**“Phase 5: Project Documentation & Submission**

**In this part you will document your project and prepare it for submission.**

**Document the disaster recovery project and prepare it for submission.**

Team member**:**

**Nepolean.G**

**Certainly, I can provide you with an outline for your disaster recovery project documentation. Here's a template you can follow:**

**Disaster Recovery Project Documentation**

**Introduction:**

The rise of virtualization as a business tool has revolutionized the way companies operate today. By decoupling data from the underlying physical hardware, businesses are freed from the limitations imposed by a need to keep their data within arm’s reach — it can now be stored anywhere in the world that it makes operational and regulatory sense to do so. However, while data is more mobile than ever, many organizations do not have a comprehensive plan in place for how to recover their data in case of natural disaster ransom are etc.

**Objective:**

**The primary objective of this project is to ensure the continuity of critical business operations in the event of a disaster. This document outlines our disaster recovery plan, design, and implementation.**

**Design Thinking Process**

**Our design thinking process involved assessing the risks and vulnerabilities of our IT infrastructure, identifying critical assets and services, and devising a comprehensive disaster recovery strategy. We considered the following key factors:**

1. **Risk Assessment:**

**We conducted a thorough analysis of potential disasters and their impact on our business.**

1. **Asset Prioritization:**

**We identified critical systems, data, and applications that must be safeguarded.**

1. **Technology Selection:**

**We chose IBM Cloud Virtual Servers as our infrastructure platform for its scalability and reliability.**

1. **Backup and Replication Strategy:**

**We designed a robust backup and replication setup to ensure data redundancy.**

**5. Recovery Testing:**

**Regular testing procedures were established to verify the effectiveness of the recovery plan.**

**Development Phases**

**1. Planning Phase:**

**Defined project objectives, scope, and budget.**

**2. Risk Assessment and Asset Identification:**

**Identified potential risks and prioritized assets.**

**3. Technology Selection:**

**Chose IBM Cloud Virtual Servers for the disaster recovery infrastructure.**

1. **Backup Configuration:**

**Configured regular backups of critical data.**

1. **Replication Setup:**

**Implemented data replication for redundancy.**

1. **Recovery Testing:**

**Conducted scheduled recovery tests to verify the plan's efficacy.**

**Disaster Recovery Strategy**

**Our disaster recovery strategy consists of the following components:**

1. **Backup Configuration:**

**Regularly scheduled backups of critical data and system configurations.**

1. **Replication Setup:**

**Real-time or near-real-time replication of data to a secondary location.**

1. **Recovery Testing Procedures:**

**Routine testing to ensure the readiness of the recovery plan.**

1. **Communication Plan:**

**A documented process for notifying key stakeholders in the event of a disaster.**

1. **Failover Plan:**

**Procedures for switching operations to the secondary location in case of a disaster.**

**Business Continuity Guarantee**

**Our disaster recovery plan ensures business continuity in unforeseen events by:**

1. **Minimizing Downtime:**

**Through timely data replication and failover procedures.**

1. **Protecting Data:**

**By implementing regular backups and replication.**

**3. Rapid Recovery:**

**Ensuring the ability to quickly restore critical systems and services.**

**4.Communication and Coordination:**

**Clearly defining roles and responsibilities during a disaster.**

**Submission:**

1. **GitHub Repository Link:**

**[Provide the link to the Git Hub repository containing the project's code and files.]**

1. **Setup and Deployment Instructions:**

**[Provide clear instructions on how to set up and deploy the disaster recovery plan using IBM Cloud Virtual Servers.]**

1. **README File:**

**Write a detailed README file within the repository, explaining how to navigate the website, update content, and any dependencies.**

**Certainly, here is a more detailed outline for your disaster recovery project documentation:**

**Disaster Recovery Project Documentation**

**Documentation**

**1. Project Overview**

**Project Objective:**

**Describe the primary goal of the disaster recovery project, which is to ensure the continuity of critical business operations in the event of a disaster.**

**Scope:**

**Specify the scope of the project, including the systems, applications, and data that will be covered by the disaster recovery plan.**

