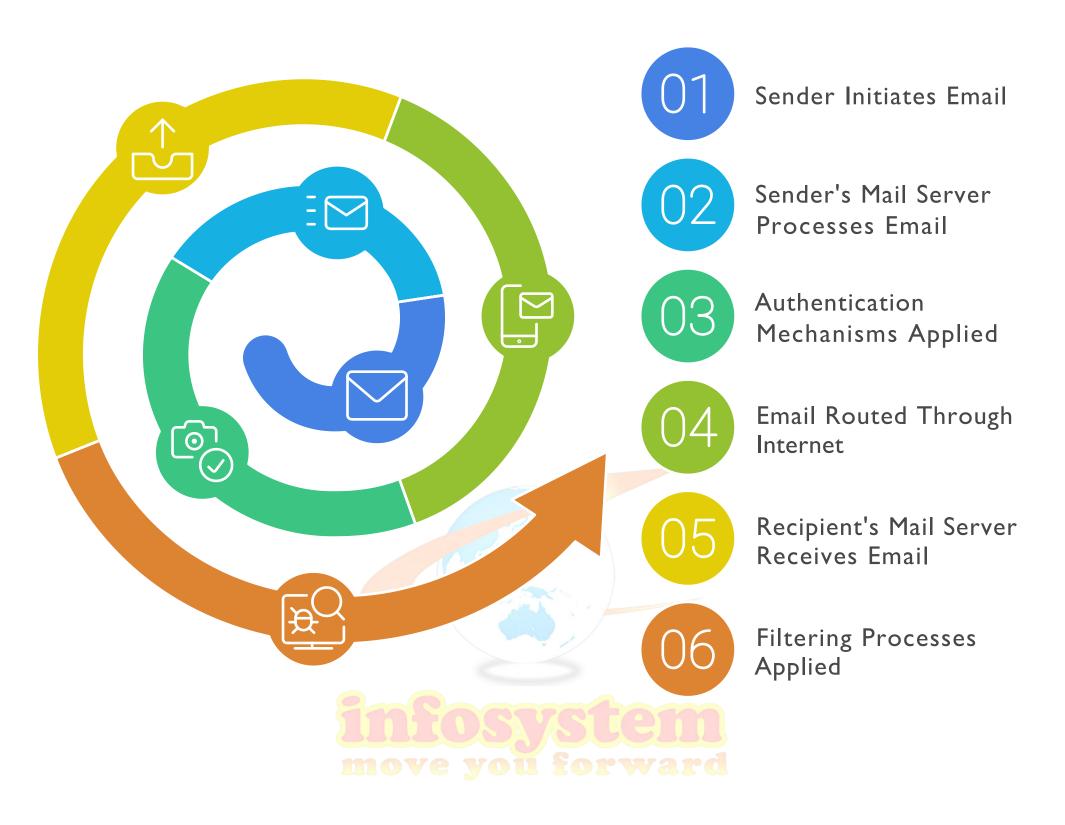
## **Understanding Mail Flow Among Mail Servers**

This document provides a detailed explanation of the email flow process among mail servers, highlighting each step from the sender to the recipient. It outlines the roles of various components involved in ensuring secure and reliable email delivery, including authentication mechanisms and filtering processes.

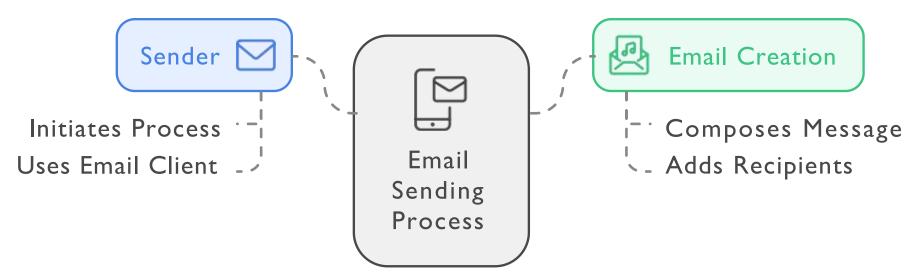
### Email Flow Process Among Mail Servers



