DEPARTMENT OF MASTER OF COMPUTER APPLICATION

Activity – 1

Case-Study of Microsoft Azure (21MCASCE4011)

ACKNOWLEDGEMENT

The successful completion of any task would be incomplete without thanking the people who made it possible whose constant guidance and encouragement motivated my effort with success.

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Submitted to: Dr.Bhuvana

It is my great pleasure to thank my guide “Dr.Bhuvana” for her excellent guidance, constant encouragement, support, constructive suggestions.

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Declaration

I hereby declare that the work which is being prepared in this activity report entitled “Microsoft Azure” for the award of the degree of Master of Computer Application, submitted in the Department of Master of Computer Application, Jain Deemed To Be University, Jayanagar 560068, Bengaluru, Karnataka, India is an authentic record of my own activity work carried out under the supervision of Dr.Bhuvana Ma’am.

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Signature of the Evaluator

Marks Obtained

Q. How to configure virtual networks for the case study below on the Azure portal.

Consider the fictional organization Vijayam Ltd, which is in the process of migrating infrastructure and applications to Azure. In your role as network

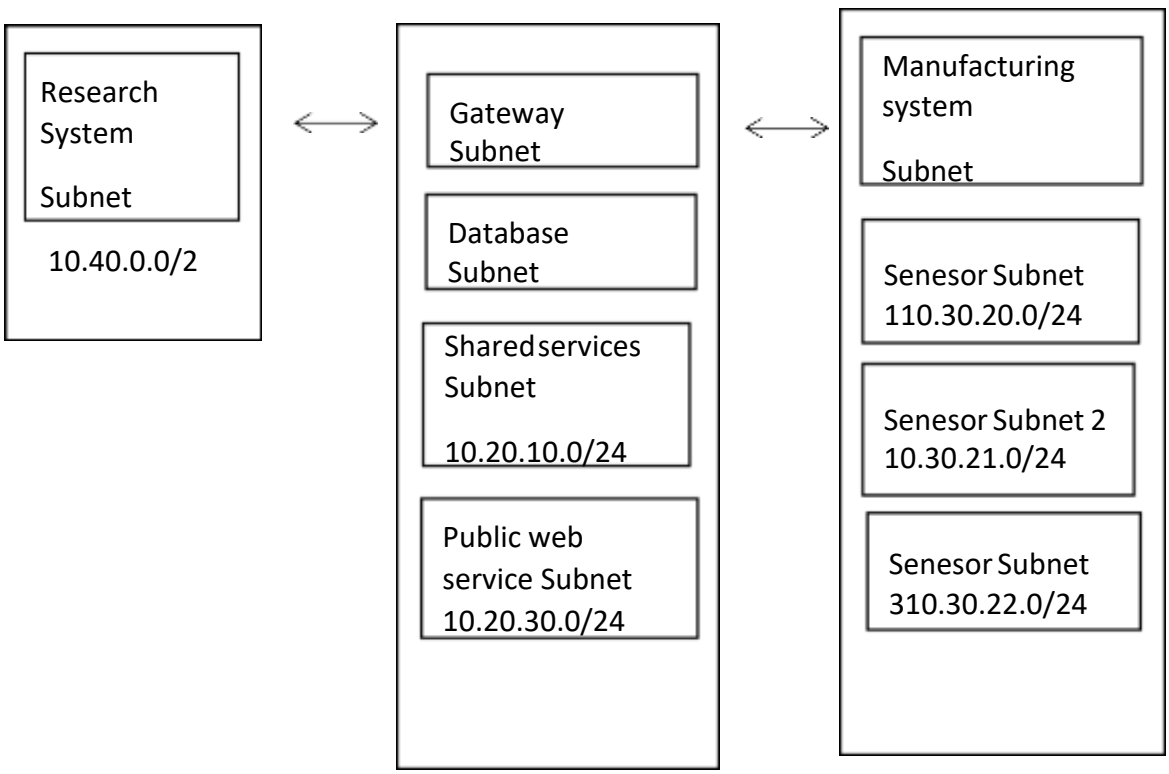
engineer, you must plan and implement three virtual networks and subnets to support resources in those virtual networks.

The Core Services Vnet virtual network is deployed in the East Indian (Kolkatha)region. This virtual network will have the largest number of resources. It will have connectivity to on-premises networks through a VPN connection. This network will have web services, databases, and other systems that are key to the operations of the business. Shared services, such as domain controllers and DNS also will be located here. A large amount of growth is anticipated, so a large address space is necessary for this virtual network.

The Manufacturing Vnet virtual network is deployed in the South Indian region (Karnataka), near the location of your organization's manufacturing facilities. This virtual network will contain systems for the operations of the manufacturing facilities. The organization is anticipating a large number of internal connected devices for their systems to retrieve data from, such as temperature, and will need an IP address space that it can expand into.

The Research Vnet virtual network is deployed in the West India region (Mumbai), near the location of the organization's research and development team. The research and development team uses this virtual network. The team has a small, stable set of resources that is not expected to grow. The team needs a small number of IP addresses for a few virtual machines for their work.

Solution:


Research System
Subnet
10.40.0.0/2
Gateway Subnet
Database Subnet
Shared services Subnet
10.20.10.0/24
Public web service Subnet
10.20.30.0/24
Manufacturing system
Subnet
Senesor Subnet
110.30.20.0/24
Senesor Subnet 2
10.30.21.0/24
Senesor Subnet
310.30.22.0/24

Virtual Network	Region	Virtual network address space	Subnet name	Subnet
CoreServices	Kolkatta	10.20.0.0/16		
			Gateway Subnet	10.20.0.0/27
			Shared Services Subnet	10.20.10.0/24
			Database Subnet	10.20.20.0/24
			Public Web Service Subnet	10.20.30.0/24
Manufacturing Vnet	Karnataka	10.30.0.0/16	Manufacturing System Subnet	10.30.10.0/24
			SensorSubnet1	10.30.20.0/24
			SensorSubnet2	10.30.21.0/24
			SensorSubnet3	10.30.22.0/24
Research Vnet	Mumbai	10.40.0.0/16		
			Research System Subnet	10.40.0.0/24