

Preparation for ISC2 CC

Certified in Cybersecurity
Entry-Level

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I think this is the best free Cybersecurity Cert.

(But limited free voucher till **end of 2022**)

- Learn with institution / organization specialized in providing cybersecurity training and certifications



Certified in
Cybersecurity
—
An (ISC)² Certification

About the Certification Exam

Exam Info

Certified in Cybersecurity Examination Information

Length of exam	2 hours
Number of items	100
Item format	Multiple choice
Passing grade	700 out of 1000 points
Exam language availability	English
Testing center	Pearson VUE Testing Center

About the Certification Exam

Exam Weights

Certified in Cybersecurity Examination Weights

Domains	Average Weight	# of Items
1. Security Principles	26%	20
2. Business Continuity (BC), Disaster Recovery (DR) & Incident Response Concepts	10%	7
3. Access Controls Concepts	22%	17
4. Network Security	24%	18
5. Security Operations	18%	13
Total	100%	75*

Let's discover the outline

It covers almost everything if not all.

- The topics on the CC exam include:
 1. Security Principles
 2. Incident Response, Business Continuity (BC) and Disaster Recovery (DR) Concepts
 3. Access Controls Concepts
 4. Network Security
 5. Security Operations

Exam Outline

Domain 1: Security Principles

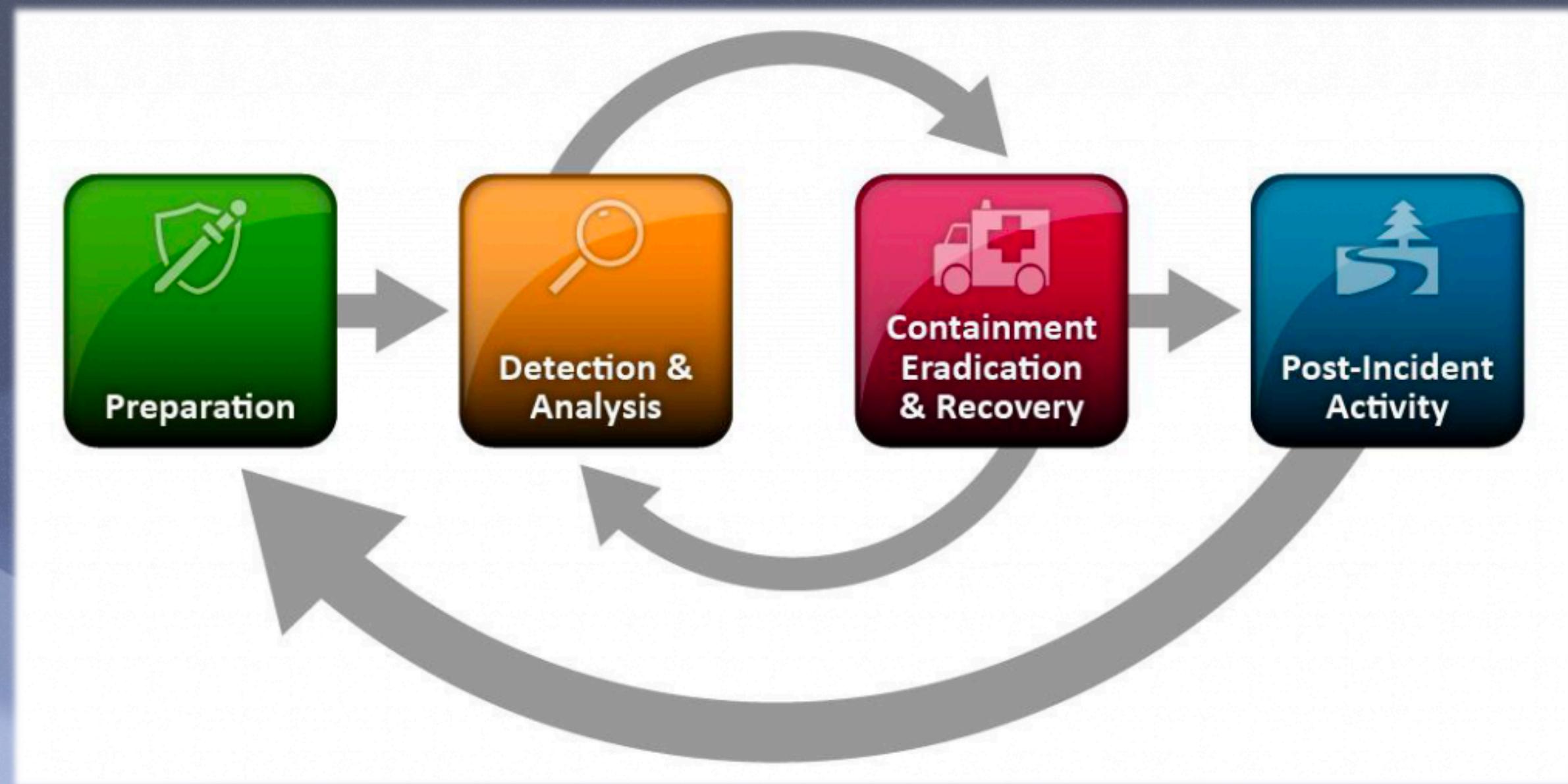
- Information Assurance Concepts
 - *CIA Triad (Confidentiality, Integrity & Availability)*
 - *Authentication (AuthN) vs Authorization (AuthZ)*
 - *Non-repudiation and privacy*
- Risk Management (priorities, assessment, treatment...)
- Understand security controls (technical, administrative and physical)
- Understand security governance process
 - *Policies, Standard, Procedure, Guidelines, Regulations and laws*



