Emails requiring a higher level of security are encrypted and sent to a third-party secure email hosting service.

Incoming mail can be routed to either the email appliance or to Exchange Online for delivery.

This diagram represents the Enterprise mail flow before introducing Office 365.
Exchange Online Implementation
Stage #1 - On-premises + MIL
18 Jun 2019

Emails requiring a higher level of security are encrypted and sent to a third-party secure email hosting service.

Mail is exchanged via SMTP over the Internet.

DNS MX Records
(MX = Mail eXchange)

mil-wa.gov.mail.protection.outlook.com

Incoming mail can be routed to either the email appliance or to Exchange Online for delivery.

DNS MX Record
(MX = Mail eXchange)

wamsg.wa.gov

Exchange Online Protection (EOP) applies message hygiene and data loss prevention (DLP) to incoming and outgoing email.

Office 365 Message Encryption
Exchange Online Protection

Office 365 Shared Enterprise Tenant
Exchange Online

Incoming mail for MIL is routed to Exchange Online. All other traffic goes to the email security appliance.

MIL exchanges mail with the rest of the Enterprise via SMTP over the Internet.

Exchange Online Implementation

Stage #1
On-premises + MIL
18 Jun 2019

MIL

Microsoft Cloud

Trustwave

WaTech Secure Email Service

On-premises

Agency applications send bulk unauthenticated SMTP email through the email security appliance.

Agency Application Servers

Email Security Appliance

Microsoft Exchange 2016

Exchange on-premises looks only in AAD

Exchange on-premises looks only in EAD

Enterprise Shared Azure Active Directory (AAD)

Enterprise Active Directory (EAD)

Exchange Online looks up addresses only in AAD

Exchange Online looks up addresses only in EAD

Exchange Online

Internet

DNS MX Records
(MX = Mail eXchange)

mil-wa.gov.mail.protection.outlook.com

wamsg.wa.gov

Incoming mail can be routed to either the email appliance or to Exchange Online for delivery.

MIL exchanges mail with the rest of the Enterprise via SMTP over the Internet.
Exchange Online Implementation
Stage #2 - On-premises + MIL + Exchange Hybrid
18 Jun 2019

- Mail is exchanged via SMTP over the Internet
- Emails requiring a higher level of security are encrypted and sent to a third-party secure email hosting service

**Internet**

**Microsoft Cloud**

**Office 365 Shared Enterprise Tenant**

- Exchange Online
- Exchange Online Protection (EOP) applies message hygiene and data loss prevention (DLP) to incoming and outgoing email.

**Enterprise Active Directory (AAD)**

- The Exchange Hybrid connector allows on-premises Exchange and Office 365 to work together as a single integrated mail service.
- Mail, calendar sharing, and free/busy data flow freely over the Exchange Hybrid connector for registered namespaces.

**MIL**

- Registered in the Exchange Hybrid connector
  - dfw.wa.gov
  - mil.wa.gov
  - oic.wa.gov
  - parks.wa.gov
  - sao.wa.gov
  - utc.wa.gov
  - wa.gov
  - watech.wa.gov

**Exchange Online Implementation Stage #2 - On-premises + MIL + Exchange Hybrid**

- Exchange Online looks up addresses only in EAD
- Exchange on-premises looks up addresses only in AAD

**On-premises**

- Agency applications send bulk unauthenticated SMTP email through the email security appliance

**Agency Application Servers**

**Email Security Appliance**

**Microsoft Exchange 2016**

**Trustwave**

- WaTech Secure Email Service