## Mail Flow Process

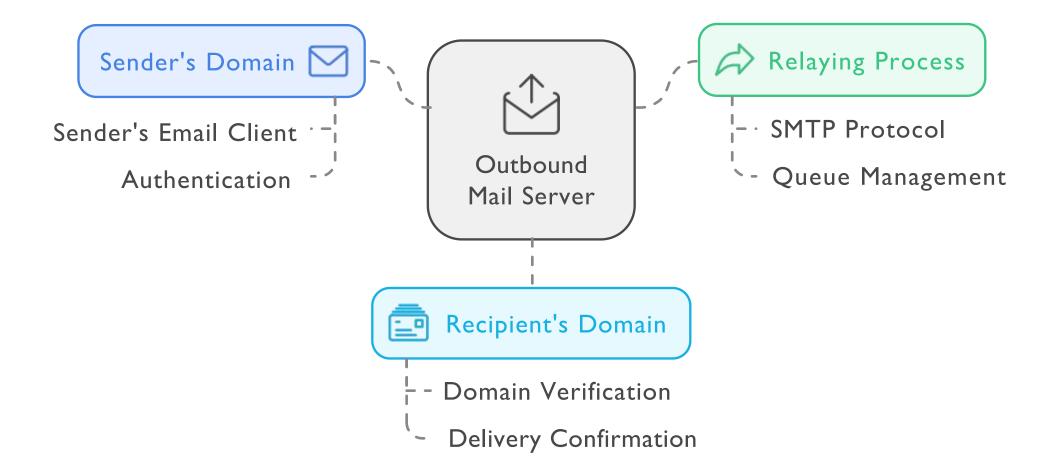
### 1. Sender:

• The process starts with the sender creating and sending an email.



#### 2. Outbound Mail Server:

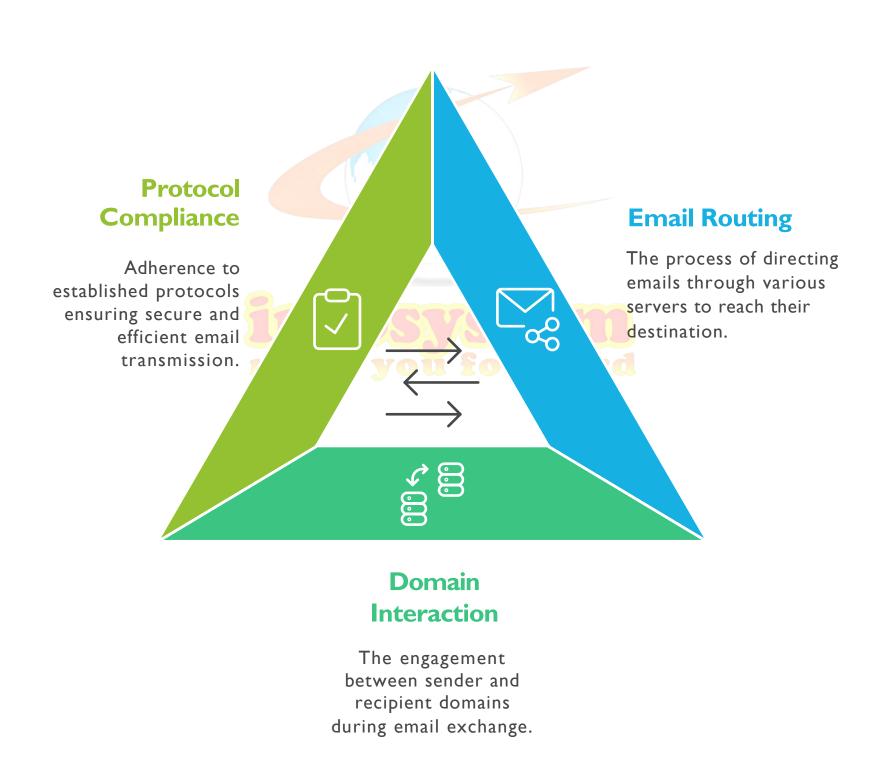
• The email first reaches the sender's outbound mail server. This server is responsible for relaying the email to the recipient's domain.



