lectures-demonstrations</b>	<b>22</b>	<b>23 h 20 min</b>
<b>Demonstrations and demonstration with practice</b>	<b>8</b>	<b>7 h 50 min</b>
<b>Practice</b>	<b>11</b>	<b>10 h 50 min</b>
<b>Examination</b>	<b>1</b>	<b>7 h 20 min</b>
<b>Testing</b>	<b>1</b>	<b>6 h 20 min</b>
<b>Meetings</b>	<b>2</b>	<b>3 h</b>
<b>TOTAL</b>		<b>58 h 40 min</b>

*Version 2*

## COURSE SYLLABUS

The plan of this course is scheduled with provision for coffee breaks and lunch hours.

Topic / Subject	Description	Hours
<b>OPENING SESSION</b>	<ul style="list-style-type: none"> <li>• Filling in questionnaires.</li> <li>• Safety Instructions.</li> <li>• Fire Safety Instructions.</li> <li>• Code of behavior on the company premises</li> </ul>	2 h
<b>INTRODUCTORY LECTURE</b> Main System Administrating Tasks in PAPILLON AFIS DB	<ul style="list-style-type: none"> <li>• Goals and Tasks of the Course</li> <li>• Introduction to the Course Syllabus</li> <li>• AFIS database administrator's tasks</li> <li>• Risks inherent in infringement of the AFIS exploitation conditions</li> </ul>	1 h 40 min
<b>LECTURE-PRESENTATION</b> PAPILLON AFIS Hardware and Software: System Architecture	<ul style="list-style-type: none"> <li>• Conceptual and logical structure of PAPILLON AFIS</li> <li>• System configuration</li> <li>• Machine functions</li> </ul> <p><b><u>Network Complex:</u></b></p> <ul style="list-style-type: none"> <li>- stations' mission</li> <li>- host names</li> <li>- users (<i>st</i> and <i>admin</i>)</li> <li>- pilot (program for managing and transmitting tenprints and latent prints through communication channels)</li> </ul> <p><b><u>Server:</u></b></p> <ul style="list-style-type: none"> <li>- mission</li> <li>- host name</li> <li>- authorized users</li> </ul> <p><b><u>Processes:</u></b></p> <ul style="list-style-type: none"> <li>- assignment of licenses</li> <li>- authorization</li> <li>- index data synchronization</li> <li>- input station</li> <li>- Database Viewer</li> <li>- search manager</li> <li>- distribution of index data for matching</li> <li>- management of automatic stations</li> <li>- automatic object transfer program</li> <li>- Express ID Checks Server</li> </ul> <p><b><u>Workstation:</u></b></p> <ul style="list-style-type: none"> <li>- mission</li> <li>- host name</li> <li>- users <i>st</i> and <i>admin</i></li> </ul> <p><b><u>Processes:</u></b></p> <ul style="list-style-type: none"> <li>- image processors</li> <li>- Database Viewer client</li> <li>- PAPILLON AFIS Main Menu</li> <li>- synchronization</li> <li>- management of automatic stations</li> </ul> <p><b><u>Matcher:</u></b></p> <ul style="list-style-type: none"> <li>- mission</li> </ul>	3 h 40 min

