NSA & CNSS Certified

IT Security Training

for IT and IA Professionals, and System End-Users

A cost-effective, interactive, web-based learning solution …
Vulnerabilities and incidents are rising exponentially
Dramatic increases in computer interconnectivity

Information Privacy / Confidentiality
Provision of Services / Availability
Critical Roles and Missions
National Infrastructure
Data Manipulation / Integrity
In the past 5 years, intrusions have risen 50%.

85% of reported virus attacks resulting in significant financial loss.

74% cited the Internet as a frequent point of attack.

33% cited internal systems.

38% have suffered unauthorized access and/or misuse of their websites.

70% of those attacked were vandalized.

Source: CIO Information Week, May 1, 2002
Computer Security Act of 1987
✓ Requires training for management and use of Federal computer systems

Office of Management and Budget Cir A-130, App III
✓ Ensure all individuals are appropriately trained in how to fulfill their security responsibilities

Government Information Security Reform Act (GISRA)
✓ Include in Agency performance plan a description Agency-wide security program, and budget, staffing, and training resources which are necessary to implement this security program

Federal Information Security Management Act of 2002 (Title III of E-Gov) (FISMA)
✓ OMB oversight of Agency IT security practices and Agency accountability
IT Security - Training

Available Training Venues

Instructor-Led Training (ILT)
- Hi-quality, interactive experience
- Costly, therefore limited for agency-wide training

Computer-Based CD-ROM Training
- Lower cost
- Instructor interaction non-existent
- Static training

Web-Based Training
- Can be anywhere, anytime, any place
- Dynamic interactive training is possible
- On-line support may be available
- Cost effective
It Security - Training Drivers

What Federal Agencies Are “Saying”

“Consistent with NIST SP 800-16”

“Aligned with federal mandates!”

“Learn anytime, anywhere (24/7)!”

“Easy to administer agency-wide”

“To measure and report on progress”

“Training specific to individual roles and responsibilities”

“Need for a impact solution!”

“Cost effective training solution”
The IT Security Training Solution

- Curriculum
- Features
- Rollout Support
- Custom Development
- Infrastructure
The IT Security Training Solution

IT Security Library

65+ IT Security Courses

4 Learning Tracks

18 Training Plans

3 Skill Levels

Promotes “Individualized Learning”
Based on NIST Special Publication 800-16

NIST SP 800-16 IT Security Training Matrix

Table 1. NIST SP 800-16 IT Security Training Matrix

<table>
<thead>
<tr>
<th>Training Areas</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Laws &amp; Regulations</td>
<td>1A</td>
<td>1B</td>
<td>1C</td>
<td>1D</td>
<td>1E</td>
<td>1F</td>
<td></td>
</tr>
<tr>
<td>2 Security Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Planning</td>
<td>2.1A</td>
<td>2.1B</td>
<td>2.1C</td>
<td>2.1D</td>
<td>2.1E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Management</td>
<td>2.2A</td>
<td>2.2B</td>
<td>2.2C</td>
<td>2.2D</td>
<td>2.2E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 System Life Cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Initiation</td>
<td>3.1A</td>
<td>3.1B</td>
<td>3.1C</td>
<td>3.1D</td>
<td>3.1E</td>
<td>3.1F</td>
<td></td>
</tr>
<tr>
<td>3.2 Development</td>
<td>3.2A</td>
<td>3.2B</td>
<td>3.2C</td>
<td>3.2D</td>
<td>3.2E</td>
<td>3.2F</td>
<td></td>
</tr>
<tr>
<td>3.3 Test &amp; Evaluation</td>
<td>3.3A</td>
<td>3.3B</td>
<td>3.3C</td>
<td>3.3D</td>
<td>3.3E</td>
<td>3.3F</td>
<td></td>
</tr>
<tr>
<td>3.4 Implementation</td>
<td>3.4A</td>
<td>3.4B</td>
<td>3.4C</td>
<td>3.4D</td>
<td>3.4E</td>
<td>3.4F</td>
<td></td>
</tr>
<tr>
<td>3.5 Operations</td>
<td>3.5A</td>
<td>3.5B</td>
<td>3.5C</td>
<td>3.5D</td>
<td>3.5E</td>
<td>3.5F</td>
<td></td>
</tr>
<tr>
<td>3.6 Termination</td>
<td>3.6A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FUNCTIONAL SPECIALTIES

Based on NIST Special Publication 800-16

... as seen in the ITSL Course Catalog
## IT Security Training Solution - Curriculum

