

Glossary

access controls A set of bits that specify the types of operations a requestor is authorized to perform on a given catalog node, record, or attribute type.

address template A set of AOCE templates that allow a user to enter address information into a User record.

AOCE Apple Open Collaboration Environment.

AOCE catalog A hierarchically arranged store of data in a format intelligible to the AOCE Catalog Manager. See also *external catalog*, *PowerShare catalog*.

AOCE messaging system The set of PowerTalk system software and PowerShare mail servers that allows Macintosh users and processes connected over a network or via a modem to exchange information.

AOCE Setup catalog See *PowerTalk Setup catalog*.

AOCE system software The collection of Macintosh Operating System managers and utility functions that provide APIs for catalog, messaging, and security services. The AOCE system software includes the Standard Mail Package, the Standard Catalog Package, AOCE templates, the Interprogram Messaging Manager, the Catalog Manager, the Authentication Manager, and the Digital Signature Manager, as well as utility functions. See also *PowerTalk system software*.

AOCE template A resource file that extends the AOCE extension to the Finder to display new types of data in catalogs or to display data in a new way. See also *aspect template*, *file type template*, *forwarder template*, *information page template*, *killer template*.

AOCE toolbox The low-level APIs for the AOCE system software: the Authentication Manager, Catalog Manager, Interprogram Messaging Manager, and Digital Signature Manager. See also *Collaboration package*, *Collaboration toolbox*.

API Application programming interface.

AppleMail format See *standard interchange format*.

AppleTalk Secure Data Stream Protocol (ASDSP) A networking protocol that provides reliable transmission of an encrypted stream of bytes between two authenticated entities on an AppleTalk internet.

approval file A file you receive from a signature-authorization-issuing agency. You use this file to activate your signer file.

approval request A notarized (or otherwise authorized) request to issue a public-key certificate. The approval request includes what is intended to be the public key of the certificate's owner.

approved signer file See *signer file*.

approving agency See *certificate issuer*.

ASDSP See *AppleTalk Secure Data Stream Protocol*.

aspect A structure in memory that contains properties provided by an aspect template. An aspect might also contain code provided by the code resource in an aspect template.

aspect template An AOCE template that specifies how attributes in a record are to be parsed into properties for display in an information page. An aspect template can also specify certain constant property values and can contain a code resource that translates between property types and implements features in information pages. See also *information page template*.

attribute The smallest unit of data in an AOCE catalog; the data within a record is organized into attributes. Each attribute has a type indicating the type of data, a tag indicating the format of the data, a creation ID, and data (the attribute value).

attribute creation ID A number assigned by a catalog that uniquely identifies an attribute value within a record. It persists for as long as the attribute value exists and is never reused. Not all catalogs support attribute creation IDs. See also *pseudo-persistent attribute creation ID*.

attribute tag See *attribute value tag*.

attribute type The type of data in an attribute; for example, telephone number or picture. A record can contain more than one attribute type, and there can be more than one attribute value of the same attribute type in a record.

attribute value The data in an attribute.

attribute value tag The format of the data in an attribute value.

authentication Verification of the identification of an entity on a network or of one end of a communication link.

authentication identity See *identity*.

Authentication Manager The part of the Macintosh Operating System that authenticates users of AOCE messaging and catalog services and provides authentication services to applications.

authentication server A secure network-based server that holds the client keys of users and services and generates credentials that allow users to do mutual authentication.

bcc recipient A “blind courtesy copy” recipient of a letter. Bcc recipients are not listed in copies of the letter received by To and cc recipients. See also *original recipient*.

block creator A four-character sequence that indicates which application created a message block; analogous to a file’s creator in HFS.

block type A code that indicates the format of the data contained within a message block.

callback routine (1) An application-defined routine called by the Operating System. When you call certain functions, you provide a pointer to a callback routine, and the function installs your routine in memory. Then when a certain event occurs, the Operating System calls your callback routine. See also *completion routine*. (2) A function provided by the CE to provide a

service for aspect code resources. When the CE calls your code resource, your code resource can call the CE’s callback routines.

catalog See *AOCE catalog*.

Catalog Browser A Finder extension that allows a user to search through an AOCE catalog by opening folders on the desktop.

catalog discriminator A name and reference number that uniquely identifies a catalog.

