WebSphere MQ

Glossary

Version 7.0

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> **Note**
>
> Before using this information and the product it supports, be sure to read the general information under notices at the back of this book.

First edition (April 2008)

This edition of the book applies to the following products:

- IBM WebSphere MQ, Version 7.0
- IBM WebSphere MQ for z/OS, Version 7.0

and to any subsequent releases and modifications until otherwise indicated in new editions.

Contents

Glossary

WebSphere® MQ V7.0 glossary of terms

This glossary describes terms that are used in this information center, and words that are used with other than their everyday meaning. In some cases, a definition might not be the only one applicable to a term, but it gives the particular sense in which the term is used here.

If you do not find the term you are looking for, try a softcopy search, or see the hardcopy index, or see the *IBM® Dictionary of Computing*, New York:. McGraw-Hill, 1994.

A

abend reason code
A 4-byte hexadecimal code that uniquely identifies a problem with a program that runs on a z/OS® operating system.

abstract class
An object-oriented programming class that represents a concept; classes derived from it represent implementations of the concept. An object cannot be constructed from an abstract class; that is, it cannot be instantiated. Also see parent class.

access control
In computer security, the process of ensuring that only authorized users can access the resources of a computer system in authorized ways.

access control list (ACL)
In computer security, a list associated with an object that identifies who or what can access the object and their access rights. For example, an access control list is a list that is associated with a file that identifies the users who can access the file and that identifies the user's access rights to that file.

accountability
The quality of being responsible for one's actions.

ACL   See access control list.

active log
See recovery log.

adapter
An interface between WebSphere MQ for z/OS and TSO, IMS™, CICS®, or batch address spaces, that enables applications to access WebSphere MQ services.

address space
The area of virtual storage available for a particular job.

administration bag

In the WebSphere MQ Administration Interface (MQAI), a type of data bag that is created for administering WebSphere MQ by implying that it can change the order of data items, create lists, and check selectors within a message.

administrator command

A command used to manage WebSphere MQ objects, such as queues, processes, and namelists.

administrative topic object

A WebSphere MQ object that allows you to assign specific, non-default attributes to topics.

advanced program-to-program communication (APPC)

An implementation of the SNA LU 6.2 protocol that allows interconnected systems to communicate and share the processing of programs.

affinity

An association between objects that have some relationship or dependency upon each other. See connection affinity and message affinity.

alert   A message sent to a management services focal point in a network to identify a problem or an impending problem.

alert monitor

In WebSphere MQ for z/OS, a component of the CICS adapter that handles unscheduled events occurring as a result of connection requests to WebSphere MQ for z/OS.

alias queue

A WebSphere MQ object, the name of which is an alias for a base queue or topic that is defined to the local queue manager. When an application or a queue manager uses an alias queue, the alias name is resolved and the requested operation is performed on the associated base object.

allied address space (ally)

A z/OS address space that is connected to WebSphere MQ for z/OS.

ally   See allied address space.

alternate user authority

The ability of a user ID to supply a different user ID for security checks. When an application opens a WebSphere MQ object, it can supply a user ID on the MQOPEN, MQPUT1 or MQSUB call that the queue manager uses for authority checks instead of the one associated with the application.

alternate user security

On z/OS, the authority checks that are performed when an application requests alternate user authority when opening a WebSphere MQ object.

APAR   See authorized program analysis report.

APF   See authorized program facility.

API-crossing exit

A user written program that is similar in concept to an API exit. It is supported only for CICS applications on WebSphere MQ for z/OS.

API exit

A user-written program that monitors or modifies the function of an MQI call. For each MQI call issued by an application, the API exit is invoked before the queue manager starts to process the call and again after the

queue manager has completed processing the call. The API exit can inspect and modify any of the parameters on the MQI call.

APPC See Advanced Program-to-Program Communication.

application-defined format
Application data in a message for which the user application defines the meaning. Also see built-in format.

application environment
The software facilities that are accessible by an application program. On the z/OS platform, CICS and IMS are examples of application environments.

application level security
The security services that are invoked at the interface between an application and a queue manager to which it is connected. These services are invoked when the application issues MQI calls to the queue manager. The services might be invoked, directly or indirectly, by the application, the queue manager, another product that supports WebSphere® MQ, or a combination of any of these working together. Application level security is also known as end-to-end security or message level security.

application log
In Windows® systems, a log that records significant application events.

archive log
See recovery log.

ARM See automatic restart manager.

asymmetric key cryptography
A system of cryptography that uses two keys: a public key known to everyone and a private key known only to the receiver or sender of the message. Also see public-private key, symmetric key cryptography.

asynchronous consume
A process that uses a set of MQI calls that allow an application to consume messages from a set of queues. Messages are delivered to the application by invoking a 'unit of code' identified by the application, passing either the message or a token representing the message.

asynchronous messaging
A method of communication between programs in which a program places a message on a message queue, then proceeds with its own processing without waiting for a reply to its message. Also see synchronous messaging.

asynchronous put
A put of a message by an application, without waiting for a response from the queue manager.

attribute
In object oriented programming, a property of an object or class that can be distinguished distinctly from any other properties. Attributes often describe state information.