Exam Outline

Domain 2a: Incident Response (IR)

- Incident response is an organizational process that **enables timely, effective response to cyberattacks.**
- Understand Incident Response Plan (IRP) from NIST



Exam Outline

Domain 2b: Business Continuity (BC), BCP and DR

- Business Continuity Plan (BCP)
 - The focus of business continuity is keeping operations running.
 - Business Impact Assessment (BIA) —> identifies and prioritizes risks
- Disaster Recovery (DR)
 - To keep business up and running during the cause of disaster
 - *High availability (HA)*
 - *Fault Tolerance (FT)*
 - *Single point of failure (SPOF)*
 - *Backup types*
 - *DR Testing*



Exam Outline

Domain 3: Access Control Concepts

- Understand physical access controls
 - Physical security controls (e.g., badge systems, gate entry, environmental design)
 - Monitoring (e.g., security guards, closed-circuit television (CCTV), alarm systems, logs)
 - Authorized versus unauthorized personnel
- Understand logical access controls
 - Principle of least privilege
 - Segregation of duties
 - Discretionary access control (DAC)
 - Mandatory access control (MAC)
 - Role-based access control (RBAC)



Mandatory Access Control (MAC)



Apply restrictions to labels

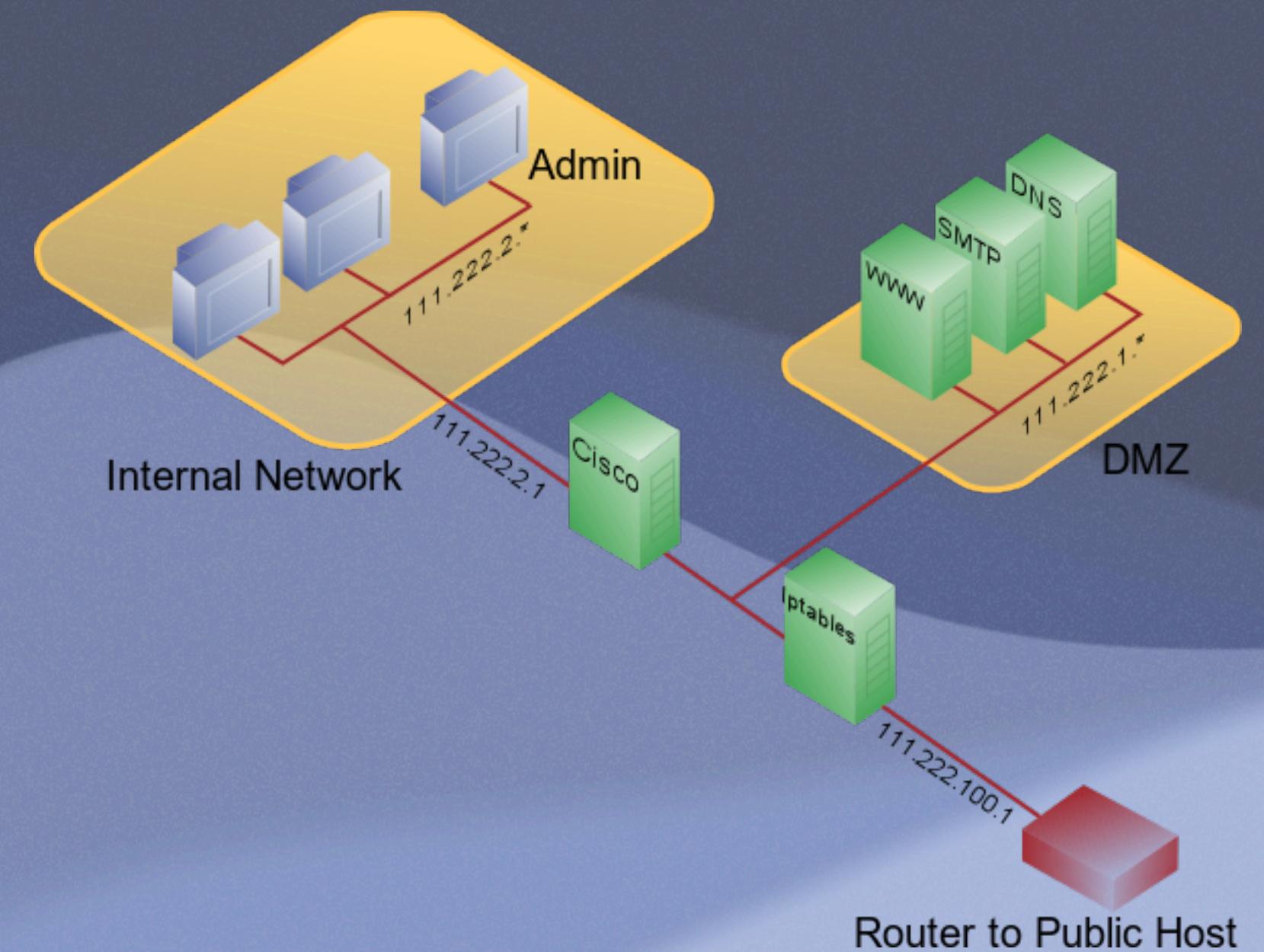
Discretionary Access Control (DAC)