Catalog Manager The part of the Macintosh Operating System that manages the organization, reading, and writing of data in AOCE catalogs.

catalog node See *dNode*.

catalog service access module (CSAM) A code module, implemented as a device driver, that makes an external catalog available within an AOCE system by supporting the Catalog Manager API.

catalog service function A CSAM-defined function that responds to requests for AOCE catalog services from clients of the Catalog Manager.

Catalogs Extension An extension to the Finder that makes it possible for the Finder to display the contents of AOCE catalogs and for the user to edit the contents of records.

cc recipient A “courtesy copy” or secondary recipient of a letter. See also *original recipient*.

CE See *Catalogs Extension*.

certificate See *public-key certificate*.

certificate issuer The organization that authorized, or issued, a particular public-key certificate. Each certificate is digitally signed by its issuer.

certificate owner The person or organization to which a particular public-key certificate has been issued. Each certificate contains the public key of its owner.

certificate request See *approval request*.

certificate set A chain of public-key certificates that, combined with a digital signature, make up a full signature. A certificate set consists of the public-key certificate of the signer (owner),

digitally signed by the organization that issued the certificate; plus the certificate of the issuing organization, signed by the organization that issued that certificate; and so on, until the last signature is that of the prime issuing organization. The certificate set provides the signer's public key for decryption of the signer's signatures and ensures the validity of that public key.

certification authority See *certificate issuer*.

chain of certificates See *certificate set*.

client key A key that is known only to a specific entity and to the authentication server.

Collaboration package The high-level APIs for the AOCE system software collaboration managers: the Standard Mail Package and the Standard Catalog Package. See also *Collaboration toolbox*.

Collaboration toolbox The low-level APIs for the AOCE system software collaboration managers: the Authentication Manager, Catalog Manager, and Interprogram Messaging Manager. See also *AOCE toolbox*, *Collaboration package*.

completion routine A callback routine you can specify when you execute a function asynchronously. When the function completes execution, it calls your completion routine.

conditional view A view in an information page that is displayed only if certain conditions are met in the aspect associated with that information page.

content block A message block that contains the body of a letter in standard interchange format.

content enclosure An enclosure that contains a letter's content. It may be the sole content in a letter or be accompanied by content in a content block, an image block, or both. See also *regular enclosure*.

context A data structure used by some Digital Signature Manager routines to hold information and the results of calculations needed when processing data. See also *queue context*.

copying As used by AOCE utility routines: the process of taking the contents of each field in a source structure and placing them in the

corresponding field of a destination structure. This process includes all nested structures as well. Compare *duplicating*.

creation ID See *attribute creation ID*, *record creation ID*.

credentials Encrypted information provided by a server and sent by an initiator to a recipient as part of the authentication process. The credentials contain the session key and the initiator's identification.

CSAM See *catalog service access module*.

current block The message block last added to a message.

decrypt To restore encrypted data to its previous, legible (unscrambled) state. In most cryptographic systems, decryption is performed by mathematically manipulating the data with a large number called a *key*.

delivery indication Information within a report that indicates the successful delivery of a specific message to a specific recipient.

DES Data Encryption Standard. A standard algorithm for data encryption.

DES encryption A form of secret-key encryption used by the Digital Signature Manager solely for keeping users' private keys secure. See also *secret-key cryptography*.

digest A number, 16 bytes long, that is calculated from the contents of a given set of data. A digest is like a sophisticated checksum; it is almost impossible for two data sets of any size with any difference to yield the same digest value.

digital signature A data structure associated with a document or other set of data. The digital signature uniquely identifies the person or organization that is signing, or authorizing the contents of, the data and ensures the integrity of the signed data. It is a digest of the data to which the signature applies, encrypted with the private key of the signer. A digital signature can be verified by decrypting with the signer's public key. Same as encrypted digest. See also *full signature*.

Digital Signature Manager The part of the Macintosh Operating System that manages digital signatures and certificates.

distinguished name The complete identifier of the owner or issuer of a certificate. A distinguished name includes elements such as common name, organization, street address, and country.

dNode A container within an AOCE catalog that contains records, other dNodes, or both.

dNode number A number assigned by a catalog that uniquely identifies a catalog node within that catalog. Not all catalogs support dNode numbers. See also *pathname*.

dNode window A Finder window that displays the dNodes and records contained in a dNode.

duplicating As used by AOCE utility routines: the process of copying the pointers to data structures and not the actual data structures themselves. Compare *copying*.

enclosure A file or folder sent along with a letter, like an attachment to a conventional hard-copy letter. See also *content enclosure*, *regular enclosure*.

