CHAPTER 2

Use Case Examples

This chapter provides use cases that describe the process of exchanging documents using the Cisco AON Healthcare Services Extension for HIPAA and ePrescription (HSE).

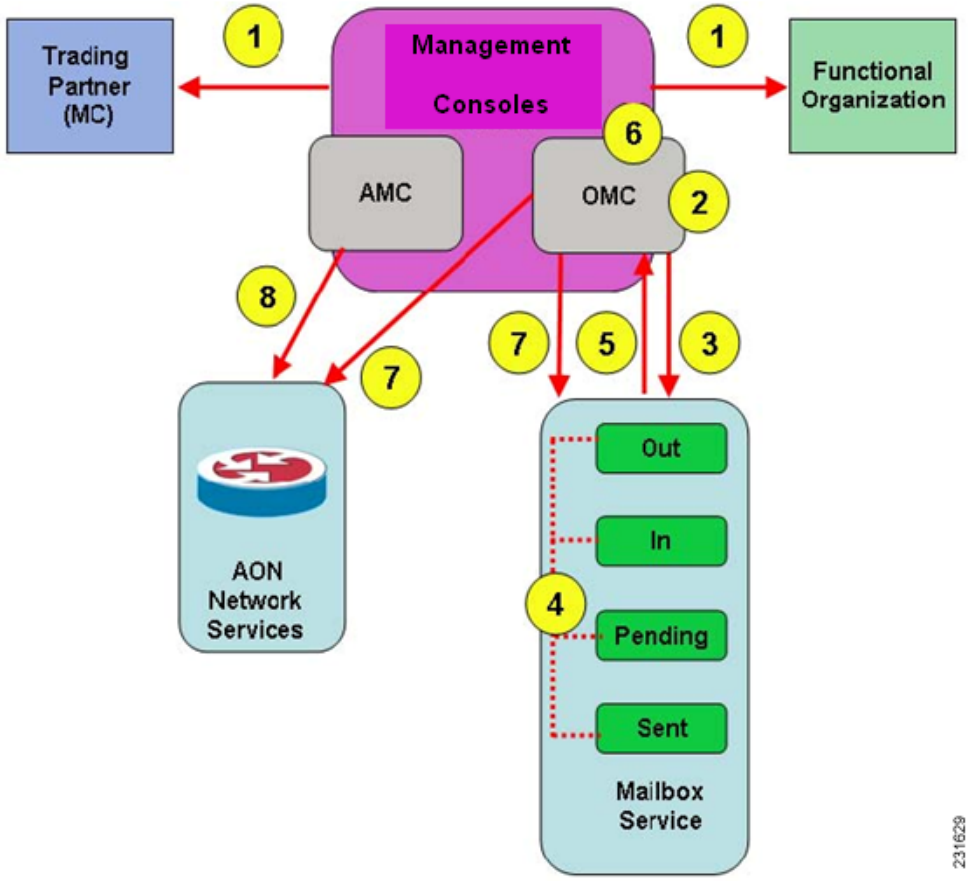
This chapter contains the following sections:

Note It is important to note that use cases show general or common situations particular to a specific use of the products and services described. Actual needs and requirements vary from customer to customer and business to business. The actual implementation of Cisco AON HSE differs accordingly.

Use Case 1: Provisioning Process

Use Case 1 describes creating a new mailbox to establish the electronic trading relationship between two trading partners. See Figure 2-1.

Figure 2-1 Use Case 1: Provisioning Process



The use case of establishing an electronic trading relationship between two trading partners follows these steps:

Step 1 The administrator collects the trading partner and SLA information necessary for the particular document exchange.

Step 2 The administrator creates a new mailbox using the Operations Management Console (OMC). This is a mandatory step before any trading relationships can be configured for the purpose of document exchange.

Step 3 When the mailbox is added, the OMC notifies the mailbox service that a new mailbox has been requested.

