IBM Cloud

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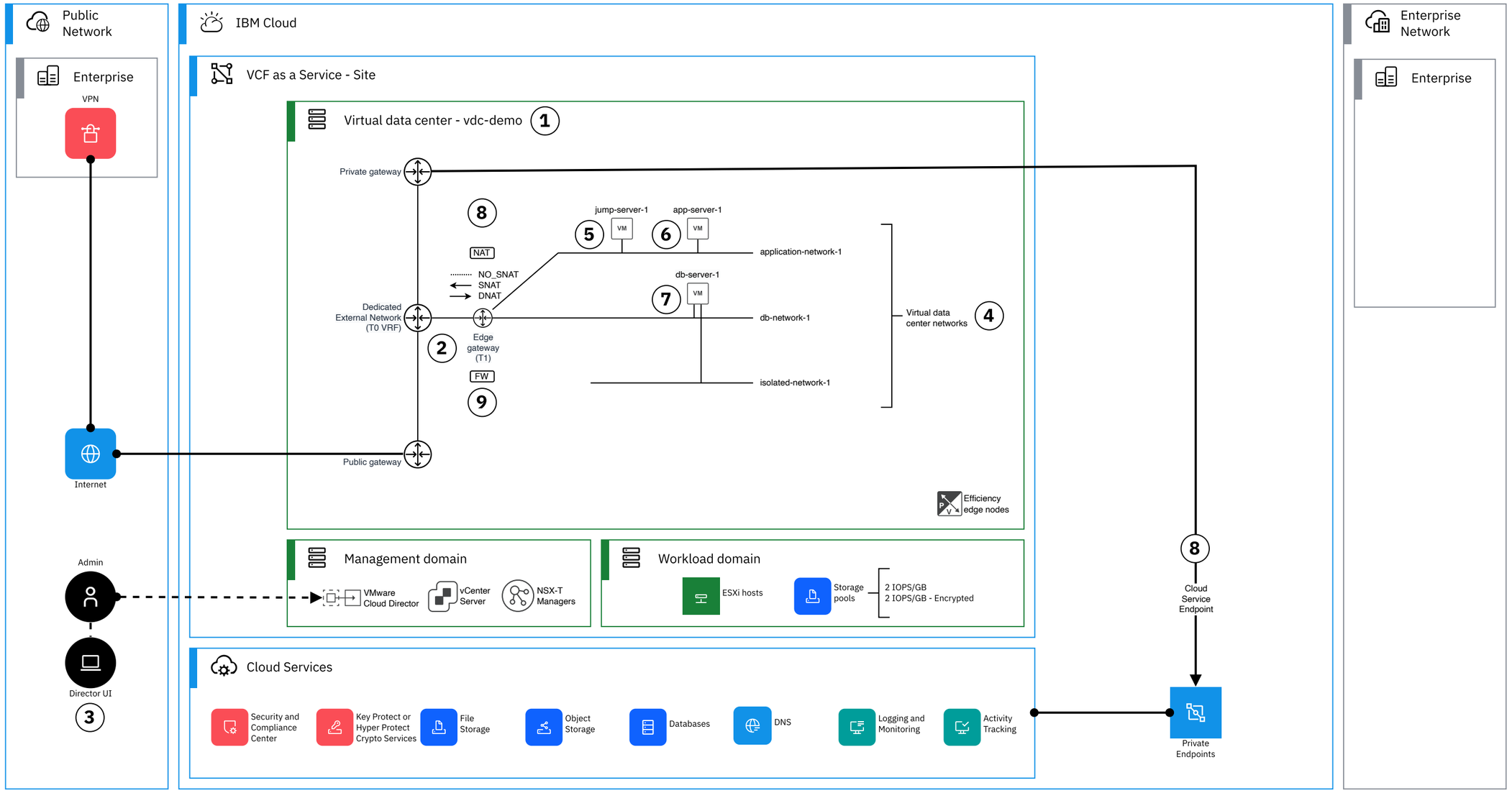
Tutorial with Director Console on VCF as a Service - Single tenant

IBM Cloud® managed VCF as a Service (VMWaaS) delivers a VMware Cloud Director platform running on dedicated IBM Cloud® Bare Metal Servers. This basic demo deployment using Director Console helps you to deploy an example infrastructure, which consists of two routed and one isolated virtual data center networks, three virtual machines and example source (SNAT) and destination (DNAT) network address translation and firewall rules.