encrypt To hide data by putting it into a scrambled (illegible) state, in such a way that its original state can be restored later. In most cryptographic systems, encryption is performed by mathematically manipulating the data with a large number called a key.

encrypted digest See *digital signature*.

encryption key See *key*.

extension type A four-character value that identifies a type of messaging system that uses a specific addressing convention; for example, an AppleLink system or an X.400 system.

external catalog A catalog or database accessible to AOCE-enabled applications through the Catalog Manager API. For a user to have access to an external catalog, the user's AOCE system must include a CSAM for that catalog service.

external messaging system Any non-AOCE messaging system.

external service A service that is not provided automatically with PowerTalk system software and PowerShare servers.

file type template An AOCE template that extends the list of file types that may contain an AOCE template. During system startup, the Catalogs Extension searches for AOCE templates in files whose types are on the list.

focus box See *focus rectangle*.

focus rectangle A heavy border around a panel or around the content portion of a window. This border indicates to the user that the area it encloses is active and that any subsequent key-down event pertains to that portion of the window. Also called focus box.

foreign dNode A dNode in a PowerShare catalog used by AOCE system software to route messages to an external messaging system through a server MSAM.

Forwarder record A catalog record that contains identifying information about a server MSAM.

forwarder template An AOCE template that allows existing aspect templates and information page templates to be used for new types of records and attributes.

From recipient The sender of a message. See also *original recipient*.

full digital signature See *full signature*.

full signature A digital signature plus the certificate set of the signer. The Digital Signature Manager creates and verifies full signatures. Same as full digital signature.

identity A number used as shorthand for the name and key or name and password of a user or service. See also *local identity*, *specific identity*.

image block A message block containing a graphic representation of a letter's content. It may be the sole content in a letter or be accompanied by content in a content block, a content enclosure, or both. The format of data in an image block is sometimes referred to as *snapshot format*.

incoming message A message coming into an AOCE system from an external messaging system.

incoming queue A queue belonging to a mail slot into which a personal MSAM puts letters coming into an AOCE system from an external system.

information page A formatted display of data and controls, similar in appearance to a dialog box, showing information about an AOCE catalog record or a portion of a record. See also *information page template*.

information page template An AOCE template that defines the layout and contents of an information page, using the properties in a specific aspect.

information page window A window that contains one or more information pages. If the window contains more than one information page, only one information page is displayed at a time. In that case, the window contains a pop-up menu with a list of the information pages available.

initiator The originator of the authentication process.

intermediary A representative of a user or service that uses a proxy to obtain credentials for mutual authentication and then performs some function for the user or service represented.

Interprogram Messaging Manager (IPM) The part of the Macintosh Operating System that manages the creation, sending, and receiving of messages. IPM messages conform to a specific structure and can be transmitted over an AppleTalk network or any other communication link. The Interprogram Messaging Manager provides store-and-forward messaging services for Macintosh computers.

issuer See *certificate issuer*.

issuing organization See *certificate issuer*.

key A number used by an encryption algorithm to encrypt or decrypt data.

Key Chain See *PowerTalk Key Chain*.

Key Chain Access Code The master password providing access to a PowerTalk Key Chain.

killer template An AOCE template that disables other AOCE templates. A killer template

can disable any type of AOCE template except another killer template.

large-catalog mode A set of algorithms used by certain components of a PowerTalk system when retrieving information from large catalogs and displaying that information to the user.

letter A type of message consisting of a defined set of message blocks. A letter is intended to be read by a person. See also *mailer, non-letter message*.

letter attribute A piece of information about a letter stored in the letter header or the letter's message summary. Letter attributes include information such as the sender, the subject, the time the letter was sent, and so forth. Not to be confused with *attribute*.

letter header block A message block found in every letter. It contains recipient information and letter attributes.

local identity A number used as shorthand for the name and password of the principal user of a particular computer. A local identity gives the user access to all the services for which names and passwords are stored in the PowerTalk Setup catalog. See also *specific identity*.

lookup table A resource in an aspect template that parses attribute values into properties and properties into attribute values. A lookup table contains an entry for each type of attribute value to be translated into and from properties.

mail A term used to refer collectively to letters.

mailer A region added to a document window that transforms the document into a letter. The mailer enables the user to enter addresses and subject information, enclose other files and folders in the letter, and add a digital signature to the letter.

mailer set All of the mailers belonging to a forwarded letter.

mail slot A personal MSAM slot that serves to transfer letters. See also *slot*.

main aspect An aspect that contains the properties the CE needs to fill in the data for an item in a sublist. Compare *main view aspect*.

main aspect template A template for a main aspect.

main enclosure See *content enclosure*.

main view aspect An aspect that provides the properties for all the views in the main portion of an information page; that is, all of the information page except for the items in a sublist. Compare *main aspect*.

