

DISASTER RECOVERY AND BUSINESS CONTINUITY MANAGEMENT

Data Center Assistance Group, LLC



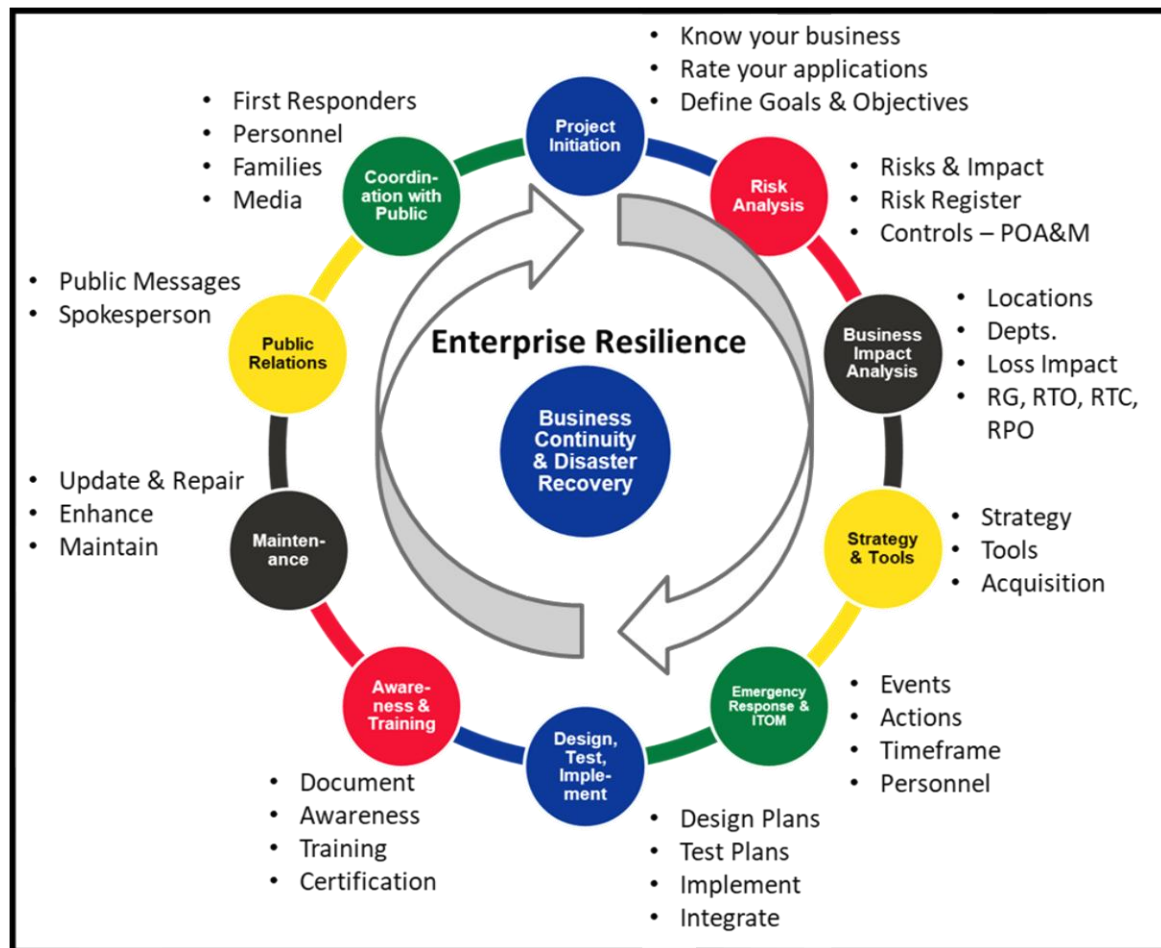
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Executive Framework: 10-Step Disaster Recovery and Business Continuity Program

By: Data Center Assistance Group, LLC (DCAG)

Objective: Establish a comprehensive, sustainable, and measurable program to ensure enterprise resilience, stakeholder confidence, and regulatory alignment through proactive continuity planning.

The Disaster Recovery Ten-Step Process.



1. Project Initiation and Management

Goal: Launch a governed, resourced program to ensure alignment with organizational priorities and oversight from inception.

- Key Actions:

- Charter signed by executive sponsor.
- Steering committee established.
- Project plan approved with milestones, KPIs, and resource assignments.
- Results Tracking:
 - Executive dashboard (milestone status, budget, risk log)
 - Bi-weekly status reports
 - RACI matrix for accountability

Get to know the company and establish a direction.