Exam Outline

Domain 4: Network Security

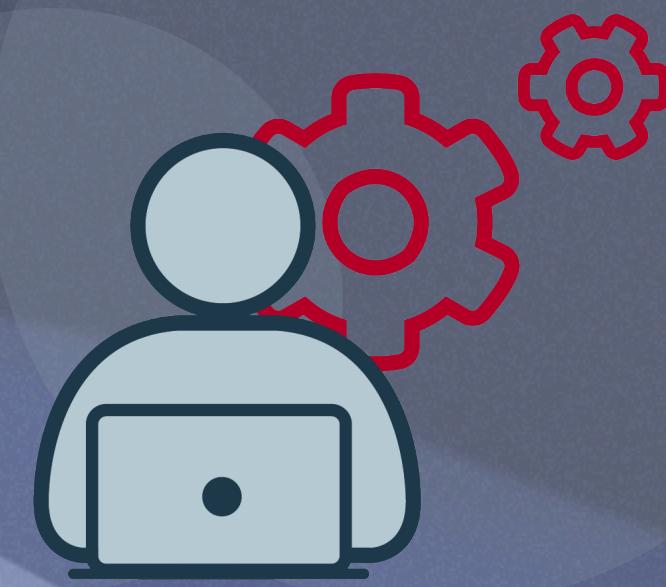
- **Understand computer networking**
 - OSI Model, TCP/IP, IPv4/IPv6, Common Ports, Applications
- **Network threats & attacks**
 - DDOS, virus, MITM, IDS/IPS, Firewall...
- **Network security infrastructure**
 - On-premises (e.g., power, data center/closets, HVAC...)
 - Network design (VLAN, DMZ, NAC...)
 - Clouds (SLA, PaaS, SaaS, IaaS...)



Exam Outline

Domain 5: Security Operations

- **Understand data security**
 - Encryption (e.g., symmetric, asymmetric, hashing)
 - Data handling (e.g., destruction, retention, classification, labeling)
 - Logging and monitoring security events
- **Understand system hardening**
- **Understand best practice security policies**
 - Data handling, Password, Acceptable Use Policy (AUP), Bring your own device (BYOD) policy
- **Understand security awareness training**



Resources

- Exam Outline: <https://www.isc2.org/Certifications/CC/Certification-Exam-Outline>
- LinkedIn Learning by Mike: <https://www.linkedin.com/learning/isc-2-certified-in-cybersecurity-cc-cert-prep/>
- Flashcard: https://quizlet.com/carla_jenkins3/folders/isc2-certified-in-cybersecurity/sets
- Knowledge from Security+ by Prof. Messer: <https://www.youtube.com/watch?v=9NE33fpQuw8&list=PLG49S3nxzAnkL2uIFS3132mOVKuzzBxA8>