Master Key password The password of the principal user of a computer. This password unlocks the local identity and provides access to the services represented in the PowerTalk Setup catalog.

message The basic unit of communication defined by the Interprogram Messaging Manager. The term *message* is used as an inclusive term to refer both to letters and non-letter messages. See also *letter, non-letter message*.

message block A component of a message consisting of a sequence of any number of bytes whose format is governed by the block creator and block type.

message creator A four-character sequence that indicates which application created a message; analogous to a file's creator in HFS.

message family A set of messages grouped according to similar characteristics. Messages of the same family conform to the syntax of a defined set of message block types and their associated semantics.

message header That part of a message that contains control information about the message such as the message creator and message type, the total length of the message, the time it was submitted, addressing information, and so forth.

message mark A marker, used by the IPM Manager, that points to the current location within a message that is being created.

message queue A set of messages maintained by the IPM Manager on a recipient's disk or the disk of a message server.

message summary A set of data used by the Finder to display an incoming letter to a user.

message type A code that indicates the semantics of the message, the block types the message should contain, and the relationships among the various blocks in the message.

messaging service access module (MSAM) A foreground or background application that makes an external messaging system accessible from within an AOCE system. It translates and transfers letters, non-letter messages, or both between an AOCE system and an external messaging system. See also *personal MSAM, server MSAM*.

messaging slot A personal MSAM slot that serves to transfer non-letter messages. See also *slot*.

messaging system A combination of hardware and software that gives users or processes the ability to exchange messages.

MSAM See *messaging service access module*.

mutual authentication Authentication of both ends of a communication link accomplished by exchanging a series of encrypted challenges and replies.

nested letter A complete letter included whole within another letter.

nested message Any type of message included whole within another message.

nesting level An indication of how many messages are nested within a given message. For example, a letter that contains one nested letter has a nesting level of 1, and a letter that contains no nested letters has a nesting level of 0.

non-delivery indication Information within a report that indicates unsuccessful attempts to deliver a specific message to a specific recipient.

non-letter message A message sent from one application or process to another, not intended to be read by people. Compare *letter*.

online mode A mode of operation available only to personal MSAMs in which the MSAM actively manages letters in a user's AOCE mailbox and in the user's accounts on external messaging systems, reflecting changes in one to the other, keeping both ends synchronized to the degree possible.

original recipient Any of four specific types of recipient that can be specified by the sender of a message: To, From, cc, or bcc. An original recipient may be a group address. A non-letter message can include only From and To recipients. See also *resolved recipient*.

outgoing message A message that is leaving an AOCE system to go to an external messaging system.

outgoing queue A queue from which an MSAM reads messages that it must deliver to an external messaging system.

owner See *certificate owner*.

packing The process of compacting or “flattening” a complex data structure into a sequence of bytes. Compare *unpacking*.

parse function A CSAM-defined function that responds to requests for AOCE parse services from clients of the Catalog Manager.

partial pathname In an AOCE catalog, a value that uniquely identifies a catalog by specifying a dNode number and continuing with the name of each dNode under that one to the dNode in question.

password In digital signatures, a set of characters used as a key to encrypt and decrypt a certificate owner’s private key.

password encryption See *DES encryption*.

pathname In an AOCE catalog, a string that uniquely identifies a catalog node by specifying the name of each catalog node in the catalog starting from the first node under the root node and including each intervening node to the node in question. See also *dNode number*.

personal catalog An AOCE catalog created and managed by the Catalog Manager. A personal catalog is an HFS file located on a user’s local disk. A personal catalog can store any records that can be kept in a PowerShare catalog and is often used to store frequently used information from such a catalog.

personal MSAM An MSAM that transfers messages between the user’s Macintosh and specific user accounts on an external messaging system. A personal MSAM runs on a user’s Macintosh. Compare *server MSAM*.

physical queue The actual data of a message queue residing on a disk. A physical queue can have any number of associated virtual queues. See also *virtual queue*.

PMSAM See *personal MSAM*.

PowerShare catalog An AOCE server-based catalog provided by Apple Computer, Inc. See also *external catalog*.