A characteristic or trait of an entity that describes the entity; for example, the telephone number of an employee is one of that employee's attributes. An attribute may have a type, which indicates the range of information given by the attribute, and a value, which is within that range. In XML, for

example, an attribute consists of a name-value pair within a tagged element, that modifies features of the element.

authentication
The security service that provides proof that a user of a computer system is genuinely who that person claims to be. Common mechanisms for implementing this service are passwords and digital signatures. Authentication is distinct from authorization; authentication is not concerned with granting or denying access to system resources.

authentication information object
A WebSphere MQ object that provides the definitions needed to check certificate revocation lists (CRLs) using LDAP servers, in WebSphere MQ support for Secure Sockets Layer (SSL) security.

authority check
See authorization check.

authorization
The process of granting or denying access to a network resource. Security systems use a two-step process: after authentication has verified that a user is who she says she is, authorization allows the user access to various resources based on the user's identity.

authorization check
A security check that is performed when a user or application attempts to access a system resource; for example, when an administrator attempts to issue a command to administer WebSphere MQ or when an application attempts to connect to a queue manager. Authorization checks are also known as authority checks and are performed as part of the access control security service.

authorization service
In WebSphere MQ on UNIX® systems and WebSphere MQ for Windows, a service that provides authority checking of commands and MQI calls for the user identifier associated with the command or call.

authorized program analysis report (APAR)
A request for correction of a defect in a current release of an IBM-supplied program.

authorized program facility (APF)
In z/OS, the authorized program facility is used to allow the installation to identify system or user programs that can use sensitive system functions.

automatic restart manager (ARM)
A z/OS recovery function that can improve the availability of specific batch jobs or started tasks, and therefore result in faster resumption of productive work.

B

backout
An operation that reverses all the changes made during the current unit of recovery or unit of work. Also see commit.

bag See data bag.

basic mapping support (BMS)
An interface between CICS and application programs that formats input and output display data and routes multiple-page output messages without regard for control characters used by various terminals.

behavior

In object-oriented programming, the functionality embodied within a method.

BMS See basic mapping support.

Booch methodology

An object-oriented methodology that helps users design systems using the object-oriented paradigm.

bootstrap data set (BSDS)

A VSAM data set that contains an inventory of all active and archived log data sets known to WebSphere MQ for z/OS, and a wrap-around inventory of all recent WebSphere MQ for z/OS activity. The BSDS is required to restart the WebSphere MQ for z/OS subsystem.

browse

In message queuing, to return a message to a calling application without removing it from the queue.

browse cursor

In message queuing, an indicator used when browsing a queue to identify the message that is next in sequence.

BSDS See bootstrap data set.

buffer pool

An area of main storage used for WebSphere MQ for z/OS queues, messages, and object definitions. Also see page set.

built-in format

Application data in a message for which the queue manager defines the meaning. Also see application-defined format.

C

CA See certificate authority.

CAF See Client Attachment feature (CAF).

call back

A generic term used to refer to either a message consumer or an event handler routine.

CCDT See Client Channel Definition Table.

CCSID

See coded character set identifier.

certificate authority (CA)

A trusted third-party organization or company that issues the digital certificates used to create digital signatures and public-private key pairs. The certificate authority guarantees that the individual granted the unique certificate is, in fact, who she claims to be. The role of the CA is to authenticate the entities (individuals or organizations) involved in electronic transactions. CAs are a critical component in data security and electronic commerce because they guarantee that the two parties exchanging information are really who they claim to be.

certificate revocation list (CRL)

A list of certificates that have been revoked before their scheduled

expiration date. CRLs are maintained by the certification authority and used, during SSL handshaking, to ensure that the certificates involved have not been revoked.

certificate store
The Windows name for a key repository.

CF See coupling facility.

CFSTRUCT
A WebSphere MQ object used to describe the queue manager's use of a Coupling Facility list structure.

channel
A WebSphere MQ object that defines a one-way communication link between two queue managers.

channel call back
A mechanism where a sender channel calls back the original requester channel using the sender's definition to ensure that the channel connection is established to the correct machine.

channel event
An event reporting conditions detected during channel operations, such as when a channel instance is started or stopped. Channel events are generated on the queue managers at both ends of the channel.

channel exit program
A user-written program that is called from one of a defined number of places in the processing sequence of a message channel agent (MCA).

channel initiator
A component of WebSphere MQ distributed queuing that monitors the initiation queue to see when triggering criteria have been met and then starts the sender channel.

channel listener
A component of WebSphere MQ distributed queuing that monitors the network for a startup request and then starts the receiving channel.

checkpoint
A place in a program at which a check is made, or at which a recording of data is made to allow the program to be restarted in case of interruption.

CI See control interval.

CipherSpec
The combination of encryption algorithm and hash function applied to an SSL message after authentication completes.

cipher suite
The combination of authentication, key exchange algorithm, and CipherSpec used by SSL for secure exchange of data.

ciphertext
Data that has been encrypted. Ciphertext is unreadable until it has been converted into plaintext (decrypted) with a key. Also see plaintext.

circular logging
In WebSphere MQ on UNIX systems and WebSphere MQ for Windows, the process of keeping all restart data in a ring of log files. Also see linear logging.