Know your company:	Know your Environment:
<ol style="list-style-type: none">1. Most Important Applications & Services (Family Jewels).2. BIA to Define the damage caused if lost and maximum duration of survival without the application or service.3. Define Requirements, Scope, Risk, Security, DevSecOps, Testing, Recovery, Acceptance, Deployment, and ITSM, ITOM.4. Define Audit Universe implement legal & auditing functions.5. Define Ideation, Brainstorming, Collaboration, to Concept cycle.6. Implement Systems Engineering Life Cycle (SEL) to respond to new ideas or business opportunities.7. Implement Systems Development Life Cycle (SDLC) to deploy new products and services.8. Define Company Organization to respond to cybersecurity and technology problems in a timely manner to the appropriate authorities (i.e., SEC Rule 2023-139)	<ol style="list-style-type: none">1. Physical and Data Security (Data Sensitivity & Data Flow).2. Architecture and engineering process.3. Asset Inventory and Configuration Management.4. Identify and Access Management.5. GRC based compliance and attestation, CIA based cybersecurity and elimination of viruses and malware.6. Development and implementation of DevSecOps.7. Personnel Titles, Job Functions and Responsibilities, and the integration of sensitive and required services within their everyday work tasks.8. Staff training and development.9. Continuous Monitoring and Improvement, along with the adoption of new technologies and processes (i.e., SRE).10. Deploying error-free products and services (see EO 14028 and OBM M-22-18) and utilize the latest technologies to respond to encountered anomalies and verify compliance.
Set your direction: <ol style="list-style-type: none">1. Most efficient, compliant, and secure production environment, capable of recovering from disaster events and providing continuous vulnerability-free products and services to customers. Continuity of Succession / Delegation of Authority must be included along with definition of duties.2. Integrate guidelines, standard Operating Procedures, skill development, and awareness throughout the organization.	

2. Risk Evaluation and Controls Improvement

Goal: Identify, quantify, and prioritize organizational risk exposures and evaluate the effectiveness of current controls.

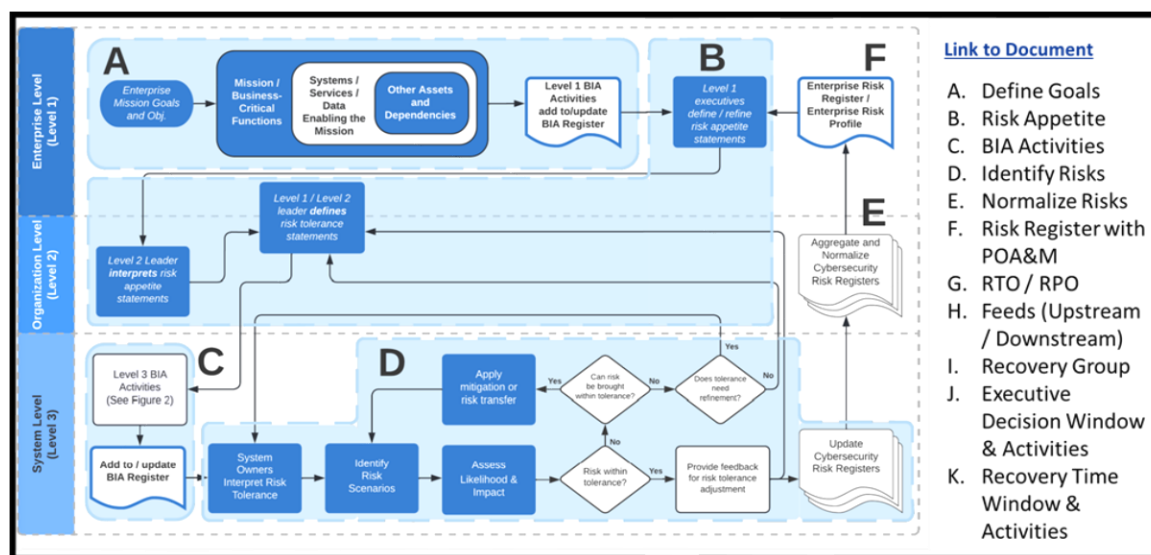
- Key Actions:
 - Risk Register with heat maps and scoring matrix.
 - Gap assessment against NIST 800-30 and ISO 31000
 - Control improvement recommendations documented and prioritized.
- Results Tracking:
 - Risk Register updates with ownership and mitigation timelines.
 - Monthly risk report to Risk Committee
 - Audit trail of control adjustments.