1. Use IBM Cloud Console to create a virtual data center in your single tenant instance. This example instance uses only 2 IOPS/GB storage pool.
2. When a virtual data center is created, an edge gateway and external networks are created automatically. External network provides you internet access and an IP address block of /29 with usable 6 public IP addresses is provided.
3. You need to use the Director Console to create virtual data center networks, virtual machines as well as firewall and network address translation rules. Authenticate to VMware Cloud Director the admin user name and password. Create a new user for yourself.
4. Create three virtual data center networks: two routed (application and db) and one isolated (isolated). Routed virtual data center networks are attached to the edge gateway while isolated virtual data center network is a standalone network. You can create more networks based on your needs.
5. Create a jump server with Windows 2022 Operating System. Attach the server to the application network. You can access the virtual machine though the VM console, or using RDP though the DNAT rule on the Edge Gateway.
6. Create an example virtual machine (application-server-1) on the application network. You can create more VMs or add disks to the servers based on your needs.
7. Create an example virtual machine (db-server-1) on the db network. You can create more VMs or add more disks to the servers based on your needs.
8. Create NAT rules for public network access. SNAT to public internet is configured for all routed networks and DNAT is configured to access the application server. Create NO_SNAT or NO_DNAT rules for traffic that you do not wan to NAT, if needed.
9. Firewall rules are provisioned to secure network access to the environment. To create firewall rules, create Static Groups and IP sets first for networks and individual IP addresses. You can then use these rules with your firewall rules as sources and detinations.