CL See Command Language.

class   In object-oriented design or programming, a model or template that can be used to create objects with a common definition and common properties, operations, and behavior. An object is an instance of a class.

class hierarchy
The relationships between classes that share a single inheritance. In Java™ programming, all classes inherit from the Object class.

class library
In object-oriented programming, a collection of prewritten classes or coded templates, any of which can be specified and used by a programmer when developing an application.

client   A run-time component that provides access to queuing services on a server for local user applications. The queues used by the applications reside on the server. Also see WebSphere MQ client.

client application
An application, running on a workstation and linked to a client, that gives the application access to queuing services on a server.

client attachment feature (CAF)
An option of WebSphere MQ for z/OS that supports the attachment of clients to z/OS.

client channel definition table (CCDT)
A file that contains one or more client-connection channel definitions.

client connection channel type
The type of MQI channel definition associated with a WebSphere MQ client. Also see server connection channel type.

close   To relinquish access to an object.

CLUSRCVR
See cluster-receiver channel.

CLUSSDR
See cluster-sender channel.

cluster
In Microsoft® Cluster Server, a group of computers, connected together and configured in such a way that, if one fails, MSCS performs a failover, transferring the state data of applications from the failing computer to another computer in the cluster and reinitiating their operation there.

In WebSphere MQ, a group of two or more queue managers on one or more computers, providing automatic interconnection, and allowing queues to be shared amongst them for load balancing and redundancy.

cluster queue
A queue that is hosted by a cluster queue manager and made available to other queue managers in the cluster.

cluster queue manager
A queue manager that is a member of a cluster. A queue manager can be a member of more than one cluster.

cluster-receiver channel (CLUSRCVR)
A channel on which a cluster queue manager can receive messages from other queue managers in the cluster, and cluster information from the repository queue managers.

cluster-sender channel (CLUSSDR)
A channel on which a cluster queue manager can send messages to other queue managers in the cluster, and cluster information to the repository queue managers.

cluster topic
In publish/subscribe messaging an object that, when defined, is published to the full repositories and pushed by them to all queue managers within the cluster.

cluster transmission queue
A transmission queue that holds all messages from a queue manager destined for another queue manager that is in the same cluster. The queue is called SYSTEM.CLUSTER.TRANSMIT.QUEUE.

coded character set identifier (CCSID)
The name of a coded set of characters and their code point assignments.

coexistence
The ability of two or more different versions of WebSphere MQ to function on the same computer.

command
In WebSphere MQ, an administration instruction that can be carried out by the queue manager.

command bag
In the MQAI, a type of bag that is created for administering WebSphere MQ objects, but that cannot change the order of data items or create lists within a message.

command event
A notification that an MQSC or PCF command has been executed successfully.

command language (CL)
In WebSphere MQ for i5/OS®, a language that can be used to issue commands, either at the command line or by writing a CL program.

command prefix (CPF)
In WebSphere MQ for z/OS, a character string that identifies the queue manager to which WebSphere MQ for z/OS commands are directed, and from which WebSphere MQ for z/OS operator messages are received.

command processor
The WebSphere MQ component that processes commands.

command server
The WebSphere MQ component that reads commands from the system-command input queue, verifies them, and passes valid commands to the command processor.

commit
An operation that applies all the changes made during the current unit of recovery or unit of work. Also see backout.

completion code
A return code indicating how a message queue interface (MQI) call has ended.

confidentiality
The security service that protects sensitive information from unauthorized disclosure. Encryption is a common mechanism for implementing this service.

configuration event
Notifications about the attributes of an object. The notifications are generated when the object is created, changed, or deleted and also by explicit requests.

configuration file
In WebSphere MQ on UNIX systems and WebSphere MQ for i5/OS, a file that contains configuration information for logs, communications, or installable services. Also see stanza.

connect
The means by which an application gains access to a queue manager and its resources.

connection affinity
A channel attribute that specifies the client channel definition that client applications use to connect to the queue manager, if multiple connections are available.

connection factory
A set of configuration properties that produces connections that enable a JMS application to perform messaging operations.

connection handle
The identifier or token by which a program accesses the queue manager to which it is connected.

constructor
In object-oriented programming, a special method used to initialize an object.

consume
To remove a message from a queue and return its contents to the calling application.

consumer
A generic term for an application that receives and processes messages. Also see message consumer

context
Information about the originator of a message that is held in fields in the message descriptor. There are two categories of context information: identity context and origin context. Context is also known as message context.

context security
On z/OS, the authority checks that are performed when an application opens a queue and specifies that it will set the context in messages that it puts on the queue, or pass the context from messages that it has received to messages that it puts on the queue.

control command
In WebSphere MQ on UNIX systems and WebSphere MQ for Windows, a command that can be entered interactively from the operating system command line. Such a command requires only that the WebSphere MQ product be installed; it does not require a special utility or program to run it.

control interval (CI)
A fixed-length area of direct access storage in which VSAM stores records and creates distributed free space. The control interval is the unit of information that VSAM transmits to or from direct access storage. A control interval always includes an integral number of physical records.

controlled shutdown
See quiesced shutdown. Also see immediate shutdown, preemptive shutdown.

conversation
Communication across a channel instance. Also see sharing conversations.

correlation identifier
A unique identifier that can be used to correlate replies with requests.

coupling facility
On z/OS, a special logical partition that provides high-speed caching, list processing, and locking functions in a parallel sysplex.