Step 4 On receipt of this notification, the OMC creates a directory on the remote file system corresponding to the mailbox ID and creates the appropriate directories (in, out, sent, pending, error) under the mailbox ID directory.

Step 5 The mailbox service sends a confirmation message to the OMC that the mailbox was created.

Step 6 Using the previously agreed-upon SLAs between trading partners, the administrator configures the trading relationship information using the OMC.

Step 7 The configuration information is pushed to the Cisco AON module and the mailbox service using a web services (WS) call.

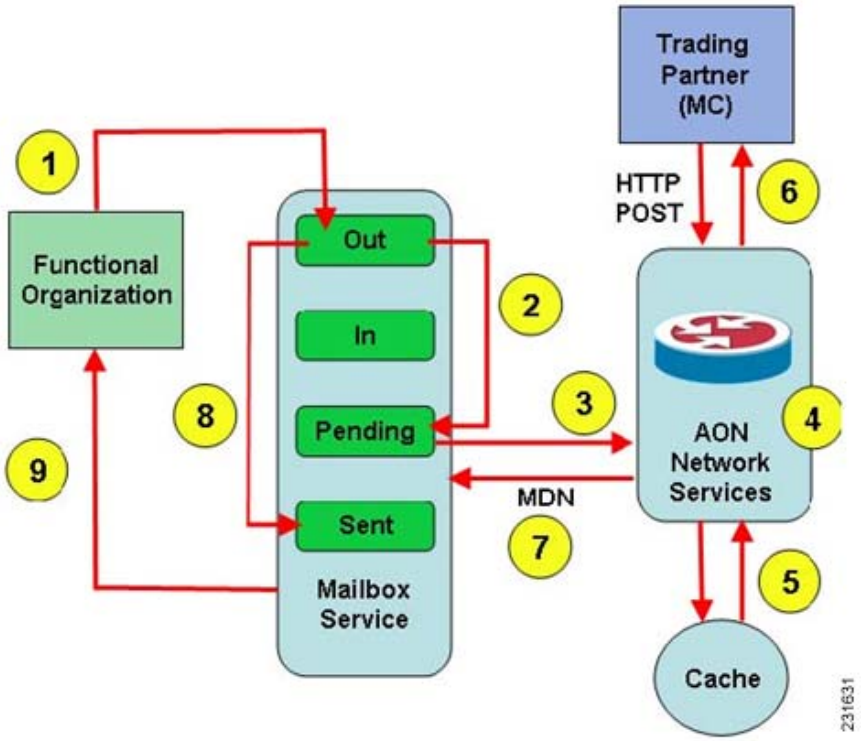
Step 8 Any required digital certificates are imported into the OMC console.

Use Case 2: Making a Benefits Eligibility Check

Use Case 2 describes sending a benefits eligibility check message to a trading partner. See Figure 2-2. A pharmacy needs to make an electronic eligibility check with a pharmacy benefits manager (PBM) for a customer.

The pharmacy has a system that outputs only CSV files. However, the PBM needs the files in HIPAA X12 format (EDI ASC X12 270).

Figure 2-2 Use Case 2: Sending an Eligibility Check to a Trading Partner



This use case proceeds as shown in the following steps:

Step 1 The administrator configures the system to deposit an eligibility check file in the *out* directory of the remote file server at a pharmacy.

Step 2 The mailbox service monitors the *out* directory of the remote file system at regularly scheduled intervals. When new files are detected, the files are moved to the *pending* directory on the file system.

Step 3 The mailbox service initiates the AS2 file transfer.

Step 4 Upon receipt of the mailbox service request, the Cisco AON module:

- Determines the trading partner ID.
- Validates the document.
- Determines the correct transformation based on the source IP address (IP address of the pharmacy), destination IP address (IP address of the PBM), and the source document type.

Step 5 AON retrieves the trading relationship information from the cache using the trading partner ID.

Step 6 The file is packaged in accordance with the SLA requirements stored in the trading relationship (for example, compression, encryption, or a digital signature might be required).