**2. Design Thinking Process**

**- \*Risk Assessment\*:**

**Explain how you assessed potential risks and vulnerabilities to the IT infrastructure.**

**- \*Asset Prioritization\*:**

**Detail how critical assets and services were identified and prioritized.**

**- \*Technology Selection\*:**

**Discuss the rationale behind choosing IBM Cloud Virtual Servers as the infrastructure platform.**

**- \*Backup and Replication Strategy\*:**

**Describe the strategy for data backup, including the frequency and methods used. Explain how data replication was set up to ensure redundancy.**

**- \*Recovery Testing Procedures\*:**

**Outline the procedures and frequency of recovery testing to verify the effectiveness of the plan.**

**3. Disaster Recovery Strategy**

**- \*Backup Configuration\*:**

**Provide specifics on how backups are configured, including what data and systems are included, backup schedules, and retention policies.**

**- \*Replication Setup\*:**

**Explain how data replication is implemented, whether it's real-time or near-real-time, and the secondary location used for replication.**

**- \*Recovery Testing Procedures\*:**

**Elaborate on the methods used for recovery testing, including the scenarios tested, and how often these tests are conducted.**

**- \*Communication Plan\*:**

**Describe the communication plan for notifying key stakeholders in the event of a disaster, including contact details and responsibilities.**

**- \*Failover Plan\*:**

**Explain the procedures for switching operations to the secondary location during a disaster and the criteria for initiating failover.**

**4. Business Continuity Guarantee**

**- \*Minimizing Downtime\*:**

**Discuss how the plan minimizes downtime through timely data replication and quick recovery procedures.**

**- \*Data Protection\*:**

**Explain how the plan protects critical data through backups and replication.**

**- \*Rapid Recovery\*:**

**Describe the mechanisms in place to ensure a fast recovery of critical systems and services.**

**- \*Communication and Coordination\*:**

**Elaborate on how roles and responsibilities are clearly defined and coordinated during disaster.**

**Submission**

**1. GitHub Repository**

**GitHub Repository Link:**

**Provide the link to the GitHub repository containing the project's code, configuration files, and relevant documentation.**

**2. Setup and Deployment Instructions**

**Deployment on IBM Cloud Virtual Servers:**

**Provide step-by-step instructions on how to set up and deploy the disaster recovery plan using IBM Cloud Virtual Servers. Include any prerequisites and configurations needed.**

**3. README File**

**Website Navigation:**

**In the README file, explain how to navigate the website or systems covered by the disaster recovery plan. Provide a user guide if applicable.**

**Content Updates:**

**Describe how to update content or configurations, including the process for keeping backups and replications up-to-date.**

**Dependencies:**

* **List and describe any dependencies, software, or libraries that are necessary for the disaster recovery plan to function effectively.**
* **This detailed outline should help you create a comprehensive and informative disaster recovery project documentation for submission. Fill in the specific details based on your project's requirements.**

**STEEPS:**

**Step 1: Perform a business impact analysis (BIA)**

**Step 2: Perform a risk assessment**

**Step 3: Design a risk management strategy**

**Step 4: Configure and test (and keep testing!)**

**Disaster will strike:**

Ensuring that your company has a comprehensive DR plan in place is every bit as important as ensuring that your production environment is operational. There can be no doubt that organizations today are under threat of data loss like never before — and even with the best precautions, it is only a matter of time before an attack happens.

**Be prepared:**

running scared, have confronted the dangers and designed a strategy for overcoming them, will prove to be far more resilient, and more The solution lies in dutiful preparation and planning. Companies that have foreseen the inevitable and, far from profitable, organizations in the long term.

**Provision AIX or IBM i VSIs in each Power VS location**

The procedure is similar for both AIX and IBM i VSI provisioning. Here is a procedure to create an AIX 7.2 VSI. The cost shown are monthly costs, but you are being charged hourly.

Go to the IBM Cloud Catalog and press the “IBM Cloud” on top left side of the UI.

**Requirements**

* Open an IBM Cloud account Login to https://cloud.ibm.com and follow the procedure to open an Internal to external account. For internal accounts, you can use your IBM intranet ID and password.
* For external accounts you will need to provide a billing source such as a credit card.

**Order Direct Link Connect Classic to connect Power VS location to IBM Cloud**

You will need to order Direct Link (DL) Connect Classic to allow your Power VSIs to communication with Linux/Window VSIs in IBM Cloud and also with all other IBM Cloud services such as VMWare VMs, and Cloud Object Storage (COS). Ordering a DL may take 1-2 weeks to complete. There is no charge for this service as of June 2020.