CPF   See command prefix.

CRL   See certificate revocation list.

cross-system coupling facility (XCF)
A component of z/OS® that provides functions to support cooperation between authorized programs running within a Parallel Sysplex®.

cryptography
Protecting information by transforming it (encrypting it) into an unreadable format, called ciphertext. Only those who possess the secret key can decipher (or decrypt) the message into plaintext.

D

DAE   See dump analysis and elimination.

daemon
A program that runs unattended to perform continuous or periodic functions, such as network control. See queued publish/subscribe daemon.

data bag
A container of object properties that the MQAI uses in administering queue managers. There are three types of data bag: user (for user data), administration (for administration with assumed options), and command (for administration with no options assumed).

data conversion interface (DCI)
The WebSphere MQ interface to which customer- or vendor-written programs that convert application data between different machine encodings and CCSIDs must conform. A part of the WebSphere MQ Framework.

data-conversion service
A service that converts application data to the character set and encoding that are required by applications on other platforms.

datagram
A form of asynchronous messaging in which an application sends a message, but does not require a response.

data integrity
The security service that detects whether there has been unauthorized

modification of data, or tampering. The service detects only whether data has been modified; it does not restore data to its original state if it has been modified.

data item
In the MQAI, an item contained within a data bag. This can be an integer item or a character-string item, and a user item or a system item.

DCE principal
A user ID that uses the distributed computing environment.

DCI See data conversion interface.

DCM See Digital Certificate Manager.

dead-letter queue
A queue to which a queue manager or application sends messages that cannot be delivered to their correct destination.

dead-letter queue handler
A WebSphere MQ-supplied utility that monitors a dead-letter queue (DLQ) and processes messages on the queue in accordance with a user-written rules table.

decryption
The process of decoding data that has been encrypted into a secret format. Decryption requires a secret key or password.

default object
A definition of an object (for example, a queue) with all attributes defined. If a user defines an object but does not specify all possible attributes for that object, the queue manager uses default attributes in place of any that were not specified.

deferred connection
A pending event that is activated when a CICS subsystem tries to connect to WebSphere MQ for z/OS before it has started.

derivation
In object-oriented programming, the refinement or extension of one class from another.

destination
An end point to which messages are sent. Queues and topics are examples of destinations. In JMS, a destination is a collection of properties that specifies where and how messages should be sent and received.

digital certificate
An electronic document used to identify an individual, server, company, or some other entity, and to associate a public key with the entity. A digital certificate is issued by a certification authority and is digitally signed by that authority.

digital certificate manager (DCM)
On i5/OS systems, the method of managing digital certificates and using them in secure applications on the i5/OS server. Digital Certificate Manager requests and processes digital certificates from certification authorities (CAs) or other third-parties.

digital signature
Information that is encrypted with a private key and is appended to a message to assure the recipient of the authenticity and integrity of the

message. The digital signature proves that the message was signed by the entity that owns, or has access to, the private key or shared secret symmetric key.

disconnect

To break the connection between an application and a queue manager.

distinguished name

A set of name-value pairs (such as CN=person's name and C=country or region) that uniquely identify an entity in a digital certificate, such as an X.509 certificate, or in an LDAP directory.

distributed application

In message queuing, a set of application programs that can each be connected to a different queue manager, but that collectively comprise a single application.

distributed computing environment

In network computing, a set of services and tools that supports the creation, use, and maintenance of distributed applications across heterogeneous platforms. DCE is independent of the operating system and network. DCE was developed by the Open Software Foundation (OSF) and is typically used in a larger network of computing systems.

distributed queue management

In message queuing, the setup and control of message channels to queue managers on other systems.

distribution list

A list of queues to which a message can be put using a single MQPUT or MQPUT1 statement.

DLQ See dead letter queue.

dual logging

A method of recording WebSphere MQ for z/OS activity, where each change is recorded on two data sets, so that if a restart is necessary and one data set is unreadable, the other can be used. Also see single logging.

dual mode

See dual logging. Also see single logging.

durable subscription

A subscription that is retained when a subscribing application's connection to the queue manager is closed. If a subscription is durable, then when the subscribing application disconnects, the subscription remains in place and can be used by the subscribing application, when it reconnects requesting the subscription again using the same unique name that was used to create the subscription. Compare with nondurable subscription.

dump analysis and elimination (DAE)

A z/OS service that enables an installation to suppress SVC dumps and ABEND SYSUDUMP dumps that are not needed because they duplicate previously written dumps.

dynamic queue

A local queue created when a program opens a model queue object.

E

eavesdropping
A breach of communication security in which the information remains intact, but its privacy is compromised. Also see impersonation, tampering.