#### 3. Internet Transmission:

• The email is sent over the internet to the recipient's domain.

### Internet Transmission

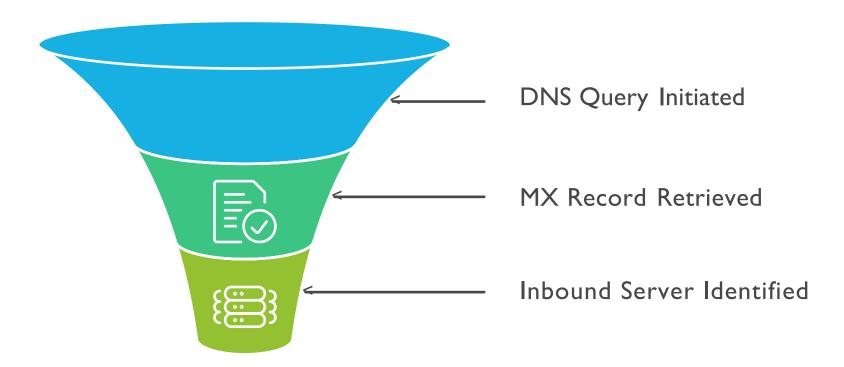


#### 4. DNS Check:

During this process, the DNS is queried to check the MX (Mail Exchange) record
of the recipient's domain. This ensures the email is directed to the correct
inbound mail server.

### **Email Routing through DNS Check**

#### Email Sent to Domain



Email Directed to Server

### 5. Inbound Mail Server:

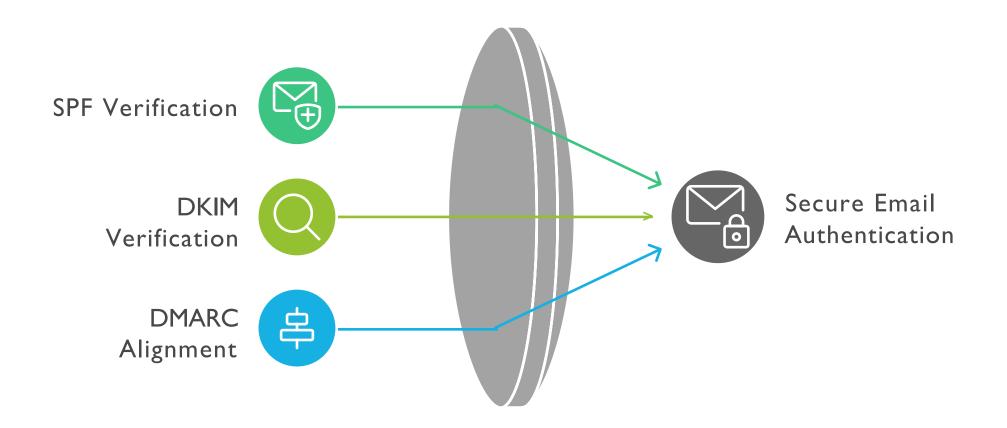
• The recipient's inbound mail server receives the email from the sender's outbound mail server.



## 6. Authentication (SPF, DKIM, DMARC):

- The inbound mail server authenticates the email using:
  - SPF (Sender Policy Framework): Verifies the sender's IP is authorized.
  - DKIM (DomainKeys Identified Mail): Checks if the email's content was tampered with.
  - DMARC (Domain-based Message Authentication, Reporting, and Conformance): Ensures SPF and DKIM align with the sender's domain policies.