	<ul style="list-style-type: none"> <li>- host name</li> <li>- users</li> </ul> <p><b>Processes:</b></p> <ul style="list-style-type: none"> <li>- distribution of index data for searches</li> <li>- matching</li> <li>- synchronization</li> <li>- automatic stations management</li> </ul> <p><b>Membox:</b></p> <ul style="list-style-type: none"> <li>- mission</li> <li>- host name</li> <li>- users</li> </ul> <p><b>Processes:</b></p> <ul style="list-style-type: none"> <li>- control over operation with database segments</li> <li>- synchronization</li> <li>- automatic stations management</li> </ul> <p><b><u>Booking Station (Station for electronic fingerprinting):</u></b></p> <ul style="list-style-type: none"> <li>- mission</li> <li>- host name</li> <li>- users</li> </ul>	
<b>LECTURE -PRESENTATION</b> Technology of Tenprint Entry in PAPILLON database	Technological workflow of tenprint entry procedure: <ul style="list-style-type: none"> <li>- interactive processes</li> <li>- background processes</li> </ul>	1 h
<b>LECTURE -PRESENTATION</b> Technology of Latent Print Entry in PAPILLON database	Technological workflow of latent print entry procedure: <ul style="list-style-type: none"> <li>- interactive processes</li> <li>- background processes</li> </ul>	40 min
<b>LECTURE – PRESENTATION</b> Database Structure	<ul style="list-style-type: none"> <li>• Concept of divisions</li> <li>• Concept of segments</li> <li>• Numeration and attributes (flags)</li> <li>• Segment structure</li> <li>• Concept of a macrosegment</li> </ul>	2 h
<b>DEMONSTRATION</b> Database Viewer	<ul style="list-style-type: none"> <li>• Operations over database lists (choosing and sorting)</li> <li>• Making selections from the database</li> <li>• Viewing text and images</li> <li>• Deletion of objects from the database</li> <li>• Work with LT-TP candidate lists</li> </ul>	1 h
<b>PRACTICE</b> Database Viewer	Tasks on performing different operations in the database. Tutor's guidance available.	1 h
<b>DEMONSTRATION</b> Recommendations on Database Maintenance	<ul style="list-style-type: none"> <li>• Verification of TP-TP search results</li> <li>• Verification of TP-LT search results</li> <li>• Verification of LT-TP search results</li> <li>• Verification of LT-LT search results</li> <li>• Operation with identified objects</li> <li>• Operation with duplicated objects</li> </ul>	20 min
<b>DEMONSTRATION &amp; PRACTICE</b> Express ID Check Workstation (MDS)	<ul style="list-style-type: none"> <li>• Mission of PAPILLON MDS Workstation</li> <li>• Express ID Check session</li> <li>• Creating electronic tenprints through livescan fingerprinting</li> <li>• Interaction with higher-level AFISs</li> </ul>	1 h 20 min
<b>LECTURE-DEMONSTRATION</b> User Management in PAPILLON	Creation of new user accounts, editing and deletion Database access rights:	1 h

AFIS	<ul style="list-style-type: none"> <li>• common</li> <li>• by DB divisions</li> <li>• group</li> </ul> Aliases of database partitions Settings of an access to AFIS services	
<b>PRACTICE</b> User Management in PAPILLON AFIS	Tasks on creating new user accounts and controlling access to the AFIS. Checking and consulting by the tutor.	1 h
<b>LECTURE-DEMONSTRATION</b> Control over Background Processes (Automatic Stations)	<ul style="list-style-type: none"> <li>• Program description</li> <li>• Current status of automatic stations</li> <li>• Automatic stations monitoring and management</li> <li>• Overall monitoring of the system</li> <li>• Work with err-files</li> </ul>	40 min
<b>LECTURE – PRESENTATION</b> Distribution of Index Data on Matchers	<ul style="list-style-type: none"> <li>• Concept of index data</li> <li>• Complete distribution of index data</li> <li>• Incomplete distribution of index data</li> </ul>	30 min
<b>LECTURE–DEMONSTRATION</b> Segment Management	<ul style="list-style-type: none"> <li>• Check for availability of empty segments in DB</li> <li>• Creation of segments</li> <li>• Creation of segments for deleted tenprints/ latent prints</li> <li>• Creation of macrosegments</li> <li>• Diagnostics and generation of tenprint groups (groups of mates)</li> <li>• Diagnostics and correction of candidate lists</li> <li>• Correction of queues of search results</li> <li>• Synchronization of index data on mirroring memboxes</li> <li>• Purging deleted files from segments</li> <li>• Copying segments from external media</li> <li>• Unlocking segments after emergency shutdown of the server</li> </ul>	2 h 30 min
<b>PRACTICE</b> Segment Management	Tasks on various operations with segments. Checking and consulting by the tutor.	2 h
<b>DEMONSTRATION &amp; PRACTICE</b> PAPILLON-M Mobile Versatile Professional Workstation	<ul style="list-style-type: none"> <li>• Mission</li> <li>• Configuration</li> <li>• Functional capabilities</li> </ul>	40 min
<b>LECTURE-DEMONSTRATION</b> Work with Index Data	<ul style="list-style-type: none"> <li>• Diagnostics and recovery of index data on the server, viewing logs</li> <li>• Diagnostics and recovery of index data on all matchers, viewing logs</li> <li>• Synchronization of index data between the server and matchers</li> <li>• Distribution of index data on matchers</li> </ul>	1 h
<b>PRACTICE</b> Work with Index Data	Tasks on various operations with index data. Checking and consulting by the tutor.	40 min

