

***DSA******Detection***<sup>®</sup>

DSA Training  
Powered by STI

## **DSA Courses Powered by STI**

### **Secure Client Information**

Currently the training standard for several government security organizations across Europe, these courses are safe and trusted to keep private information secure.

### **Progress Evaluation**

Progress evaluation is provided in various methods correlating to the type of course format chosen at time of order.

### **Complete and Customizable Courses**

The DSA courses powered by STI are all module-based, allowing for the custom assembly of any training program for any type of security checkpoint operation.

The unique software allows for a selection of different learning modules divided into practical X-ray simulator modules and theoretical tutorial modules.

The courses follow a methodological approach for enhanced information retention: “Information–Practice–Review–Test”.

### **Testing**

Highly-comprehensive course content is logically organized in succession, allowing students to confidently absorb the information before testing. Each course chapter concludes with a multiple choice exercise. Students can immediately see the results of the test at the end of the course. Successful completion entitles students to certificates.

### **Support & Compatibilities**

Operating System: Microsoft Windows XP and higher (Microsoft Silverlight Plugin)

Browser: Internet Explorer Version 8+, Firefox 21+, Chrome

Internet Connection Speed: Min. 1,000 kBit/s

Screen Resolution: Min. 1280x800

Available Languages: English, German

## Available DSA Courses Powered by STI\*:

1. Introduction to Checkpoint Screening Operations
2. Introduction to Checkpoint Screening Equipment
3. Introduction to Aviation Security
4. Initial/Recurring Training for X-Ray Operations
5. Advanced Training for X-Ray Operations
6. Checked Baggage Screening Operations
7. Air Cargo X-Ray Screening Operations
8. Mail Threat X-Ray Screening Operations
9. Global Threat Analysis
10. Smiths Detection X-Ray Operations
11. Course Editor



*Figure 1: Example X-ray image*

\*The course purchased determines the types of bags encountered in the CBT (*Example: Pallets may be seen in cargo-style courses*)

\*Add-on modules can be recommended based on training needs

## Licensing Options

OTS Online: Individual logins and passwords are available for use with the online-based training portal. A simple, fast download provides a computer desktop link for secure access.

OTS Compact, Single Computer: A software download permitting 1 Trainer and up to 30 User accounts on one computer, this cost-effective solution provides pre-configured programs. This license permits one user at a time to complete the course.

OTS Premium, Single Computer: A software download permitting 1 Trainer and unlimited User accounts on one computer, this open-modular system provides flexibility with additional options and services. This license permits one user at a time to complete the course and requires remote installation.

OTS Premium, Multi-Computer: A software download permitting 1 Trainer and unlimited User accounts set up on initially one computer, this option allows for additional computers to use the same coursework over a network connection via their own licenses to use the software. This open-modular system provides flexibility with additional options and services. It requires initial on-site installation followed by a technical training.

## Course Framework Overview



Figure 2: Virtual practice and testing scenarios

- Virtual practice scenarios using Smiths or Rapiscan X-ray systems (Fig.2)
- Functional instrument keys, such as image filters (Fig. 3)
- Real simulation of a conveyor belt moving through an X-ray system
- Courses end with a DSA Detection Certificate of Completion (Fig. 4)

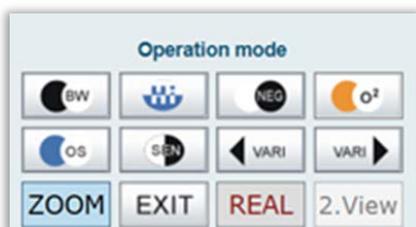


Figure 3: Smiths Detection image filter keys



Figure 4: DSA Detection Certificate of Completion

- All enrolled courses appear upon login (Fig. 5)
- Self-paced
- Easy to navigate
- The system keeps track of course progress