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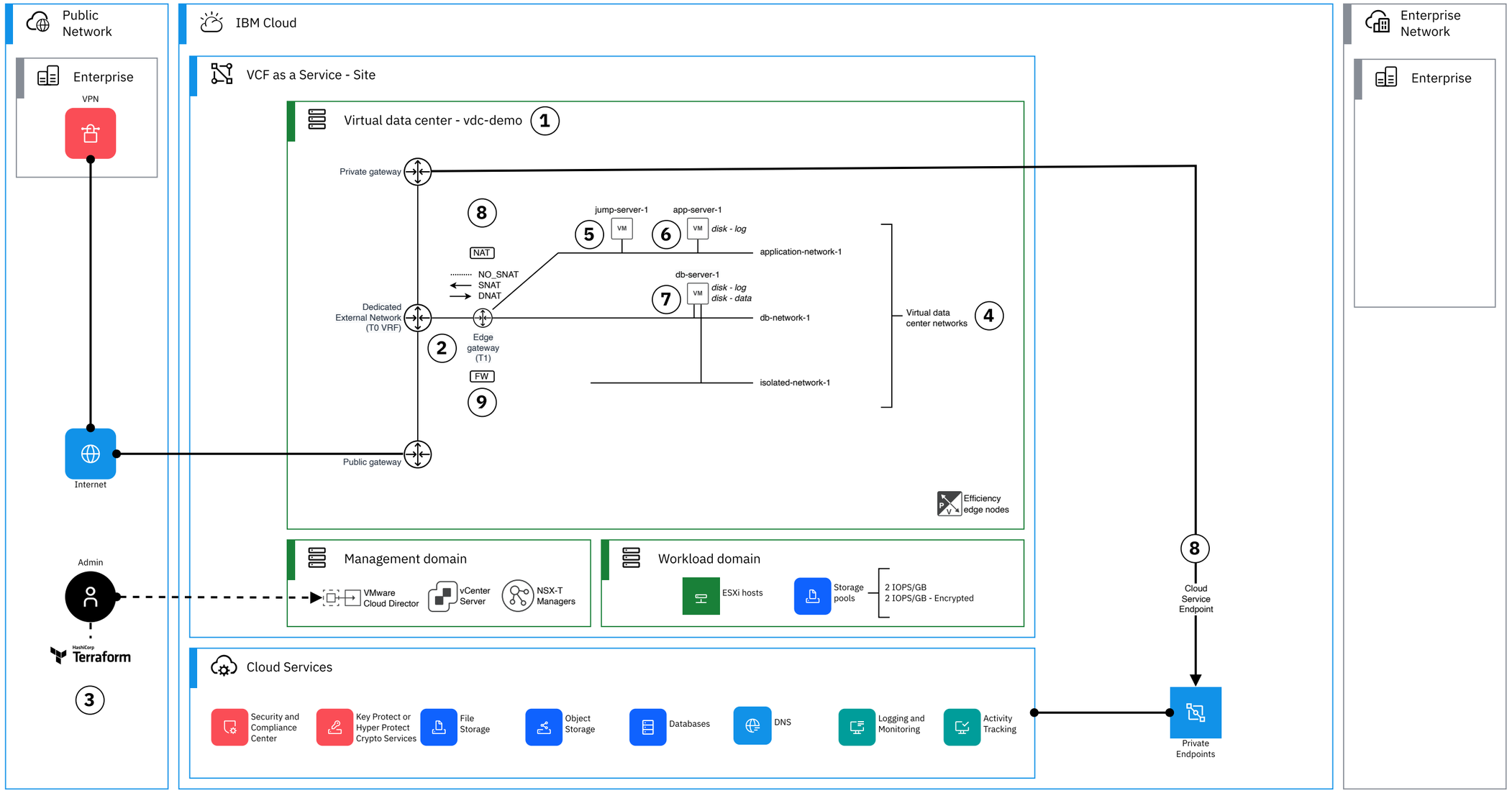
Terraform Tutorial on VCF as a Service - Single tenant

IBM Cloud® managed VCF as a Service (VMWaaS) delivers a VMware Cloud Director platform running on dedicated IBM Cloud® Bare Metal Servers. This Terraform tutorial deployment deploys an example infrastructure, which consists of two routed and one isolated virtual data center networks, three virtual machines and example source (SNAT) and destination (DNAT) network address translation and firewall rules.



1. Use IBM Cloud Console to create a virtual data center in your single tenant instance. This example instance uses only 2 IOPS/GB storage pool.
2. When a virtual data center is created, an edge gateway and external networks are created automatically. External network provides you internet access and an IP address block of /29 with usable 6 public IP addresses is provided.
3. Terraform template is used to create virtual data center networks, virtual machines as well as firewall and network address translation rules. The creation is fully controlled though variables. Terraform authenticates to VMware Cloud Director API with user name and password. Access tokens will be supported in the future.
4. Three virtual data center networks are created: two routed (application and db) and one isolated (isolated). Routed virtual data center networks are attached to the edge gateway while isolated virtual data center network is a standalone network. You can create more networks based on your needs.
5. A jump server is created with Windows 2022 Operating System. The server it attached to the application network. You can access the virtual machine though the VM console, or using RDP though the DNAT rule created on the Edge Gateway.
6. One example virtual machine (application-server-1) is created on the application network. Application server has an additional disk e.g. for logging. You can create more VMs or disks based on your needs.
7. One example virtual machine (db-server-1) is created on the db network. Database server has two additional disks e.g. for data and logging. You can create more VMs or disks based on your needs.
8. SNAT and DNAT rules are created for public network access. SNAT to public internet is configured for all routed networks and DNAT is configured to access the application server.
9. Firewall rules are provisioned to secure network access to the environment. To create firewall rules, Static Groups and IP sets are created for networks and individual IP addresses.