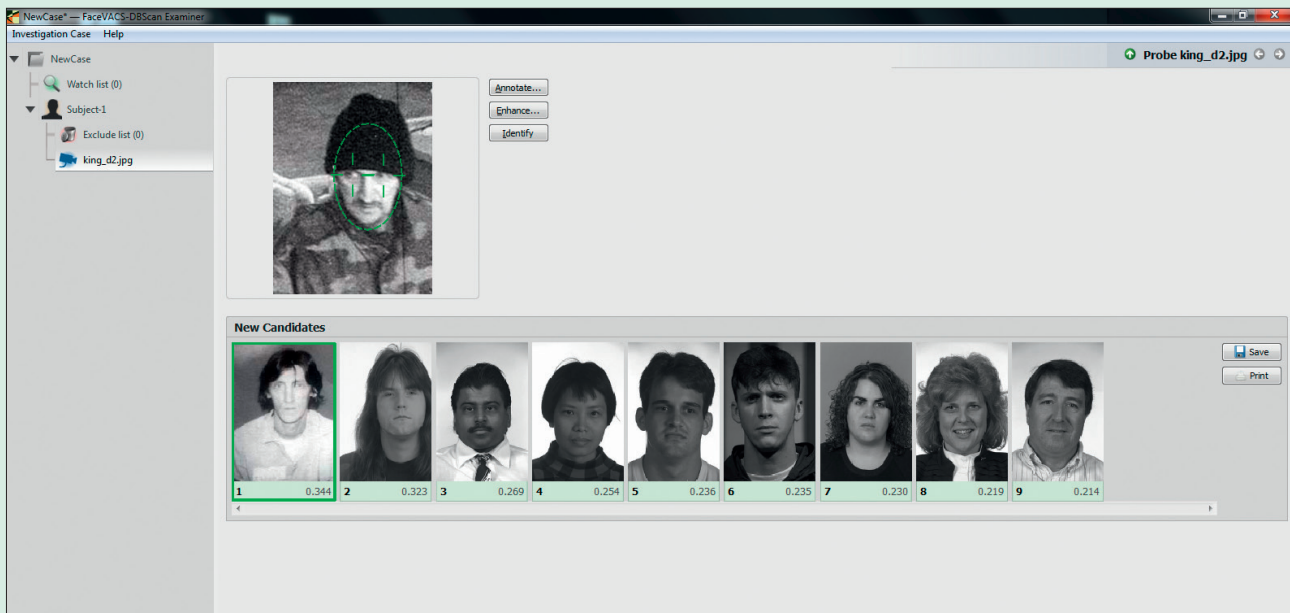




# Face recognition technology for matching facial images in large databases

## FaceVACS-DBScan with Examiner

- compare facial images from different sources to those stored in multi-million image databases
- instantly view match lists with the most similar identities
- control thresholds and match list sizes
- use Examiner tools and filters to enhance images and compare them side by side
- manage demographics and other case-related data
- run as a ready-to-use application or integrate into your applications and infrastructure



## Applications



### ID fraud prevention (detecting multiple identities)

- passport
- visa
- driver's license
- ID card
- voter registration

### Law enforcement and criminal investigation

- identify suspects
- create match lists
- search for missing persons

### Photo indexing and sorting



## Technology

Cognitec's FaceVACS® technology delivers the best possible performance for probe images or video sequences of low quality. Cognitec's algorithms are set to work with

- partial face occlusions
- beard and hairstyle changes
- glasses (except reflecting sunglasses)
- lighting changes
- image noise
- small faces (small inter-eye pixel distance)
- blurred images
- little contrast/dynamic range in the face area
- pose deviation
- errors in artificially generated probes

## Examiner

Investigators rely on our innovative technology to match crime scene photos and surveillance video images against the agency's mug shot repository and immediately act upon the search results.

### Investigation Management

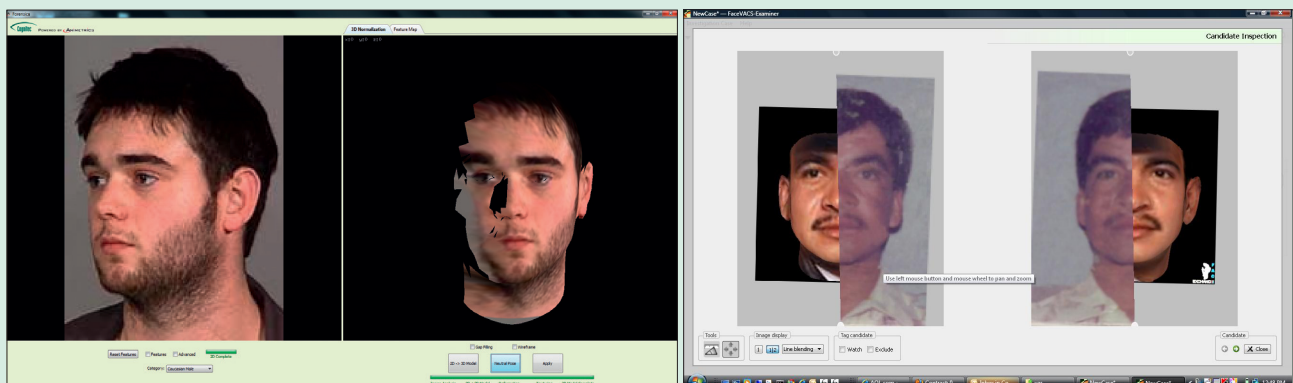
- create investigation case and add probe images
- generate and maintain candidate lists, along with demographic data
- inspect image pairs
- manage watch lists and exclude lists
- print reports

### Detail Inspection

- superposition probe and candidate image
- measure angles and distances
- use single or side-by-side line blending tool

### Probe Enhancement Filters

- pose normalization using 3D technologies to create frontal views
- de-interlace filter for images from interlaced video
- median filter to remove noise
- histogram to correct contrast
- aspect ratio filter to correct lens distortion
- face cropping filter



Cognitec develops market-leading face recognition technologies and applications for industry customers and government agencies around the world. In various independent evaluation tests, our FaceVACS® software has proven to be the leading technology available on the market. Cognitec's portfolio includes products for facial database search, video screening, border control, ICAO compliant photo capturing and facial image quality assessment. Corporate headquarters are located in Dresden, Germany; other offices in Miami, FL; Rockland, MA; and Hong Kong.