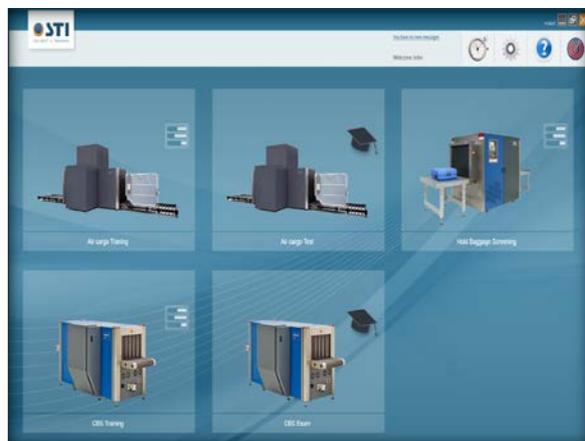
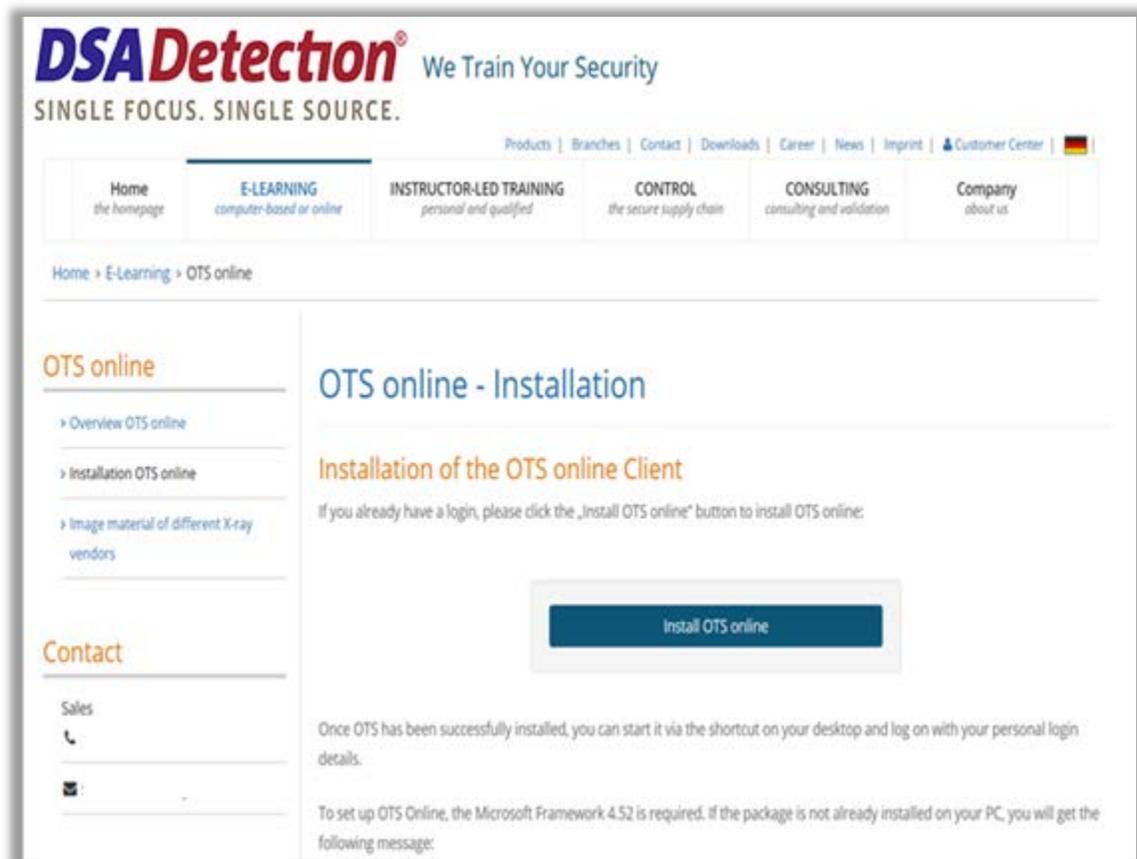


Figure 5: Example program layout

- Same-day link provided to log in (Fig. 6)
- Simple, fast download (Fig. 7)
- Desktop OTS link