In this case, it is transformed to the EDI ASC X12 270 data format.

Step 7 The file is then forwarded to the appropriate TP destination address (for the PBM) using an HTTP/HTTPS POST operation.

Step 8 The Cisco AON module monitors the response. If the transaction requires a synchronous Message Disposition Notification (MDN), the MDN signature is generated. The AON Module concludes the initial web services request from the mailbox service, including any synchronous MDN and optional status or error indications.

Step 9 When the MDN is received, the mailbox service moves the original file to the **`sent`** directory and places a copy of the MDN with it.

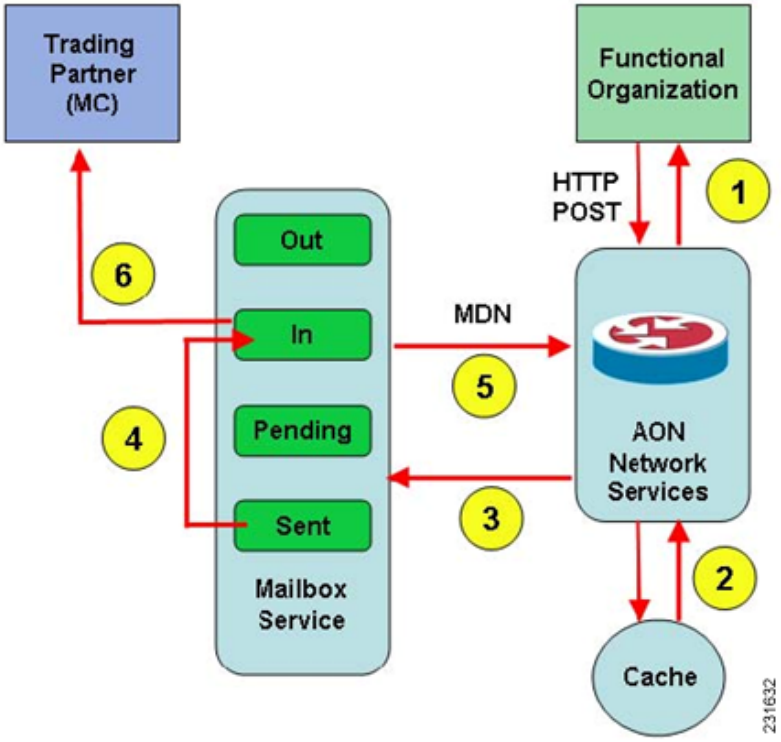
Step 10 All events are sent by web services to the OMC, providing details of the transaction to the administrator.

Step 11 The transformed and encrypted file is stored on a shared, remote file system (not on AON) for use in auditing and non-repudiation.

Use Case 3: Receiving an Electronic Prescription

Use Case 3 describes receiving an electronic prescription sent by an external trading partner. See Figure 2-3.

Figure 2-3 Use Case 3: Receiving an Electronic Prescription



This use case proceeds as shown in the following steps:

Step 1 The Trading Partner sends an AS2 message by HTTP(S) POST to the Cisco AON module.

Step 2 The Cisco AON module validates that a recognized “AS2 To” and “AS2 From” pair is resolvable and retrieves the trading relationship configuration from the cache based upon the “AS2 To” and “AS2 From” identifiers.

According to information contained in the AS2 headers, the Cisco AON module can perform several functions on the incoming file including unpacking, decompressing, decrypting, and verifying signatures.

Step 3 After the file is unpacked, the resulting message is processed by the mailbox service, specifying the target mailbox and MDN requirements in the SOAP header.

Step 4 The mailbox service deposits the file in the appropriate in directory and generates the MDN as appropriate. If transformation of the document to another format is required, the document is transformed.

Step 5 If a synchronous MDN is required, the MDN is sent from the AON node to the initiating trading partner's AS2 gateway in the HTTP(S) response. If an asynchronous MDN is required, the Cisco AON module sends the MDN over a separate HTTP request that is sent from the receiving end of the transaction.