PowerShare server A server installed on an AppleTalk network to provide catalog services to any number of entities on that network. A PowerShare server can also identify and authenticate users to ensure that only authorized people or agents gain access to the catalog information.

PowerTalk Key Chain The PowerTalk software that sets up and maintains a user’s PowerTalk Setup catalog.

PowerTalk Setup catalog A special personal catalog that contains information about the mail and messaging services, catalog services, and other services available to the owner of the computer. See also *local identity*.

PowerTalk system software Apple Computer’s implementation of the AOCE system software for use on Macintosh computers. The PowerTalk system software includes desktop services as well as all of the services of the AOCE system software managers.

private key One of a pair of keys needed for private-key cryptography. Every user has a private key kept by the user and known only to the user.

property An individual, self-contained piece of information, such as a number or a string. A property is defined in an aspect template and stored in an aspect in memory.

property command Any command handled by your AOCE template code resource’s `kDETCmdPropertyCommand` routine. The CE calls your code resource with the `kDETCmdPropertyCommand` routine selector when the user clicks a button or checkbox in your information page, when the user selects an item in a pop-up menu in your information page, and in a few other circumstances.

property number A reference number assigned to a property by an aspect template. The property number uniquely identifies that property within that aspect.

property type A constant associated with a property that specifies the nature of the data in the property value. For example, a property type can be a number, a string, or a custom type defined by a developer.

property value The data associated with a property.

proxy A privilege provided by a user or service to an intermediary. The proxy allows the intermediary to be authenticated as the user or service for a limited period of time.

pseudonym An alternative name for a record in a Catalog Manager routine.

pseudo-persistent attribute creation ID A number that uniquely identifies an attribute value within a record. It persists from the time the CSAM is opened at system startup until system shutdown. See also **attribute creation ID**.

public key One of a pair of keys needed for public-key cryptography. Every user has a public key, which can be distributed to other users.

public-key certificate A document that contains, among other information, the name and public key of a user. The user is the owner of the certificate. See also **signed certificate, certificate set**.

public-key cryptography A system of cryptography in which every user has two keys to encrypt and decrypt data: a public key and a private key. Data encrypted with a user's public key can be decrypted only with that same user's private key. Likewise, data encrypted with a user's private key can be decrypted only with that user's public key.

quasi-batch mode A mode of operation available only to personal MSAMs in which the MSAM complies with the minimum requirements of online mode. See also **online mode**.

queue context A grouping of virtual message queues. When you close a queue context, you simultaneously close all of the queues associated with that context. See also **virtual queue**.

recipient (1) The end of a communications link that receives credentials and a challenge from the initiator. The recipient must respond correctly to establish an authenticated connection. (2) An addressee on an AOCE message. See also **original recipient, resolved recipient**.

record The fundamental container for data storage in an AOCE catalog; analogous to a file in the HFS hierarchy. A record can contain any number of attributes.

record alias A record that enables you to store information about another record. For example, an alias could store in its attribute value the record location information for the original record.

record creation ID A number that uniquely identifies a record within a catalog. Not all catalogs support record creation IDs.

record ID The identity of a record, comprising the record name, record type, record creation ID, and record location information. See also **record creation ID, record type**.

record reference An attribute that identifies a specific catalog record.

record type A value that indicates the type of entity represented by a record—for example, LaserWriter, User, or Group.

regular enclosure Any message enclosure that is not a content enclosure. See also **content enclosure, enclosure**.

report A message with a defined set of message blocks used to send delivery and non-delivery indications to the sender of the message.

resolved recipient A recipient to which an MSAM must deliver a message. See also **original recipient**.

RSA RSA Data Security, Inc., a prime issuing organization for public-key certificates.

SAM See **service access module**.

secret-key cryptography A system of cryptography in which a single key is used to both encrypt and decrypt data. All who wish to share information must share the same key and keep it secret from all others.

server A program or process that provides some service to other processes on a network.

server MSAM An MSAM that transfers messages for multiple users on the AppleTalk network to which it is connected. It transfers messages between a PowerShare mail server and an external messaging system. A server MSAM must run on the same Macintosh as a PowerShare mail server. Compare *personal MSAM*.

service access module A software component that provides a PowerTalk user with access to external mail and messaging services or catalog services.

session key A key provided by an authentication server to be used by both the initiator and the recipient for mutual authentication. The session key remains valid for a limited time period.

Setup catalog See *PowerTalk Setup catalog*.