*Figure 6: Login screen*



*Figure 7: Installation webpage for OTS Online*

## Course Framework Details

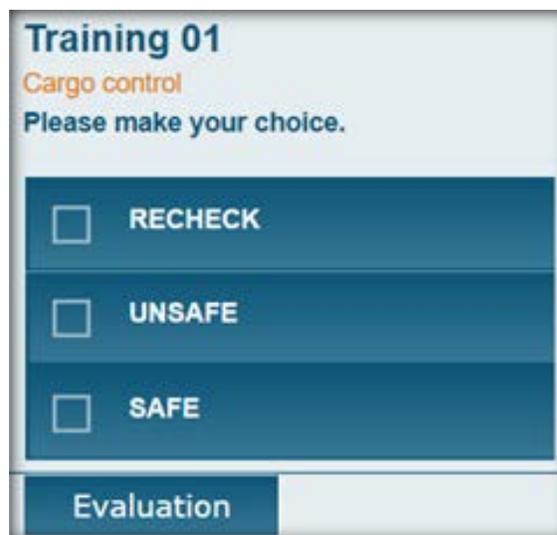
Once the students begin the training course, they find the interface provides a highly realistic training experience. The X-ray images are all very high-quality, depicting actual bags which would be encountered at a real checkpoint. The course purchased determines the types of images seen in the training (Fig. 8). The following information is intended to serve as examples taken from various CBT courses. Minor variances can be seen depending on the licensing option chosen.



*Figure 8: Air Cargo-based CBT depicting X-ray image of shipping box on pallet*

The image interpretation interface is realistic, easy to use, and provides the students with all of the same image tools that a real X-ray system provides to evaluate an image for threats (Fig.9-10).

- A. **Student must decide** what they see in the bag. Is a threat present or not? (Note: “Recheck” option is only available for air cargo and checked bags training courses.)
- B. **Evaluation** lets the student know if they made the correct or incorrect selection.



*Figure 9: Realistic screening process decisions*



*Figure 10: Simulation of Image Keys with Working Functions*

- C. **Operation Mode** provides the student with all of the image enhancement keys that are on a real X-ray system. (Smiths Detection Image Keys are displayed as an example.)
- D. **The number of questions remaining** is provided. The button to move onto the next question is also located here.

Let's take a closer look at the image function keys provided.... (Fig. 11)

1<sup>st</sup> Row, Left to Right:

- 1) Black & White
- 2) High Penetration
- 3) Negative
- 4) Organic Only

2<sup>nd</sup> Row, Left to Right:

- 1) Organic Stripping
- 2) Superenhancement
- 3) Vari Keys (High-Low Absorption)

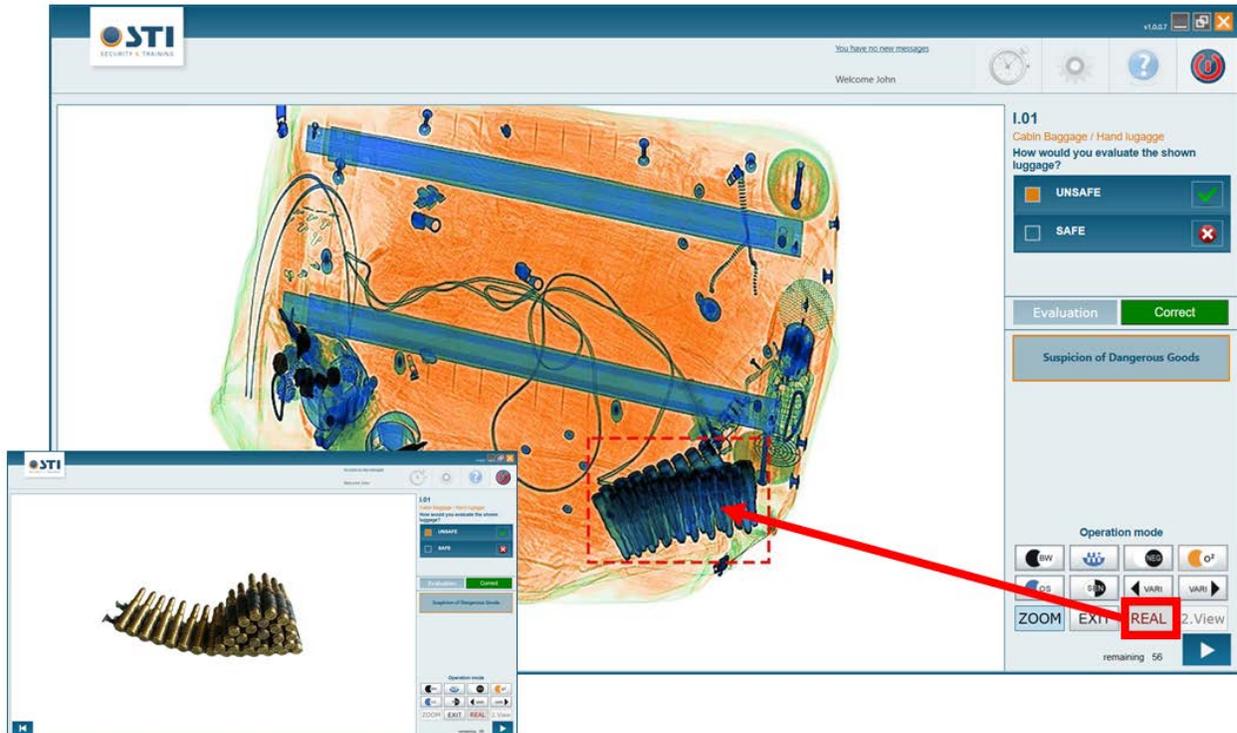
3<sup>rd</sup> Row, Left to Right:

