1.Network Creation

* Set up a VPC.
* Allocate secondary subnet IPs for pods.
* Allocate secondary subnet IPs for services.
* Enable Private Google Access.
* Configure NAT Router

2.Cluster Creation and Configuration

1. Create a node pool with high vCPUs:
   * Disable the GKE Metadata server under the security section in node pool settings.
   * Enable cluster auto-scaling option.
   * Specify zone: us-central1-a.
   * Disable auto-upgrade.
2. Cluster settings:
   * Location type: Zonal.
   * Control plane zone: us-central1-a.
   * Default node zones: us-central1-a.
   * Release channel: Stable channel.
   * Maintenance window: To be determined.
   * Vertical Pod Auto-scaling: Disabled.
   * Private cluster: Enabled.
   * Control plane address range: Provided by GKE.
   * Control plane global access: Disabled.
   * Workload Identity: Enabled.
   * Backup for GKE: Enabled.

3.Application Services Deployment

* Deploy the Application Services.
* Deploy SentinelOne.

4.Configure permissions (IAM)

* Assign Editor permission to the Google APIs Service Agent service account.

Groups Creation:

* Infra team is to create dedicated groups for developers, DevOps.

5.Postgres Instance Creation

* Create PostgreSQL 15 version instance.
* Disable the public IP.

6.Restore Databases

* Automated backups: Enabled
* Automated backups retained: 7.
* Point-in-time recovery: Enabled
* Days of logs retained: 7.
* Location: Multi-region: us

7.SQL Server Instance Creation

* Create SQL Server latest version.
* Disable the public IP.

8.Audit Logging Setup

* For Audit Logs need to enable Cloud Logging API
* Pushing the audit logs to Splunk.

9.Endpoints Creation

* For Endpoints creation need to enable the Google Cloud Endpoints.

10.Firewall Configuration

* implicit-allow-all-egress.
* implicit-deny-all-ingress.
* google-iap-to-cloudsql-auth-proxy (For datastream setup) - As per requirement.

11.Identity Platform Configuration

* Create the provider based on the developer requirements.

12.Google Firebase Configuration

* Create the firebase configuration based on the developer requirements.

**Note**: **Ensure all the resources cloud builds, buckets etc... are in the us-central1 location.**