Setup record A record in the PowerTalk Setup catalog containing record references to all records in the PowerTalk Setup catalog that represent slots, catalogs, and other items.

setup template A set of AOCE templates that allow a user to install and configure a service access module.

sign As used by the Digital Signature Manager: To create a digital signature and affix it to a document or other piece of data. By signing, the signer authorizes the content of the data, protects it from alteration, and asserts his or her identity as the signer.

signature See *digital signature*.

signature resource A resource in an AOCE template that specifies the type of the template and the base ID number for the template. Other standard template resources have ID numbers equal to the signature resource's ID number plus some offset value.

signed certificate A public-key certificate that has been digitally signed by its issuer. Like any digital signature, the signature on a certificate ensures the integrity of the certificate (including its public key) and proves the identity of the signer (the issuer of the certificate).

signed digest See *encrypted digest*.

signer The individual or organization that signs a document or other piece of data. To create a signature, a signer must be the owner of a public-key certificate.

signer file A file used by a signer to create a digital signature. It consists of the signer's encrypted private key and the signer's certificate set.

Simple Mail Transfer Protocol (SMTP) A protocol for the exchange of electronic mail. Computers connected to the Internet often use this protocol.

slot A collection of information about one account on an external messaging system. The information includes whatever is necessary to allow an MSAM to access the account and retrieve and send messages. See also *mail slot*, *messaging slot*.

SMSAM See *server MSAM*.

snapshot format See *image block*.

specific identity A number used as shorthand for the name and key of an alternate user on a computer to provide access to a specific catalog or mail service. See also *local identity*.

stand-alone attribute A record that contains only one attribute, extracted from another record. Although technically a record, the AOCE software treats a stand-alone attribute like an attribute in most circumstances. The record type of a stand-alone attribute begins with the value of the constant `kAttributeValueRecTypeBody`.

Standard Catalog Package The part of the Macintosh Operating System that manages find and browse panels for AOCE catalogs.

standard content See *standard interchange format*.

standard interchange format A set of data formats that consists of plain text, styled text, sound (AIFF), images (PICT), and QuickTime movies ('MOOV').

Standard Mail Package The part of the Macintosh Operating System that manages mailers and makes it easy for applications to create and send letters.

standard mode A mode of operation available to server MSAMs and to personal MSAMs that deal with non-letter messages. An MSAM operating in standard mode hands off an incoming message to an AOCE system. It is the AOCE system, not the MSAM operating in standard mode, that is responsible for delivering the message to the ultimate destination.

store-and-forward gateway A link between different messaging systems, sometimes bridging different physical media, providing temporary data storage, and, where necessary, address translation.

store-and-forward messaging A method of delivering messages that provides for temporary storage and forwarding of a message from one location to another, sometimes through several intermediate store-and-forward gateways or servers.

store-and-forward server A server that provides store-and-forward messaging services. PowerShare servers are store-and-forward servers.

sublist A list of attributes that appears as a distinct subset of the items displayed in an information page window, or a list of records that appears in a dNode window.

tag See *attribute value tag*.

TCP/IP Transmission Control Protocol/Internet Protocol. The major transport protocol and the network layer protocol typically used in communicating messages over the Internet.

template See *AOCE template*.

To recipient A principal recipient of a message. See also *original recipient*.

unapproved signer file A file created by the MacSigner application when it creates an approval request. The unapproved signer file contains a DES-encrypted number that is intended to be the user's private key.

universal coordinated time (UTC) The same as Greenwich Mean Time (GMT); the standard time as established by the Royal Observatory at Greenwich, England.

unpacking The process of reconstructing a data structure from a sequence of bytes. Compare *packing*.

User record A catalog record representing an entity that has an account on an AOCE messaging or catalog server. A User record contains electronic addresses and biographical information about the entity that can be read by users of the system, as well as information about the entity's access privileges and password for use by the AOCE software.

UTC See *universal coordinated time*.

verify To establish the authenticity of a digital signature. Verification consists of determining that the signed document has not changed since it was signed and affirming that the public key used to decrypt the signature is valid.

view An item or field in an information page displaying one or more property values.

view list A data structure that specifies individual views on an information page. Each item in the list includes the graphic rectangle containing the view, the number of the property that provides the information to be displayed, the type of view, and information specific to that view type.

virtual queue A view of a physical message queue through which an application can open, close, and list messages. More than one virtual queue can be associated with a single physical queue. See also *physical queue*.