Azure Landing zone foundation - MatrixMind managed connectivity

The Landing zone is a Microsoft solution to build Azure Cloud engine for single instance, Enterprise scale and everything in-between. MatrixMind build the Azure Landing zone based on pre-factored survey and quick scan.

The methodology used to build and operate the landing zone is Cloud Adoption Framework. MatrixMind CAF-approach is stage-based implementation:

Define	Plan	Ready	Adopt	Govern	Manage

Figure 1. CAF-stages

The default approach is the delivery of pre-factored solution. The default scope is "**Plan & Ready**". This will include the inventory, organizational alignment, get familiar with Azure Landing zone and build it. The default solution includes:

1. Landing zone foundation for workloads management
2. Landing zone for workloads

Regardless of the size of the landing zone, the design and placement of building blocks are considered in the following layers:

- Azure agreement (CSP, EA, MCA)
- Management Groups
- Subscriptions for Landing zone foundation (Connectivity – Identity – Management)
- Subscriptions for the Landing Zone Workloads (Production – NonProduction – Sandbox)
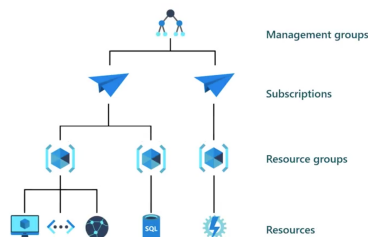- Resource groups
- Resources

Figure 2. MatrixMind Layering approach

The Landing zone foundation is default integrated with customers environment by using MatrixMind connectivity services (CloudHub). This service secures the dedicated connection and guaranteed bandwidth-capacity.

Landing zone deliverables

Once implemented the customer will receive:

1. Landing zone foundation with integrated connectivity
2. Landing zone for workloads

Azure Landing zone foundation
- It is implemented with 3 subscriptions for Connectivity, Identity and Management
    - In the Connectivity subscription the ExpressRoute will be enabled by using MatrixMind CloudHub
    - In the Identity subscription the IAM is arranged for MatrixMind managed connectivity services
    - In the Management subscriptions the tooling is enabled to managed environment
- Each of these subscriptions will have default set of Resource groups and resources
    - Network resource group
    - Foundation resource group for key vault and diagnostic purposes
- The Management subscription will have additional Resource groups and resources related to management applications (Log analytics workspace)
- The Identity subscription will have additional Resource groups and resources related to Identities (e.g., Active Directory)
- The Connectivity subscription will have additional Resource groups and resources related to connectivity and Security. In MatrixMind case Azure Firewall Premium or Palo Alto Network Next Generation Firewall

Azure Landing zone for workloads
It is implemented with minimum 3 subscriptions: Sandbox, Production and NonProduction.
- Each of these subscriptions will have default set of Resource groups and resources:
    - Network resource group
    - Foundation resource group for key vault and diagnostic purposes
- In addition, these subscriptions will have additional Resource groups and resources related to applications/workloads
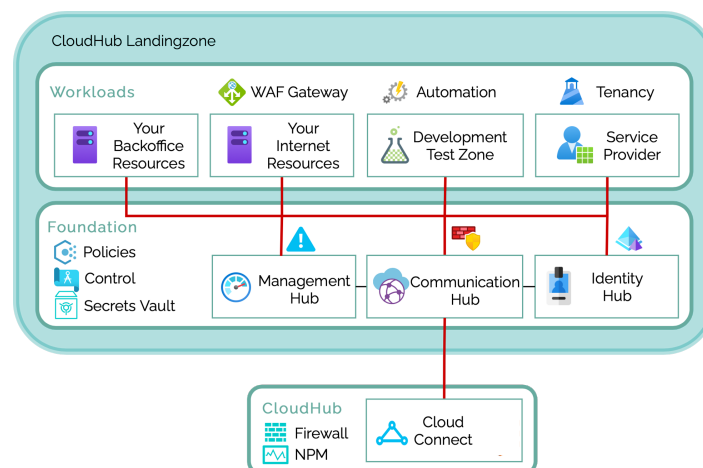

Figure 3. MatrixMind Landing zone concept with integrated connectivity

Azure Landing zone – Integrated connectivity

- The Azure Foundation and Azure Landing zones for Workloads are integrated with customer existing infrastructure via MatrixMind connectivity services (CloudHub)
- The design is based on Azure vWAN and is delivered as fully managed Cloud connectivity
- The CloudHub is completely based on private connections from Eurofiber, InterXion, Equinix and our network-partners
- The customer will receive secure, reliable and high-quality network, completely separated from the Public Internet

The CloudHub

- ExpressRoute, Ethernet/Internet, WDM, Managed-Dark Fiber
- Direct peering to all available SaaS or other providers by Eurofiber, InterXion, Equinix
- Direct peering to AM-IX and NL-IX
- Direct Internet peering with Microsoft Azure
- Private Cloud hosted in DataPlace DC's
- Dcspine, DC to DC on demand connectivity for 85 datacenters in The Netherlands
- Meet-me-room with 1800 Network providers
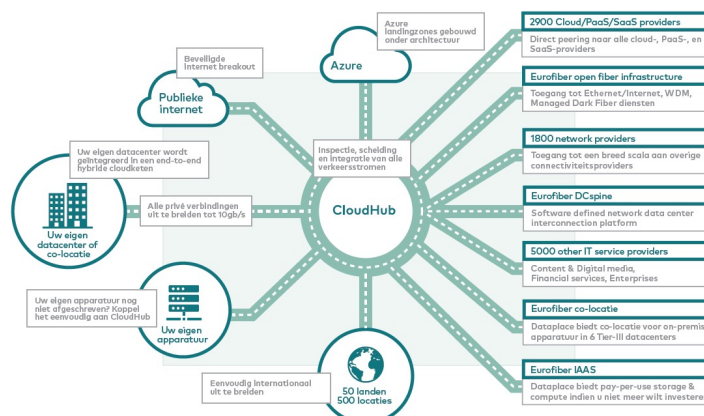- It is easy to scale platform

Figure 4. MatrixMind CloudHub

Build

The customers can expect from MatrixMind:

- DevOps a way of working
- Automated deployment
- Clearly described deliverables
- Guaranteed support for Landing zone
- The Kickoff session where journey and solution are explained using the visuals and conversation with customers stakeholders
- Workshops as Cloud awareness program

The awareness programs

To get familiar with Azure and to understand what the customer will receive MatrixMind will organize Azure workshops prior each stage. The available workshops are:

Contracts	Development	Networking	Identity	Security	Governance	Manage Services
MCA	Portal	Hybrid concept	Microsoft AD / AAD/ O365	Subscriptions	Regulations	MatrixMind Manage Services
EA	CLI	Hub & Spoke topology	IAM	Network Security Groups	Controls	
MOSA	Infra as a code	Network tiers		Security Center/Hub	Reports & Actions	
CSP	Automation	Edge design		Azure firewalls	Five baseline principles	
		Management segment		WAF / DDoS		

Figure 5. MatrixMind workshops

Manage services

Once finished the customer can choose for fully managed Landing zone by MatrixMind and make the next step for adoption/migration. The adoption/migration is provided in 3 scenarios:

1. As is migration
2. Partially improved
3. Green field with deployment of Cloud native services, for example Azure Kubernetes Services, Azure Directory Services and Azure Virtual Desktop.

After implementation the innovation calendar will be defined to stay on rails. The innovation calendar depends on manage services contact with MatrixMind.

Sincerely MatrixMind