Eclipse
An open-source initiative that provides independent software vendors and other tool developers with a standard platform for developing plug-compatible application development tools.

encapsulation
In object-oriented programming, the technique that is used to hide the inherent details of an object, function, or class from client programs. Client programs are only required to know the interface of a class (the signatures of the methods of the class and the names of the attributes of the class) to use the methods and attributes of the class.

encryption
In computer security, the process of transforming data into an unintelligible form in such a way that the original data either cannot be obtained or can be obtained only by using a decryption process.

enqueue
To put a message on a queue.

entity A user, group, or resource that is defined to a security service.

environment variable
A variable that specifies how an operating system or another program runs, or the devices that the operating system recognizes.

ESM See external security manager.

ESTAE
See extended specify task abnormal exit.

event data
In an event message, the part of the message data that contains information about the event (such as the queue manager name, and the application that gave rise to the event). Also see event header.

event handler
A program or function that is invoked when an asynchronous event, such as a queue manager quiescing, occurs. Also see message consumer and call back.

event header
In an event message, the part of the message data that identifies the event type of the reason code for the event. Also see event data.

event message
A message that contains information (such as the category of event, the name of the application that caused the event, and queue manager statistics) relating to the origin of an instrumentation event in a network of WebSphere MQ systems.

event queue
The queue onto which the queue manager puts an event message after it detects an event. Each category of event (queue manager, performance, configuration, command, authority, or channel event) has its own event queue.

Event Viewer
A tool provided by Windows systems to examine and manage log files.

exception listener
An instance of a class, that can be registered by an application, for which the onException() method is called to pass a JMS exception to the application asynchronously.

exclusive method
In object-oriented programming, a method that is not intended to exhibit polymorphism; one with specific effect.

extended specify task abnormal exit (ESTAE)
A z/OS macro that provides recovery capability and gives control to the user-specified exit routine for processing, diagnosing an abend, or specifying a retry address.

external security manager (ESM)
A security product that performs security checking on users and resources. RACF® is an example of an ESM.

F

failover
An operation that detects a failure in an application on one computer in the cluster, and shuts down the disrupted application in an orderly manner, transfers its state data to the other computer, and re-initiates the application there.

FAP See Formats and Protocols.

FDC The filetype of First Failure Support Technology™ files. FDC stands for failure data capture.

FFDC™
See First Failure Data Capture.

FFST file
See First Failure Support Technology file.

FIFO See first-in-first-out.

First Failure Data Capture (FFDC)
First Failure Data Capture (FFDC) provides an automated snapshot of the system environment when an unexpected internal error occurs. This snapshot is used by IBM support personnel to provide a better understanding of the state of the system and WebSphere MQ when the problem occurred.

First Failure Support Technology file (FFST file)
A file containing information for use in detecting and diagnosing software problems. In WebSphere MQ, FFST files have a file type of FDC.

first-in-first-out (FIFO)
A queuing technique in which the next item to be retrieved is the item that has been in the queue for the longest time.

forced shutdown
A type of shutdown of the CICS adapter where the adapter immediately disconnects from WebSphere MQ for z/OS, regardless of the state of any currently active tasks. Also see quiesced shutdown.

format

In message queuing, a term used to identify the structure of application data in a message.

formats and protocols (FAP)

In message queuing, a definition of how queue managers communicate with each other, and of how clients communicate with server queue managers.

framework

In WebSphere MQ, a collection of programming interfaces that allow customers or vendors to write programs that extend or replace certain functions provided in WebSphere MQ products. The interfaces are the following: data conversion interface (DCI), message channel interface (MCI), name service interface (NSI), security enabling interface (SEI), trigger monitor interface (TMI).

friend class

In object-oriented programming, a class in which all the member functions are granted access to the private and protected members of another class. It is named in the declaration of another class and uses the keyword friend as a prefix to the class.

FRR See functional recovery routine.

full repository

A complete set of information about every queue manager in a cluster. This set of information is called the repository or sometimes the full repository and is usually held by two of the queue managers in the cluster. Also see partial repository.

function

A named group of statements that can be called and evaluated and can return a value to the calling statement.

functional recovery routine (FRR)

A z/OS recovery and termination manager that enables a recovery routine to gain control in the event of a program interrupt.

G

generalized trace facility (GTF)

An optional z/OS service program that records significant system events, such as supervisor calls and start I/O operations, for the purpose of problem determination.

generic security services application programming interface (GSS API)

A common application programming interface (API) for accessing security services.

get In message queuing, to use the MQGET call to remove a message from a queue and returns its contents to the calling application. Also see browse and put.

globally defined object

On z/OS, an object whose definition is stored in the shared repository. The object is available to all queue managers in the queue-sharing group. Also see locally defined object.

Global Secure Kit (GSKit)

Global Secure Kit is a set of programmable interfaces that allow an application to be SSL enabled.

global trace
 A WebSphere MQ for z/OS trace option where the trace data comes from the entire WebSphere MQ for z/OS subsystem.

graphical user interface (GUI)
 A type of computer interface that presents a visual metaphor for a task, by combining high-resolution graphics, pointing devices, menu bars and other menus, overlapping windows, icons and the object-action relationship.

grouping
 See message group.