- 1) Zoom: Zooms in and out of image
- 2) Exit: Returns to default image
- 3) Real: If a threat were present, this button would show the student an image of the threat.
- 4) View: For dual-view units, this button switches to the 2<sup>nd</sup> image view.



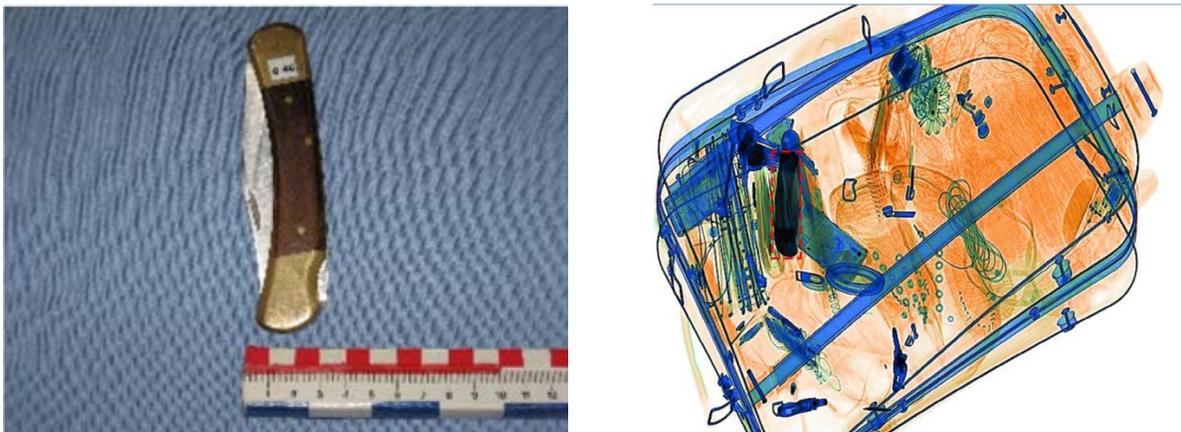
*Figure 11: Image Keys Available (Smiths Detection Example)*

The “Real” button is a unique feature of these courses. After submitting an answer as to whether a threat was or was not present, they can use this function to see an image of the actual threat to assist in learning comprehension. They will see a visual of the actual threat regardless of if they have answered correctly or incorrectly.



*Figure 12: The “Real” key function displays an image of the actual threat.*

Showing the student what the actual threat looks like is the key to them comprehending how threats of these types will appear in X-rays (Fig. 13). It also potentially assists them in identifying which component they missed and why, if they have answered incorrectly.



*Figure 13: The pocket knife shown in the X-ray image is shown in plain sight.*

## Pricing

### Review of Licensing Options:

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### Suggested Course Package:

OTS Premium, Multi-Computer

- The ideal class size to train over 100 students in an efficient manner would be about 5 students to 1 trainer. This licensing option perfectly allows this, as there can be for example one trainer computer associated with 5 additional computers for trainees. Setting this up in groups of 1 trainer per 5 students allows each small group to train at the same time.
- For new hires (initial training), the CBS Primary X-Ray Simulator module is recommended.
- For yearly training, the OTS tutor is recommended.
- On-site installation and technical training (how to use the programs properly) is recommended.

### Bulk Purchase Discounts:

Licenses are offered monthly or yearly. The yearly licenses offer significant reductions in cost.

To enroll in classes with DSA Detection, please contact Clay Edwards at:  
cedwards@dsadetection.com.