<b>LECTURE - PRESENTATION</b> Ensuring Data Integrity in the AFIS (Archive Manager and Backup Manager)	<ul style="list-style-type: none"> <li>• Archiving in PAPILLON AFIS</li> <li>• Saving a backup copy of a segment</li> <li>• Concept of current and periodic archives</li> <li>• System backup</li> </ul>	20 min
<b>LECTURE-DEMONSTRATION</b> Recording a Segment of Tenprints on a CD/DVD	<ul style="list-style-type: none"> <li>• Exploring the CD-recorder application</li> <li>• Copying a full tenprint segment onto a CD/DVD</li> </ul>	40 min
<b>LECTURE-DEMONSTRATION</b> Work with Archives	<ul style="list-style-type: none"> <li>• Program description</li> <li>• Work with current archives: <ul style="list-style-type: none"> <li>- status control</li> <li>- deletion of archives</li> </ul> </li> <li>• Work with periodic archives</li> <li>• Recording of archives on external mediums</li> </ul>	50 min
<b>LECTURE-DEMONSTRATION</b> Work with Backups	<ul style="list-style-type: none"> <li>• Backup constituents</li> <li>• Program description</li> <li>• Monitoring of system backups</li> <li>• Backup of system working files</li> <li>• Recording of backup copies on external mediums</li> </ul>	40 min
<b>PRACTICE</b> Data Integrity in the AFIS. Work with Archives. Work with System Backups. Recording of a Tenprint segment on a CD/DVD	Tasks on measures ensuring data integrity in the AFIS: operation with archives, system backups, recording of a segment of tenprints on a CD/DVD. Checking and consulting by the tutor.	30 min
<b>DEMONSTRATION &amp; PRACTICE</b> Replacement of Polymeric Coating (Membrane) of the Scanning Prism	<ul style="list-style-type: none"> <li>• How to determine the need in replacing the membrane on the livescan device</li> <li>• Procedure for replacing the membrane of the scanner</li> <li>• Materials and tools needed to replace the membrane</li> </ul>	1 h 40 min
<b>LECTURE-DEMONSTRATION</b> Recovery of Database Objects. Recovery of Files from Backups.	<ul style="list-style-type: none"> <li>• Recovery of deleted objects in the database</li> <li>• Use of archives for object recovery</li> <li>• Recovery of system files from backups</li> </ul>	40 min
<b>PRACTICE</b> Recovery of Database Objects. Recovery of Files from Backups.	Tasks on recovering database objects and system files. Checking and consulting by the tutor.	30 min
<b>LECTURE - PRESENTATION</b> Data Exchange with Other AFISs	<ul style="list-style-type: none"> <li>• Objects export</li> <li>• Objects import</li> <li>• Objects relocation within the local DB</li> </ul>	20 min
<b>LECTURE-DEMONSTRATION</b> Export and Import of Objects from and to the AFIS Database. Settings to Mount Devices and Remote Systems.	<ul style="list-style-type: none"> <li>• Export of objects: objectives and procedure</li> <li>• Import of objects: objectives and procedure</li> <li>• Relocation of objects within the local database</li> <li>• Work with external mediums</li> <li>• Conversion of files to ANSI/NIST format</li> <li>• Customization of print forms for lists</li> <li>• Import of objects in AFIS and ANSI/NIST formats</li> <li>• Adding of new devices to the exchange module</li> </ul>	2 h 10 min