GSS API
 See Generic Security Services Application Programming Interface.

GTF See generalized trace facility.

GUI See graphical user interface.

H

HACMP
 See High Availability Cluster Multiprocessing.

handshake
 The exchange of messages at the start of a Secure Sockets Layer session that allows the client to authenticate the server using public key techniques (and, optionally, for the server to authenticate the client), then allows the client and server to cooperate in creating symmetric keys for encryption, decryption, and detection of tampering.

hardened message
 A message that is written to auxiliary (disk) storage so that the message is not lost in the event of a system failure.

header
 See message header.

heartbeat
 In software products, a signal that one entity sends to another to convey that it is still active.

heartbeat flow
 A small packet sent from one end of the channel to the other at regular intervals to verify that the remote end of the channel is still working. Heartbeat flows are generally sent only during periods of inactivity on the channel.

heartbeat interval
 The time, in seconds, that is to elapse between heartbeat flows.

hierarchy
 In publish/subscribe messaging topology, a local queue manager connected to a parent queue manager.

high availability cluster multiprocessing (HACMP)
 IBM's solution for high-availability clusters on the AIX, Unix, and Linux for IBM System p platforms.

hypertext transfer protocol (HTTP)
 In the Internet suite of protocols, the protocol that is used to transfer and display hypertext documents.

I

ICE See Intersystem Communications Environment.

identification
> The security service that enables each user of a computer system to be identified uniquely. A common mechanism for implementing this service is to associate a user ID with each user.

identity context
> Information that identifies the user of the application that first puts the message on a queue.

IFCID See instrumentation facility component identifier.

ILE See Integrated Language Environment®.

immediate shutdown
> In WebSphere MQ, a shutdown of a queue manager that does not wait for applications to disconnect. Current message queue interface (MQI) calls are allowed to complete, but new MQI calls fail after an immediate shutdown has been requested. Also see controlled shutdown, preemptive shutdown.

impersonation
> A breach of communication security in which the information is passed to a person posing as the intended receiver or information is sent by a person posing as someone else. Also see eavesdropping, tampering.

inbound channel
> A channel that receives messages from another queue manager.

in-built format
> See built-in format. Also see application-defined format.

index In the WebSphere MQ Administration Interface (MQAI), a means of referencing data items. Also see queue index.

in-doubt unit of recovery
> In WebSphere MQ, the status of a unit of recovery for which a syncpoint has been requested but not yet confirmed.

inheritance
> An object-oriented programming technique that allows the use of existing classes as a basis for creating other classes.

initialization input data set
> A data set used by WebSphere MQ for z/OS when it starts up.

initiation queue
> A local queue on which the queue manager puts trigger messages.

initiator
> In distributed queueing, a program that requests network connections on another system. Also see responder.

input parameter
> A parameter of an MQI call in which you supply information when you make the call.

insertion order
> In the WebSphere MQ Administration Interface (MQAI), the order that data items are placed into a data bag.

installable service
> In WebSphere MQ on UNIX systems and WebSphere MQ for Windows,

additional functionality provided as independent component. The installation of each component is optional: in-house or third-party components can be used instead.

instance
In object-oriented programming, an object of a particular class.

instance data
In object-oriented programming, state information associated with an object.

instrumentation event
A way of monitoring queue manager resource definitions, performance conditions, and channel conditions in a network of WebSphere MQ systems.

instrumentation facility component identifier (IFCID)
In DB2 Universal Database™ for z/OS, a value that names and identifies a trace record of an event that can be traced. As a parameter on the START TRACE and MODIFY TRACE commands, it specifies that the corresponding event is to be traced.

Integrated Language Environment (ILE)
A set of constructs and interfaces that provides a common run-time environment and run-time bindable application program interfaces (APIs) for all ILE-conforming high-level languages.

Interactive Problem Control System (IPCS)
A component of MVS™ and z/OS that permits interactive problem diagnosis, and online debugging for disk-resident abend dumps.

Interactive System Productivity Facility (ISPF)
An IBM licensed program that serves as a full-screen editor and dialog manager. Used for writing application programs, it provides a means of generating standard screen panels and interactive dialogs between the application programmer and terminal user.

interface
In object-oriented programming, an abstract model of behavior; a collection of functions or methods.

internet protocol (IP)
A protocol that routes data through a network or interconnected networks. Internet Protocol (IP) acts as an intermediary between the higher protocol layers and the physical network. Also see Transmission Control Protocol.

interprocess communication (IPC)
The process by which programs communicate data to each other and synchronize their activities. Semaphores, signals, and internal message queues are common methods of interprocess communication.

intersystem communication (ISC)
A CICS facility that provides inbound and outbound support for communication from other computer systems.

Intersystem Communications Environment (ICE)
A family of Compaq-based software products that enables you to access a variety of applications on Compaq computers.

IP See Internet Protocol.

IPC See interprocess communication.

IPCS   See Interactive Problem Control System.

IPT   See WebSphere MQ Internet pass-thru (IPT).

ISC   See intersystem communication.

ISPF   See Interactive System Productivity Facility.

