**Domain join directory:**

This option allows you to select a directory for the instance to join if applicable, such as an Active Directory domain.

**IAM instance profile:**

Here, you can assign an IAM role to the instance, which grants the instance permissions to AWS services.

The dropdown allows you to select the IAM role associated with the profile.

**Hostname type:**

This dropdown allows you to choose the type of hostname for the instance.

The "IP name" is selected, meaning the instance's hostname will be derived from its IP address.

**DNS Hostname:**

Enable IP name IPv4 (A record) DNS requests: This checkbox is selected but grayed out, indicating it is enabled by default and cannot be modified.

Enable resource-based IPv4 (A record) DNS requests: This option is selected, which means that the instance will use resource-based DNS records for IPv4.

Enable resource-based IPv6 (AAAA record) DNS requests: This option is available but not selected, allowing you to enable it if you want the instance to use IPv6 DNS records.

**Instance auto-recovery:**

This dropdown allows you to enable or disable auto-recovery for the instance. Auto-recovery automatically recovers the instance if it becomes impaired due to an issue that can be resolved by a simple reboot.

**Shutdown behavior:**

This dropdown determines what happens when the instance is shut down.

The options are likely "Stop" or "Terminate," and "Stop" is selected, meaning the instance will stop when shut down but can be restarted later.

**Stop - Hibernate behavior:**

This dropdown allows you to choose whether the instance should hibernate when it is stopped. Hibernation saves the contents of the instance's memory (RAM) to the root EBS volume, allowing the instance to resume later with the same memory state.

**Termination protection:**

This setting is a safeguard to prevent accidental termination of the instance. If enabled, the instance cannot be terminated from the console until termination protection is disabled.

**Stop protection:**

This option provides protection against accidental stopping of the instance. When enabled, it prevents the instance from being stopped through the console.

**Detailed CloudWatch monitoring:**

This dropdown allows you to enable or disable detailed monitoring for the instance. With detailed monitoring, Amazon CloudWatch collects data on a 1-minute interval, providing more granular performance metrics compared to the default 5-minute interval.

**Elastic GPU:**

This option allows you to attach an Elastic GPU to the instance. Elastic GPUs provide flexible GPU resources to your EC2 instance, enabling it to handle more graphics-intensive workloads without needing a dedicated GPU instance type.

**Credit specification:**

This setting applies to T2, T3, T3a, and T4g instance types, which use CPU credits to manage CPU usage. The "Standard" option is selected, which allows the instance to accumulate CPU credits when idle and spend them when needed for burst performance. There may also be options like "Unlimited" to allow sustained high CPU usage.

**Capacity reservation:**

This dropdown allows you to specify a capacity reservation for the instance. Capacity reservations ensure that you have access to the specified number of instances when you need them, particularly in times of high demand.

**Tenancy:**

This option lets you select the tenancy model for the instance. Common choices include:

Shared (default): The instance runs on shared hardware.

Dedicated Instance: The instance runs on dedicated hardware.

Dedicated Host: The instance runs on a dedicated physical server.

**RAM disk ID:**

This field allows you to specify a RAM disk for the instance if needed. RAM disks are rarely required, but they can be used for specific types of workloads or custom kernels.

**Kernel ID:**

This option allows you to specify a custom kernel to use with the instance. Typically, most users use the default Amazon kernel unless there's a need for a specific custom kernel.

**Nitro Enclave:**

This dropdown lets you enable or configure Nitro Enclaves, which are isolated compute environments to protect and process highly sensitive data. Nitro Enclaves are not compatible with instance types that have fewer than 2 vCPUs.

**License configurations:**

This field allows you to specify license configurations if you are using a bring-your-own-license (BYOL) model or if you need to apply specific licenses to your instance.

**Specify CPU options:**

This checkbox allows you to specify custom CPU options for the instance, such as the number of CPU cores and threads per core. In the image, this option is grayed out, indicating that the selected instance type does not support custom CPU options.