<b>PRACTICE</b> Export and Import of Objects from and to the AFIS Database. Settings to Mount Devices and Remote Systems.	Tasks on exporting and importing objects from and to the AFIS database, and on setting up the mounting parameters for devices and remote systems. Checking and consulting by the tutor.	1 h 30 min
<b>LECTURE - DEMONSTRATION</b> Creation and Editing Text Data Entry Forms. Work with Picklists and Dictionaries	<ul style="list-style-type: none"> <li>• Program description</li> <li>• Creating new text data forms for tenprints, editing and deleting of the existing ones: <ul style="list-style-type: none"> <li>- for initial text data entry</li> <li>- for selecting tenprints by specific criteria</li> <li>- for editing text details of a tenprint stored in the database</li> </ul> </li> <li>• Creating and activating picklists and dictionaries (simple and multilevel)</li> <li>• Editing picklists</li> </ul>	30 min
<b>PRACTICE</b> Creation and Editing Text Data Entry Forms. Customization of Picklists and Dictionaries.	Tasks on creating and editing text data entry forms and on customizing picklists and dictionaries. Checking and consulting by the tutor.	1 h
<b>LECTURE-DEMONSTRATION</b> Search Tracking	<ul style="list-style-type: none"> <li>• Program description</li> <li>• Searches monitoring</li> <li>• Distribution of search types on matchers (search range control)</li> <li>• Changing request priority (urgency)</li> </ul>	40 min
<b>EXAMINATION</b>	Tasks on the covered subjects. Checking and consulting by the tutor.	7 h 20 min
<b>LECTURE-DEMONSTRATION</b> Statistics Gathering. Viewing Statistics by Operators.	<ul style="list-style-type: none"> <li>• Statistics Viewer: program description and capabilities</li> <li>• Procedure</li> <li>• Recording of statistic reports to file</li> <li>• Printing of statistic reports</li> </ul>	30 min
<b>PRACTICE</b> Statistics Gathering. Viewing Statistics by Operators.	Tasks on gathering various statistics, including that on operators. Checking and consulting by the tutor.	30 min
<b>DEMONSTRATION</b> Gathering Statistics about the Database	Use of the generator to create statistical reports on the database.	1 h
<b>LECTURE-PRESENTATION</b> Interaction between AFIS, Polyphem and Statistics Generator	Interaction between the AFIS system, Polyphem and the Statistical Report Generator.	30 min
<b>LECTURE (Survey)</b> Procedure to Switch On/Off the AFIS Hardware	Proper sequence of switching the AFIS system on and off.	30 min
<b>DEMONSTRATION</b> Replacement of Polymeric Coating (Membrane) of the Scanning Prism	Testing of the previously replaced membrane of the fingerprint scanner.	20 min
<b>DEMONSTRATION</b> Technology of Bulk Tenprint Entry	<ul style="list-style-type: none"> <li>• Description of the technology</li> <li>• Text data entry and image acquisition during the bulk entry session</li> </ul>	1 h 30 min

<b>PRACTICE</b> Questions from PAPILLON Hotline Service	A session of questioning of the trainees for their knowledge of PAPILLON AFIS operation.	1 h 30 min
<b>PRACTICE</b> Preparation for Final Examination	<ul style="list-style-type: none"> <li>• Consultations of the tutor on trainees' questions</li> <li>• Preparing for the final exam</li> </ul>	40 min
<b>LECTURE</b> Information Security in PAPILLON AFIS	Talk about the importance and necessity to provide confidentiality of information resources of the AFIS site	20 min
<b>FINAL EXAMINATION</b>	<p>Instructions on the examination procedure</p> <p>Performing tasks specified on question cards comprising two parts:</p> <ul style="list-style-type: none"> <li>- writing test</li> <li>- practical task on diagnostics and troubleshooting</li> </ul> <p>Checking the tasks by the tutor.</p> <p>Filling in the examination worksheet.</p>	6 h 20 min
<b>CLOSING SESSION</b>	<ul style="list-style-type: none"> <li>• Summarizing the outcome of the training, exchanging opinions and views</li> <li>• Giving out documentation</li> </ul>	1 h