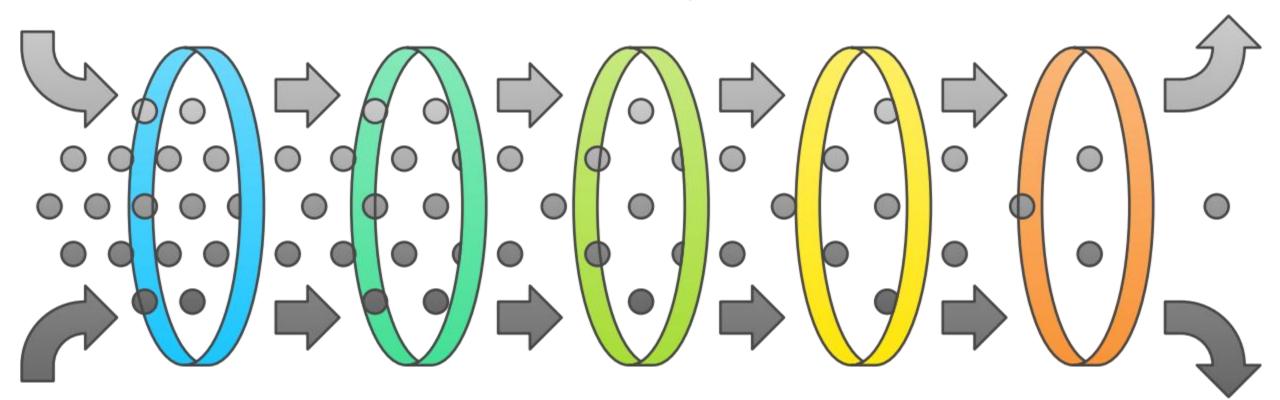
## **Ensuring Email Security**



#### 7. Reputation & Filtering:

- The server evaluates the email's authentication and sender's reputation:
  - If it fails, the email might be:
    - Blocked: Completely rejected.
    - SPAM: Moved to the spam folder.
  - If it passes, it proceeds to the user's Inbox or a specific folder (e.g., via user-defined filters).

## **Email Processing Funnel**



# Authentication Check

Verifying the email's authenticity

# Reputation **Evaluation**

Assessing the sender's reputation

## **Blocked**

Email is completely rejected

## Marked as **SPAM**

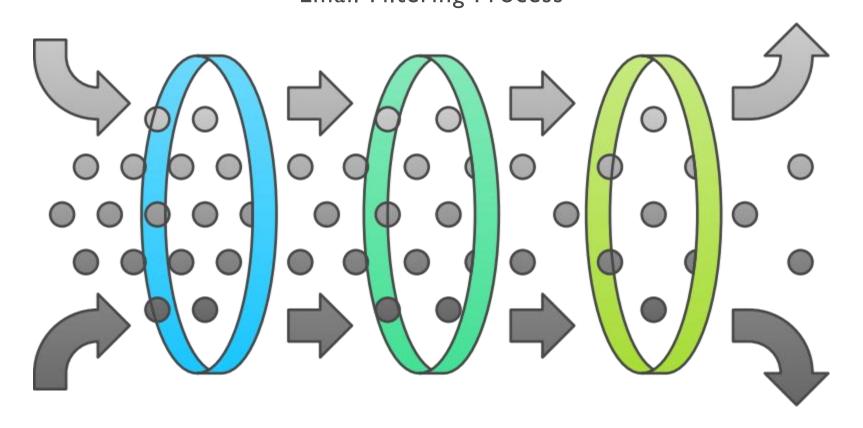
Email moved to spam folder

# Delivered to Inbox

Email reaches the user's inbox

This process ensures secure and reliable email delivery while preventing spam or malicious messages. If you have any questions or need further details, feel free to ask!

## Email Filtering Process



# Spam Detection

Identifying and blocking spam

## **Security Check**

Scanning for malicious content

## Reliable Delivery

Ensuring emails reach intended inbox