3. Business Impact Analysis (BIA)

Goal: Establish recovery prioritization and resource needs based on critical business functions and dependencies.

- Key Actions:
 - Conduct BIA interviews/workshops.
 - Determine RTO, RPO, MTPD, and interdependencies.
 - Identify Tier 1–3 functions and applications.
- Results Tracking:
 - Executive BIA Summary Report
 - BIA heat map and dependency matrix
 - Signed executive acceptance of recovery priorities.

Performing a Business Impact Analysis



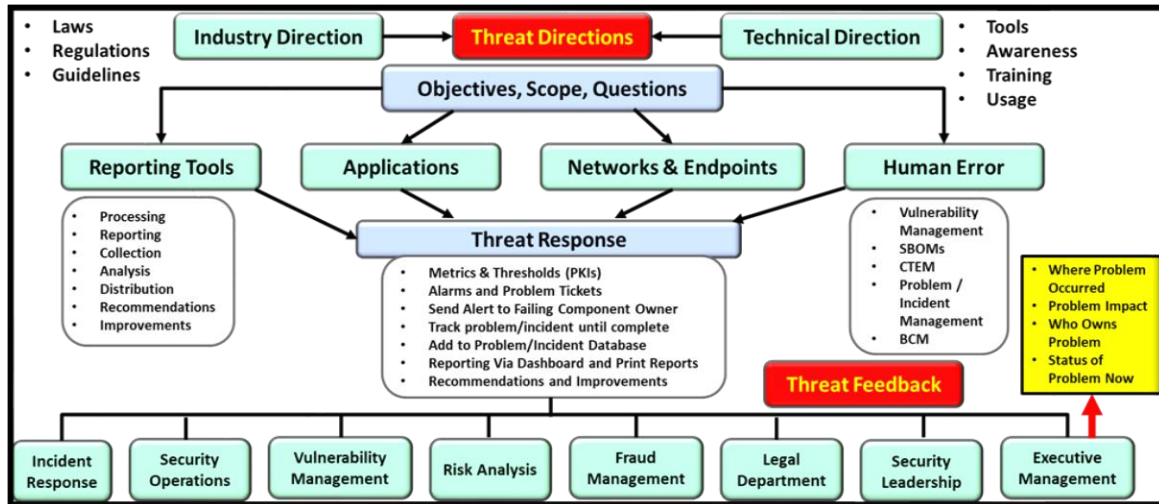
4. Developing Business Continuity Strategies

Goal: Define viable strategies to restore operations within business-defined tolerances.

- Key Actions:
 - Evaluate options (redundancy, outsourcing, cloud, etc.)
 - Develop cost/benefit scenarios.
 - Present strategy recommendations for executive leadership
- Results Tracking:

- Strategy Decision Matrix
- ROI model and strategic alignment metrics
- Board endorsement or approval.

Understanding Threats and taking corrective actions.



5. Emergency Response and Operations Restoration

Goal: Ensure rapid, coordinated emergency and restoration response capability to protect life, assets, and continuity.

- Key Actions:
 - Emergency Response Plan and team established.
 - Vaulting, backup, and restoration protocols validated.
 - Emergency communication systems evaluated.
- Results Tracking:
 - Quarterly emergency drills and response time metrics
 - Backup restoration time validation logs
 - Incident After-Action Review (AAR) reporting

