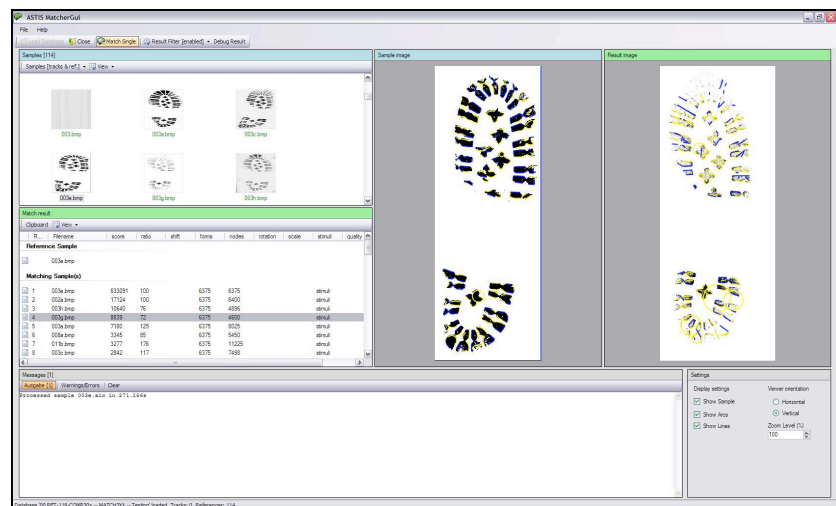


ASTIS™ - The First Automatic Shoeprint Track Information System

When Germany's Federal Criminal Police Office, the Bundes-Kriminal-Amt (BKA) turned to semantic system AG with a complex shoeprint-matching problem in 2005, the Semantic Team used its ai-one™ technology to come up with an effective solution. The complexity of the problem laid in its core requirement: comparing images of blurred and often incomplete crime scene shoeprints against each other and against a reference database of stock and suspects' shoeprints. Semantic solved this problem by partnering with PIC-System AG, an image processing and archiving systems provider, to deliver a pattern-recognition-based solution: an intelligent and autonomous system that accurately identifies and matches shoeprints, even in noisy images.

The solution, called ASTIS™ by Semantic, works autonomously, without user intervention, to match various shoe tracks in order to identify the shoe type (brand, model, etc.). ASTIS™ is a dedicated hardware and software solution provided by PIC as an option to the PIC



system, with an included image database, graphics editor and standardized reproduction facility for records. Besides automatically matching shoe tracks, the application provides experts with manual editing and analysis features for further processing as part of an investigation.

ASTIS™ has been in use at the BKA for 6 months, with final approval pending an updated version of the software. The Zurich PD will start using ASTIS™ in the second half of 2009.