Introduction

This document provides a description of Hexagon Geospatial’s offerings for specific use case trainings.

Target Audience

Luciad Portfolio product trainings are intended for:

- Customers new to Luciad Portfolio products,
- Customers experienced in Luciad Portfolio products who are interested in refreshing their knowledge and learning about the new capabilities, or
- New team members that have joined an existing project team and wish to benefit from a knowledge transfer and exchange with Hexagon Geospatial engineers, and as a result be up to speed with Luciad Portfolio products capabilities.

Training Organization

Luciad Portfolio trainings are organized for small groups for maximum exchange between the trainer and the trainees. Hexagon Geospatial offers two training formats for the Luciad Portfolio:

- **Seminar:** a classroom training where theoretical presentations are combined with hands-on exercises. The trainer assists the trainees with the exercises, reviews their solutions, and provides model solutions for the exercises at the end of the training.

- **Workshop:** a solution for a specific need is developed with the trainees. Workshops are less presentation-focused and spend more time on actual analysis, design, and implementation work with a clear benefit for the customer. The goal is to present tangible results at the end of the workshop.

Seminars and workshops can be organized on demand either on-site at customer premises or in our Hexagon Geospatial office in Leuven, Belgium. We offer on-demand trainings for organizations that wish to train a group of customers using the Luciad Portfolio.

Advanced sessions can be organized for customers who request additional training on topics that are not covered in standard trainings. Your sales manager can assist you in defining a custom training or workshop tailored to your specific needs. This document includes some suggestions of typical topics and formats. These trainings or workshops are prepared by the trainer-consultant to meet your demands.

Remote Training

Hexagon Geospatial also offers its standard portfolio of classroom trainings in a remote learning format with a supported self-study approach. The typical daily cycle of this way of working is:
1. A web conference (1-2h) with one of our expert trainers who will explain a part of the training and provide you with materials.

2. Self-study of the training materials.

3. Hands-on exercises (e.g. you independently try to solve some coding exercises).

4. A review web conference with the trainer. You will look at the solutions to the exercises and can ask any questions you may have.

This training approach offers great flexibility in terms of learning pace for each participant and the amount of time and effort spent by each participant on the training.

**Public Training**

Public training events are held regularly and are open to participants from different organizations attending simultaneously. Public trainings are perfectly suited for cost-efficiently training just one or two people, without the need to order on-demand training.

Public trainings are held quarterly at Hexagon Geospatial’s office in Leuven, Belgium. These events, which include multiple sessions, are a chance to visit us and meet other Luciad Portfolio users from all over the world.

When there is training interest from multiple organizations in a specific region, Hexagon Geospatial schedules public training events abroad, in all corners of the world. This provides an opportunity to attend a public training in your area.

**Registration**

Registering for a public training can be done in one of several ways, listed below. Any registration is completed upon payment of the invoice.

- Register online at [https://www.hexagongeospatial.com/about-us/events](https://www.hexagongeospatial.com/about-us/events). Public training events in our offices will be announced there well in advance.

- Contact your sales manager or our customer service team at customerservices.luciad.gsp@hexagon.com.

- Send a purchase order (PO) to customerservices.luciad.gsp@hexagon.com.

**Training Suggestions**

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<th>Level: Intermediate</th>
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<tbody>
<tr>
<td>Type</td>
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<tr>
<td>Custom training.</td>
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## Specific Use Case Training Description

<table>
<thead>
<tr>
<th>Goal</th>
<th>Gain a thorough understanding of one of the many LuciadLightspeed components and the functionality offered for implementing solutions for specific use cases. Learn about best practices for leveraging the offered functionality.</th>
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<tbody>
<tr>
<td>Target Audience</td>
<td>Software developers and software architects.</td>
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<tr>
<td>Prerequisites</td>
<td>LuciadLightspeed primary training (or equivalent experience) and elementary knowledge of Java and object-oriented programming.</td>
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<tr>
<td>Duration</td>
<td>1-3 days (depending on the component and specific interest).</td>
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<tr>
<td>Type</td>
<td>Custom training.</td>
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**Agenda**

- The training agenda will vary depending on the requested component(s). Recurring requests include:
  - **Dynamic Data**
    Learn how to optimally embed dynamic data in your LuciadLightspeed-based application. This includes visualizing real-time data and playback of recorded data. The course considers multi-threading and styling of thousands of moving objects.
  - **Terrain Elevation Analysis**
    Learn how to use terrain-related calculations such as line of sight, hypsometric calculations, and peak detection in LuciadLightspeed.
  - **Military Symbology**
    Learn how you can use LuciadLightspeed to model and visualize objects using military symbology such as MS-2525b/c or APP-6a/b.
  - **Spatial Databases**
    Learn how LuciadLightspeed supports spatial databases, such as Oracle, PostGIS, ARCSDE, and SQLite.
  - **Specific Data Formats**
    Learn how LuciadLightspeed models and displays data of a specific format and how you can customize this. Data formats could be s-57, KML, AIXM, or many others.
  - **C++ Integration**
    Learn how to seamlessly integrate LuciadLightspeed views in a C++ application.
  - **.NET Integration**
    Learn how to seamlessly integrate LuciadLightspeed views in a .NET application.

### 2020 Public Trainings
Prerequisites

Disk space requirements

Hardware requirements:

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<th>Supported and Recommended</th>
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Software requirements:

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<th>Operating system for Java based client (for example)</th>
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ensuring a scalable, sustainable future.

Hexagon’s Geospatial division creates solutions that deliver a 5D smart digital reality with insight into what was, what is, what could be, what should be, and ultimately, what will be.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 4.3bn USD. Learn more at hexagon.com and follow us @HexagonAB.

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