Based on NIST Special Publication 800-16

### Course to NIST SP-800-16 Cross Reference

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Level</th>
<th>NIST Special Publication 800-16 Matrix*</th>
</tr>
</thead>
<tbody>
<tr>
<td>99001</td>
<td>Advanced Local Network Security Plan</td>
<td>Adv</td>
<td>4</td>
</tr>
<tr>
<td>990017</td>
<td>Analyzing Network Security Plans</td>
<td>Int</td>
<td>3</td>
</tr>
<tr>
<td>990004</td>
<td>Authentication and Authorization in E-Commerce</td>
<td>Int</td>
<td>2</td>
</tr>
<tr>
<td>990129</td>
<td>Certification Authority</td>
<td>Int</td>
<td>1</td>
</tr>
<tr>
<td>990130</td>
<td>COI and Encryption</td>
<td>Int</td>
<td>1</td>
</tr>
<tr>
<td>990525</td>
<td>Designing and Configuring Firewalls</td>
<td>Int</td>
<td>1</td>
</tr>
<tr>
<td>990600</td>
<td>Designing Local Network Security</td>
<td>Adv</td>
<td>1</td>
</tr>
<tr>
<td>99058</td>
<td>Designing Remote Security Solutions</td>
<td>Int</td>
<td>1</td>
</tr>
<tr>
<td>99059</td>
<td>Designing WAN Security</td>
<td>Int</td>
<td>1</td>
</tr>
<tr>
<td>99052</td>
<td>Detecting Hacks</td>
<td>Int</td>
<td>1</td>
</tr>
<tr>
<td>99025</td>
<td>Distributed Security Planning</td>
<td>Int</td>
<td>1</td>
</tr>
</tbody>
</table>

---

### Sample Training Plans

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Level</th>
<th>Track</th>
<th>Weekly Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Local Network Security Plan</td>
<td>Adv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyzing Network Security Plans</td>
<td>Int</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authentication and Authorization in E-Commerce</td>
<td>Int</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certification Authority</td>
<td>Int</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COI and Encryption</td>
<td>Int</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designing and Configuring Firewalls</td>
<td>Int</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designing Local Network Security</td>
<td>Adv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designing Remote Security Solutions</td>
<td>Int</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designing WAN Security</td>
<td>Int</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detecting Hacks</td>
<td>Int</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributed Security Planning</td>
<td>Int</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*Note: The shaded areas of the table differentiate course levels (e.g., beginning, intermediate, and advanced).

...as seen in the ITSL Course Catalog

---

**Karta Technologies, Inc.**

The “Can Do” Company
IT Security Training Solution - Curriculum

Predetermined Integrated Training Plans

Examples of some of the Training Plans are:

- Information Security Officer
- IT Program Manager
- Network and System Administrators
- Database Administrator
- Program and Systems Analysts
- System Owner
- System Design Developer
- Information Resource Manager
- End Users
- Designated Approving Authority
The Karta IT Security Training curriculum received NSA and CNSS Certification by meeting national standards for NSTISSI No. 4013 through 2006!
Individuals holding Certified Information Systems Security Professional (CISSP) or System Security Certified Practitioner (SSCP) can earn CPE credit for each hour of education accomplished in Karta’s IT Security Library from (ISC)².
## IT Security Training Solution

<table>
<thead>
<tr>
<th>Features / Infrastructure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browser Playable; No Plug-ins; Minimal Bandwidth Requirements</td>
<td>User friendly; technical challenge avoidance</td>
</tr>
<tr>
<td>Electronic Registration and Reporting</td>
<td>Simplified accessibility and tracking</td>
</tr>
<tr>
<td>Pre and Post Assessments</td>
<td>Individualized learning</td>
</tr>
<tr>
<td>Embedded Questions and Exercises</td>
<td>Reinforced learning</td>
</tr>
<tr>
<td>Courseware Mentoring – Online SME 24/7 (Optional)</td>
<td>Interactive support</td>
</tr>
<tr>
<td>Help Desk</td>
<td>User Acceptance</td>
</tr>
<tr>
<td>Hosting</td>
<td>Accessibility</td>
</tr>
</tbody>
</table>

“A Turn Key Solution”
Custom Development and Rollout Support

- Custom courses can increase the utilization of the entire IT Security Library
  = “User Buy-in”

- Custom courses satisfy the need to train on agency-specific security policies and procedures
  = Customer Ownership

- Marketing Support and Program Development
  = Outreach and Communications
IT Security Training Solution – Benefits Summary

- Based on federal guidelines and mapped to NIST SP 800-16 in order to create integrated training plans
- Meet requirements set forth by the Federal mandates – use solution as part of your FISMA response
- Curriculum is recognized by professional security groups such as: NSA/CNSS and (ISC)$^2$
- Comprehensive program with rollout support and custom course development services available to ensure the greatest ROI
- Based on the needs heard from the Government Security Professionals
- Cost effective and standardized
IT Security Training Solution – Current Customers

Federal Agency Customers

- Department of Education
- Department of Labor (OSHA)
- FDIC
- FAA
- NASA
- Library of Congress
- Veterans Affairs
- Executive Office of the President (EOP)
- USAID
- NIST
- EPA
- Department of Interior
- USDA
- Florida State
- US Secret Service
Sonny Kakar  
VP, Capitol Area Operations  
Karta Technologies, Inc.  
703.469.2282  
202.549.8184 (cell)  
skakar@karta.com

George Soltys  
Manager, IT Security Training  
Karta Technologies, Inc.  
703.469.2080  
703.309.3038 (cell)  
gsoltys@karta.com