Resilience Patterns and Recovery Groups

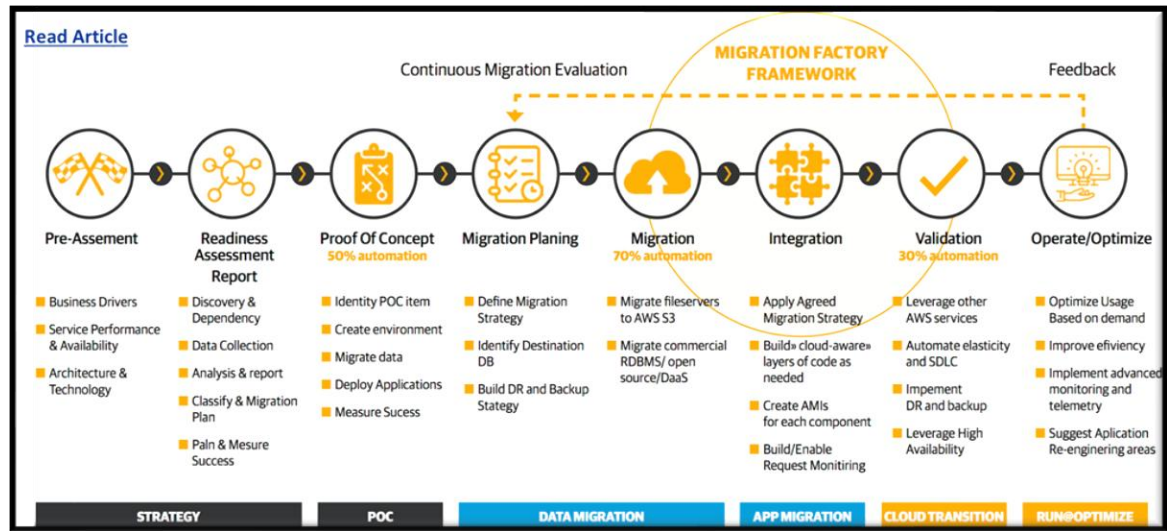
Resiliency Patterns	Single Region	Multiple Regions		
	In-Region	Active Standby (Pilot Light)	Active-Passive (Warm Standby)	Active-Active (Multi-Site)
Pattern Profile	1. TRANSACTIONAL TRAFFIC - handled by primary region only 2. No multi-region INFRASTRUCTURE 3. APPLICATION code only available in single region 4. Multi-region RECOVERY not supported	1. TRANSACTIONAL TRAFFIC - handled by primary region only 2. INFRASTRUCTURE available on stand-by 3. APPLICATION provisioned, but in shutdown state	1. TRANSACTIONAL TRAFFIC - handled by primary region only 2. INFRASTRUCTURE available on standby 3. Minimal APPLICATION footprint running in 2nd region (all components are spun up and available with min. capacity, where application)	1. TRANSACTIONAL TRAFFIC - handled by primary region only 2. INFRASTRUCTURE always available in both regions 3. APPLICATION stack running active/active multi-region
Reserve Capacity			Required RESERVE CAPACITY	Required RESERVE CAPACITY
Cross-Region Maintenance	None	1. Maintain PERSISTENT DATA REPLICATION infrastructure 2. APPLICATION CODE maintained for currency in BOTH REGIONS 3. Operate Production from stand-by region periodically	1. Maintain PERSISTENT DATA REPLICATION infrastructure 2. APPLICATION CODE maintained for currency in BOTH REGIONS 3. Operate Production from stand-by region periodically	1. Maintain 2-WAY PERSISTENT DATA REPLICATION 2. APPLICATION CODE maintained for currency in BOTH REGIONS 3. Operate Production from stand-by region periodically
Recovery Steps	1. ACQUIRE INFRASTRUCTURE 2. BUILD OUT infrastructure 3. DEPLOY application 4. RECOVER / RECREATE DATA 5. REDIRECT TRAFFIC to region 2	1. SCALE INFRASTRUCTURE 2. STARTUP application 3. FAILOVER TRAFFIC	1. AUTO-SCALE INFRASTRUCTURE 2. FAILOVER TRAFFIC	1. RECOVERY achieved through automated redirect of traffic
Recovery Group (RG)	RG7	RG 4-6	REG 1-3	RG 0
Recovery Time Design (RTD)	Days+	Hours (<8 hrs)	Minutes (<15 mins)	Real-Time (<5mins)
Recovery Point Design (RPCD)	Hours (<8 Hrs)	Minutes (<15 mins)	Minutes (<15 mins)	Real-Time (< 0 mins)
Cloud Based Recovery Group Specifications		Preferred Patterns		

6. Designing and Implementing Business Continuity Plans

Goal: Develop actionable, function-specific recovery plans that are accessible, validated, and continuously improved.

- Key Actions:
 - Develop standardized templates (IT DRP, HR, Facilities, etc.)
 - Integrate contact rosters, escalation paths, and runbooks.
 - Implement plan versioning and access control system.
- Results Tracking:
 - Plan readiness scoring (completeness, currency, accessibility)
 - Annual sign-off by department leads.
 - Plan gap log with remediation tracking.

Designing and executing Recovery Plans



7. Awareness and Training

Goal: Foster a culture of resilience by ensuring that all staff understand their roles in continuity and recovery.

- Key Actions:
 - Deliver training by role and department.
 - Embed awareness in onboarding and quarterly refreshers.
 - Run tabletop and scenario-based exercises.
- Results Tracking:
 - Training completion dashboard
 - Quarterly knowledge assessments
 - Executive awareness briefings delivered semi-annually.