J

Java EE Connector Architecture (JCA)
A standard architecture for connecting the Java EE platform to heterogeneous enterprise information systems.

Java Message Service (JMS)
An industry standardized application programming interface for the Java programming language, which is part of the Java 2 Platform, Enterprise Edition standard, used for interacting with messaging systems such as WebSphere MQ.

Java Naming and Directory Interface (JNDI)
An extension to the Java platform that provides a standard interface for heterogeneous naming and directory services.

Java Runtime Environment (JRE)
A subset of the Sun Microsystems Java Development Kit (JDK) that contains the core executable programs and files that constitute the standard Java platform. The JRE includes the Java virtual machine (JVM), core classes, and supporting files.

JCA   See Java EE Connector Architecture.

JMS   See Java Message Service.

JMSAdmin
An administration tool that enables administrators to define the properties of WebSphere MQ JMS objects and to store them within a JNDI namespace.

JNDI   See Java Naming and Directory Interface.

journal
A feature of i5/OS that WebSphere MQ for i5/OS uses to control updates to local objects. Each queue manager library contains a journal for that queue manager.

JRE   See Java Runtime Environment.

K

keep alive
A TCP/IP mechanism where a small packet is sent across the network at predefined intervals to determine whether the socket is still working correctly.

Kerberos
An authentication system developed at the Massachusetts Institute of Technology (MIT) that enables two parties to exchange private information over an otherwise open network. It works by assigning a unique key, called a ticket, to each user that logs on to the network. The ticket is then embedded in messages that are sent over the network. The receiver of a message uses the ticket to authenticate the sender.

key authentication
    See authentication.

key repository
    A store for digital certificates and their associated private keys.

key ring
    z/OS name for a key repository.

L

LDAP See Lightweight Directory Access Protocol.

Lightweight Directory Access Protocol (LDAP)
    An open protocol that uses TCP/IP to provide access to directories that
    support an X.500 model and that does not incur the resource requirements
    of the more complex X.500 Directory Access Protocol (DAP). For example,
    LDAP can be used to locate people, organizations, and other resources in
    an Internet or intranet directory. In WebSphere MQ, LDAP is often used to
    store certificate revocation lists and JMS administered objects.

linear logging
    In WebSphere MQ on UNIX systems, and WebSphere MQ for Windows,
    the process of keeping restart data in a sequence of files. New files are
    added to the sequence as necessary. The space in which the data is written
    is not reused. Also see circular logging.

link level security
    The security services that are invoked, directly or indirectly, by a message
    channel agent (MCA), the communications subsystem, or a combination of
    the two working together.

listener
    A program that detects incoming requests and starts the associated
    channel.

local definition of a remote queue
    A WebSphere MQ object belonging to a local queue manager that defines
    the attributes of a queue that is owned by another queue manager. In
    addition, it is used for queue-manager aliasing and reply-to-queue aliasing.

locale On UNIX systems, a subset of a user's environment that defines
    conventions for a specific culture (such as time, numeric, or monetary
    formatting and character classification, collation, or conversion). The queue
    manager CCSID is derived from the locale of the user ID that created the
    queue manager.

locally defined object
    On z/OS, an object whose definition is stored on page set zero. The
    definition can be accessed only by the queue manager that defined it. Also
    see globally defined object.

local queue
    A queue that belongs to the local queue manager. A local queue can
    contain a list of messages waiting to be processed. Also see remote queue.

local queue manager
    The queue manager to which the program is connected and that provides
    message queuing services to the program. The local queue manager is
    sometimes referred to as the source queue manager. A queue manager to

which a program is not connected is called a remote queue manager, even if it is running on the same system as the program. Also see remote queue manager.

log   In WebSphere MQ, a file recording the work done by queue managers while they receive, transmit, and deliver messages, to enable them to recover in the event of failure.

log control file
In WebSphere MQ on UNIX systems, and WebSphere MQ for Windows, the file containing information needed to monitor the use of log files (for example, their size and location, and the name of the next available file).

log file
In WebSphere MQ on UNIX systems, and WebSphere MQ for Windows, a file in which all significant changes to the data controlled by a queue manager are recorded. If the primary log files become full, WebSphere MQ allocates secondary log files.

logical unit (LU)
In SNA, a port or window through which a user accesses the SNA network to communicate with another user, and uses the functions provided by system services control points (SSCPs). An LU can support at least two sessions--one with an SSCP and one with another LU--and may be capable of supporting many sessions with other LUs.

logical unit 6.2
A type of logical unit that supports general communications between programs in a distributed processing environment. LU 6.2 is characterized by (a) a peer relationship between session partners, (b) efficient use of a session for multiple transactions, (c) comprehensive end-to-end error processing, and (d) a generic application programming interface (API) consisting of structured verbs that are mapped into a product implementation.

The LU type that supports sessions between two applications using APPC.

logical unit of work identifier (LUWID)
A name (consisting of a fully qualified LU network name, a logical-unit-of-work (LUW) instance number, and an LUW sequence number) that uniquely identifies a logical unit of work within a network.

log record
A set of data that is treated as a single unit in a log file.

log record sequence number (LRSN)
An alternative technique to RBA for addressing log records.

