Foundation level landing zone

Scope

it is designed to provide a baseline environment for the initial setup of workloads in azure.
it simply focuses on establishing core components and networking foudations.

Purpose

the primary goal of foundation landing zone is to create a secure, compliant and well architected environment that can serve as the basis for deploying specific workloads or apploication.

components

it includes the cire infrastructure components like network, identity , and security.
also policy for governance and resource organisation principles

The components of a foundation landing zone in Azure include fundamental elements and configurations that establish a secure, compliant, and well-architected environment for deploying workloads. Here are the key components of a foundation landing zone:

1. **Networking:**
   - **Virtual Networks (VNets):** Creation of isolated network environments to host resources.
   - **Subnets:** Division of VNets into subnets for resource organization and network traffic control.
   - **Network Security Groups (NSGs):** Configuration of NSGs to control inbound and outbound traffic to resources.
2. **Identity and Access Management:**
   - **Azure Active Directory (AAD):** Implementation of foundational identity management for user authentication and authorization.
   - **Role-Based Access Control (RBAC):** Definition and assignment of basic roles to control access to Azure resources based on job roles.
3. **Security:**
   - **Security Baselines:** Implementation of basic security configurations and best practices to establish a secure foundation.
   - **Encryption:** Configuration of data encryption for storage accounts and other relevant resources.
   - **Azure Key Vault:** Setup of Azure Key Vault to securely store and manage sensitive information like secrets and encryption keys.
4. **Resource Management:**
   - **Resource Organization:** Establishment of basic organizational structures, such as resource groups, to facilitate resource management.
   - **Resource Tagging:** Implementation of basic resource tagging for categorization and identification.
   - **Resource Naming Conventions:** Definition of naming conventions for resources to ensure consistency and clarity.
5. **Operational Considerations:**
   - **Basic Monitoring:** Setup of basic monitoring and alerting for critical resources using Azure Monitor.
   - **Basic Logging:** Configuration of basic logging for audit and diagnostic purposes.

- **Backup and Recovery:** Implementation of basic backup and recovery processes for critical data and resources.

6. **Hybrid Cloud Connectivity:**
   - **Basic Connectivity:** Establishment of basic connectivity between on-premises infrastructure and Azure, if applicable.
   - **VPN Configuration:** Configuration of basic VPN connectivity for hybrid cloud scenarios.

7. **Documentation and Training:**
   - **Documentation:** Provision of basic documentation on the deployed foundation landing zone, including architecture diagrams and configuration details.
   - **Training:** Offering basic training to relevant teams on the established foundation to ensure effective usage and management.

8. **Cost Management:**
   - **Basic Cost Tracking:** Implementation of basic mechanisms for tracking resource usage and associated costs.
   - **Budgeting:** Setup of basic budgeting and cost control measures to manage expenditures.

These components collectively provide a foundational environment that is secure, organized, and operationally efficient. They serve as the basis for deploying specific workloads in a standardized manner, allowing for consistency and ease of management. Keep in mind that the specific configurations and components may vary based on organizational requirements and the nature of the workloads being deployed.