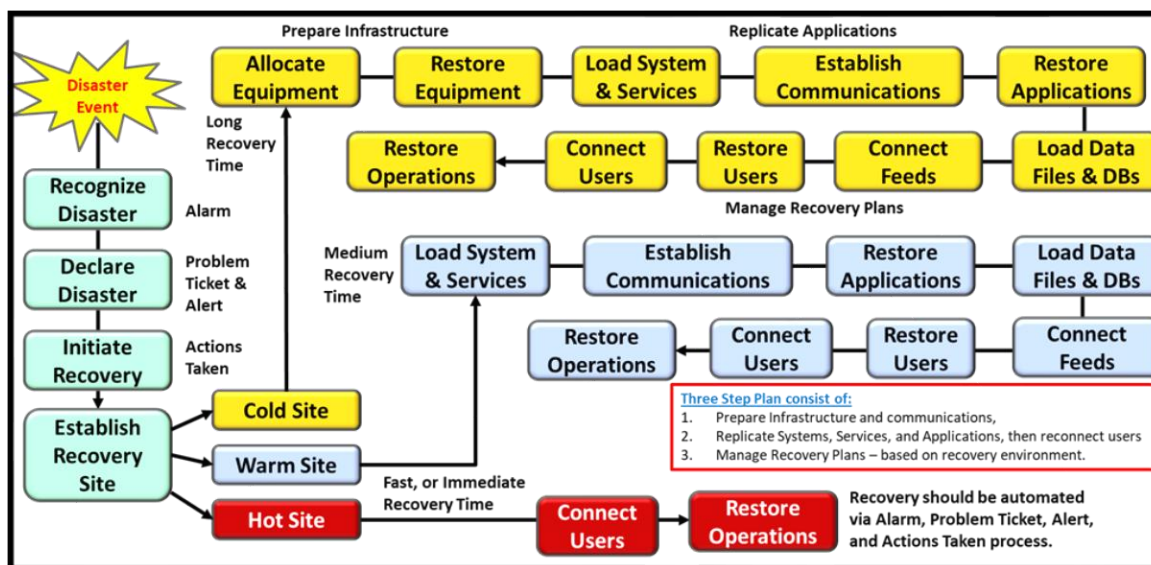
8. Maintaining and Exercising Business Continuity Plans

Goal: Validate recovery capabilities, identify improvement areas, and maintain executive confidence through testing and simulation.

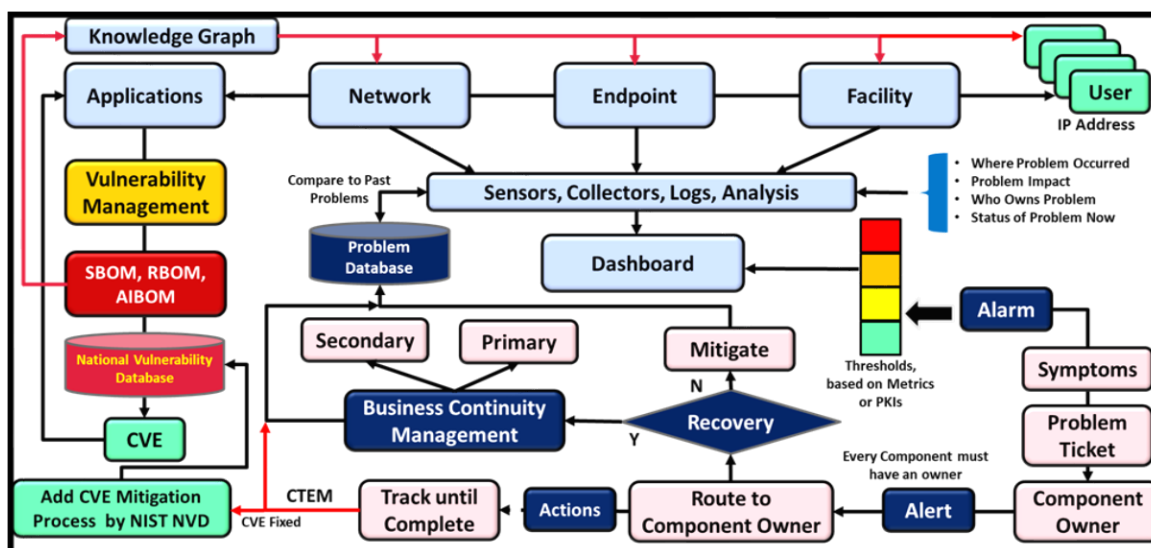
- Key Actions:
 - Conduct testing program (tabletop, simulation, live drills)
 - Post-exercise review with corrective action planning
 - Annual review and certification of plans
- Results Tracking:

- Evaluate success metrics (RTO achieved, participation levels)
- Corrective Action Plan (CAP) log
- Plan review schedule compliance.

