Data Models

PostgreSQL Data Models

1. **Host Information**

   - **HostID** (Primary Key): Unique identifier for each host.

   - **Hostname**: Name of the host.

   - **IPAddress**: Network address of the host.

   - **OS**: Operating system of the host.

   - **OSVersion**: Version of the operating system.

   - **HardwareSpecs**: JSON or a structured format to store CPU, Memory, Disk, etc.

   - **AgentVersion**: Version of the agent installed.

   - **LastSeen**: Timestamp of the last communication with the agent.

2. **User**

   - **UserID** (Primary Key): Unique identifier for each user.

   - **Username**: User's name.

   - **Email**: User's email address.

   - **PasswordHash**: Hash of the user's password for authentication.

   - **Role**: Role of the user (e.g., admin, viewer).

3. **Command Logs**

   - **CommandID** (Primary Key): Unique identifier for each command.

   - **HostID**: Identifier of the host the command was sent to.

   - **Command**: The actual command or script sent.

   - **Timestamp**: When the command was issued.

   - **ResponseStatus**: Success or error code.

   - **Response**: Output or result of the command.

InfluxDB Data Models

1. **System Metrics**

   - **Measurement**: Type of metric (e.g., cpu_usage, memory_usage, disk_io, network_traffic).

   - **Tags**: Key-value pairs to store metadata (HostID, Hostname, etc.) that you can index on.

   - **Fields**: Actual data points (e.g., usage_percent=75, read_bytes=1024).

   - **Timestamp**: When the metric was collected.