



TRIMBLE eCOGNITION ESSENTIALS

Powerful Out-of-the-box Land Cover Mapping Solution

TRIMBLE® ECOGNITION® ESSENTIALS SOFTWARE ALLOWS USERS AT ANY SKILL LEVEL TO QUICKLY PRODUCE HIGH-QUALITY, GIS-READY DELIVERABLES FROM IMAGERY

KEY FEATURES

Intuitive, graphical user interface to perform land cover mapping from satellite imagery

Guided workflows for effectively transforming image data into actionable intelligence

Improve productivity across the organization by reducing the time needed for geospatial image analysis

ALL-IN-ONE IMAGE ANALYSIS SOLUTION

Built on core eCognition software technology, Trimble® eCognition® Essentials offers users a complete out-of-the-box solution for object-based image analysis. With a focus on quickly obtaining quality results and actionable data, eCognition Essentials allows users to easily analyze and transfer image data into intelligent geospatial information - for example, creating land cover maps to be exported into a GIS database.

INTUITIVE GRAPHICAL INTERFACE

For anyone wishing to utilize remote sensing data, Trimble eCognition Essentials offers an easy-to-use, intuitive graphical user interface. With immediate access to automated segmentation and classification tasks, the software puts a sample-based image classification workflow right at the hand of a production-oriented user.

LESS COMPLEXITY, MORE CAPABILITY

Powered by proven eCognition technology, eCognition Essentials is a stand-alone application that covers all steps of sample-based image analysis in the remote sensing market. By applying predefined and structured rules to image analysis tasks, eCognition Essentials offers a streamlined workflow to quickly extract geospatial information from raw satellite image data. At any moment, only the most relevant actions will be displayed on the screen, while the sequence of components follows a pre-defined format to guide users towards optimal results.

SAVE TIME WITH AUTOMATED FUNCTIONS

Users can achieve professional results with minimal turnaround times thanks to automated image analysis functions. These functions include image segmentation and sample-based classification alongside a set of interactive tools for quality control. Automated functions allow GIS and Image Analysts to quickly create high quality deliverables, freeing their time to focus on the interpretation of results and decision-making.

ACCESS THE INSPIHERE DATA MARKETPLACE

With the Trimble InSphere Data Marketplace plug in for eCognition Essentials you can easily access remote sensing imagery and begin generating results immediately. The platform will be expanded constantly, with the following sets currently available:

- The Landsat 8 library features about 5,000 clear sky images of the United States, automatically added to the libraries for eCognition available free of charge.
- Digital Globe Precision Aerial data from the U.S. and Western Europe is also available.



FEATURES

FEATURE	DETAILS
Easy-to-use graphical interface	<ul style="list-style-type: none"> • Get right to work without long ramp-up times or prerequisite programming skills. With a minimum of training effort, the graphical user interface offers direct access to actions including: <ul style="list-style-type: none"> – Create objects – Train a classifier – Classifying objects – Merge results – Check the accuracy – Export results
Faster analysis using predefined, structured workflow blocks	<ul style="list-style-type: none"> • Predefined workflow blocks allow users to quickly handle tasks such as: <ul style="list-style-type: none"> – One-step project creation based on image data. – Formulation of sample-based classification rules based on SVM, kNN. – Export of GIS-ready result layers (SHP / FileGDB).
Guided analysis workflow	<ul style="list-style-type: none"> • At any step in the process, only a specific, relevant set of components is displayed for the particular purpose. The sequence of components is also predefined. • Workflow steps are calibrated to the corresponding image data sets using simple sliders or buttons.
Customize Predefined Actions	<ul style="list-style-type: none"> • Simply add, remove or replace Predefined Actions according to your needs in the <i>Analysis Builder Window</i>.
Support for a variety of use cases	<ul style="list-style-type: none"> • Quickly and efficiently handle a variety of use cases, including: <ul style="list-style-type: none"> – Forest mapping for carbon sequestering assessment on REDD++ projects and forest monitoring for Kyoto Protocol reports. – Agriculture mapping for yield assessment and agricultural subsidies on country level. – Basic land cover mapping for monitoring of land degradation. – Land cover mapping in countries where land cover information is generated based on VHR satellite data only (i.e. China).
Support for multiple data types	<ul style="list-style-type: none"> • Officially supported image data types: <ul style="list-style-type: none"> – Rasters (TIF, IMG, JP2) – Vectors (SHP, FileGDB)
Control a complete analysis workflow in one single analysis software	<ul style="list-style-type: none"> • All-in-one collection of required workflow steps for sample-based classification solutions, powered by eCognition engine.
Discover, download and use Geospatial data	<ul style="list-style-type: none"> • InSphere Data Marketplace plug-in allows direct access to Geospatial image and vector data. • Some datasets may require purchase.

SYSTEM REQUIREMENTS

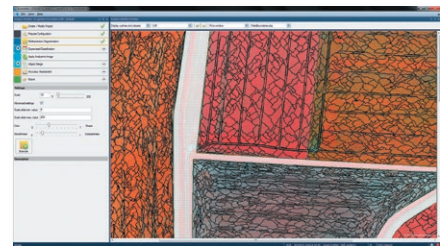
Trimble eCognition Essentials requires an Intel x86_64 hardware platform (64 bit).

The recommended hardware requirements are:

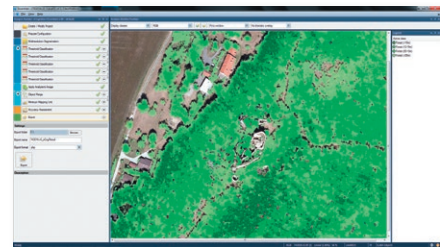
- Intel Dual Core
- 8 GB RAM
- 200 GB available hard disk space
- 1920 x 1080 display

The software has been validated for the following operation systems:

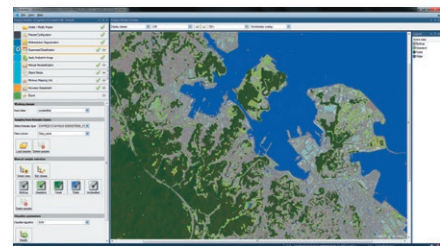
- Microsoft Windows 7
- Microsoft Windows 8.1



eCognition Essentials Agriculture Mapping



eCognition Essentials Forest Mapping



eCognition Essentials Land Cover Mapping

EDUCATIONAL DISCOUNT AVAILABLE.

Contact your Trimble representative to secure your exclusive EDU discount for eCognition Essentials.