Planning and executing recovery plans.



Tracking problems and initiating recovery operations



9. Public Relations and Crisis Communications

Goal: Manage stakeholder confidence and brand integrity through clear, timely, and credible communication during a crisis.

- Key Actions:
 - Crisis Communication Plan with pre-approved statements
 - Assign trained spokespeople and media liaisons.
 - Integrate legal and executive signoff workflows.
- Results Tracking:
 - Communications drill outcomes.
 - Message delivery metrics across channels (email, social, press)
 - Incident communications review and lessons learned.

10. Coordinating with Public Authorities

Goal: Ensure response and recovery actions are aligned with local, state, and federal authorities.

- Key Actions:
 - Register with FEMA, DHS, state emergency agencies.
 - Establish MOUs and response protocols.
 - Participate in joint simulations and incident coordination calls.
- Results Tracking:
 - MOU log and authority contact directory.
 - Joint exercise participation records
 - Emergency collaboration performance reviews

Program Governance and Reporting

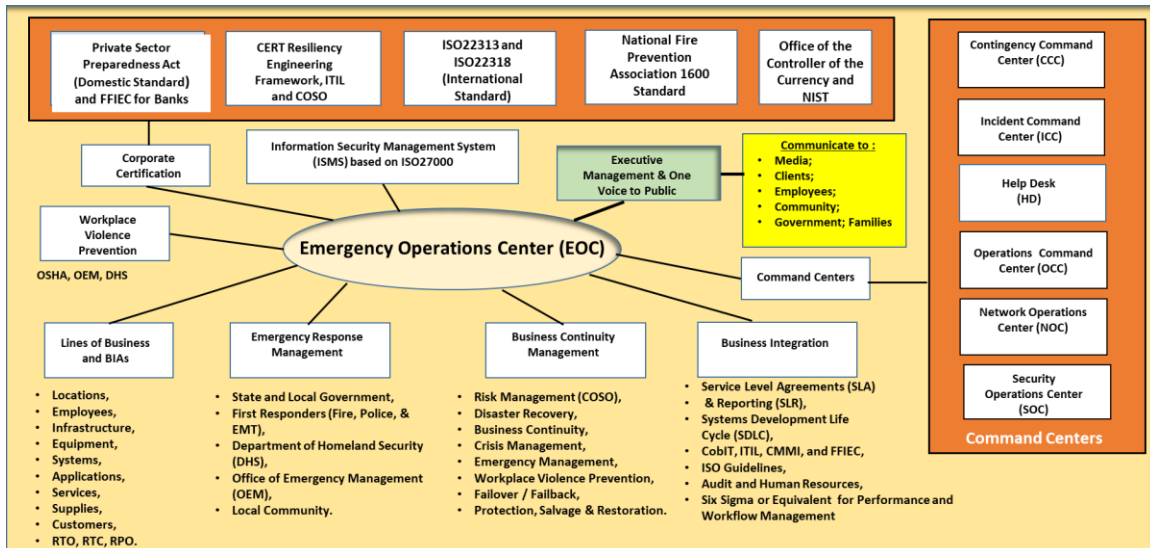
Executive Oversight: Via Steering Committee chaired by CIO, COO, or CISO

Project Management Tools: MS Project / Asana / ServiceNow PMO Modules


Reporting Cadence:

- - Weekly project status reports (WBS, milestones, risks)
- - Monthly executive dashboards
- - Quarterly board briefings

Emergency Operations Center



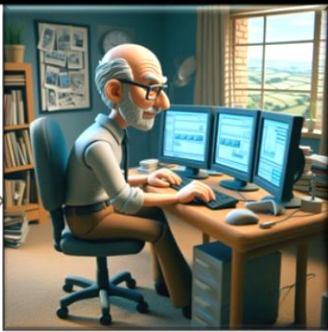
For additional information, or to discuss your needs, please contact us.



- Discuss
- Define
- Propose
- Achieve

Quality Service at a Reasonable Price

Helping Clients to achieve success



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If you find the information included in this presentation of value and want to explore methods to improve the reliability of your enterprise and IT environment, please contact me to discuss your needs and request our assistance.

We look forward to our future relationship.