LRSN   See log record sequence number.

LU   See logical unit.

LU 6.2 conversation
In SNA, a logical connection between two transaction programs over an LU 6.2 session that enables them to communicate with each other.

LU 6.2 conversation level security
In SNA, a conversation level security protocol that enables a partner transaction program to authenticate the transaction program that initiated the conversation. LU 6.2 conversation level security is also known as end user verification.

LU 6.2 session
> In SNA, a session between two logical units (LUs) of type 6.2.

LU name
> In a z/OS environment, the name by which VTAM® refers to a node in a network. Also see logical unit.

LUWID
> See logical unit of work identifier.

M

managed destination
> A queue that is provided by the queue manager, as the destination for published messages to be sent, for an application that elects to use a managed subscription. Also see managed subscription.

managed handle
> An identifier that is returned by the MQSUB call when you specify that the queue manager is to manage the storage of messages that are sent to the subscription.

managed subscription
> A subscription for which the queue manager creates a subscriber queue to receive publications, because the application does not require a specific queue to be used.

marshaling
> See serialization.

MCA See message channel agent.

MCI See message channel interface.

media image
> In WebSphere MQ on UNIX systems and WebSphere MQ for Windows, the sequence of log records that contain an image of an object. The object can be re-created from this image.

message
> A communication sent from a person or program to another person or program.
>
> In system programming, information intended for the terminal operator or system administrator.

message affinity
> The relationship between conversational messages that are exchanged between two applications, where the messages must be processed by a particular queue manager or in a particular sequence.

message body
> The part of the message that contains the message payload. Also see message header.

message channel
> In distributed message queuing, a mechanism for moving messages from one queue manager to another. A message channel comprises two message channel agents (a sender at one end and a receiver at the other end) and a communication link.

message channel agent (MCA)

A program that transmits prepared messages from a transmission queue to a communication link, or from a communication link to a destination queue.

message channel interface (MCI)

The WebSphere MQ interface to which customer- or vendor-written programs that transmit messages between a WebSphere MQ queue manager and another messaging system must conform. A part of the WebSphere MQ Framework. Also see message queue interface.

message consumer

A program or function that is invoked by a message when one that matches the application's requirement becomes available. In JMS, an object that is created within a session, to receive messages from a destination. Also see event handler and call back

message descriptor

Control information describing the message format and presentation that is carried as part of a WebSphere MQ message. The format of the message descriptor is defined by the MQMD structure.

message exit

A type of channel exit program that is used to modify the contents of a message. Message exits usually work in pairs, one at each end of a channel. At the sending end of a channel, a message exit is called after the message channel agent (MCA) has got a message from the transmission queue. At the receiving end of a channel, a message exit is called before the message channel agent (MCA) puts a message on its destination queue.

message flow control

A distributed queue management task that involves setting up and maintaining message routes between queue managers.

Message Format Service (MFS)

An editing facility that allows application programs to deal with simple logical messages instead of device-dependent data, thus simplifying the application development process.

message group

A group of logical messages. Logical grouping of messages allows applications to group messages that are similar and to ensure the sequence of the messages.

message handle

A reference to a message. The handle can be used to obtain access to the message properties of the message.

message header

The part of a message that contains control information such as a unique message ID and the message format. Also see message body

message input descriptor (MID)

The MFS control block that describes the format of the data presented to the application program. Also see message output descriptor.

message listener

An object that acts as an asynchronous message consumer.

message output descriptor (MOD)

The MFS control block that describes the format of the output data produced by the application program. Also see message input descriptor.

message priority

In WebSphere MQ, an attribute of a message that can affect the order in which messages on a queue are retrieved, and whether a trigger event is generated.

message producer

In JMS, an object that is created by a session and that is used to send messages to a destination.

message property

Data that is associated with a message, consisting of a textual name and a value of a particular type. Message properties are used by message selectors to filter publications to topics or to selectively get messages from queues. Message properties can be used to include business data or state information without having to store it in the message data.

message queue interface (MQI)

The programming interface provided by WebSphere MQ queue managers. The programming interface allows application programs to access message queuing services. Also see message channel interface.

message queue management (MQM)

In MQSeries® for Compaq NonStop Kernel, a facility that provides access to PCF command formats and control commands to manage queue managers, queues, and channels.

message queuing

A programming technique in which each program within an application communicates with the other programs by putting messages on queues.

message-retry

An option available to an MCA that is unable to put a message. The MCA can wait for a predefined amount of time and then try to put the message again.

message segment

One of a number of segments of a message that is too large either for the application or for the queue manager to handle.

message selector

In application programming, a message selector is a variable-length string, whose syntax is based on a subset of the SQL92 conditional expression syntax, that is used by an application to register its interest in only those messages whose properties satisfy the Structured Query Language (SQL) query that the selection string represents.

message token

A unique identifier of a message within an active queue manager.

message sequence numbering

A programming technique in which messages are given unique numbers during transmission over a communication link. This enables the receiving process to check whether all messages are received, to place them in a queue in the original order, and to discard duplicate messages.

method

In object-oriented design or programming, the software that implements the behavior specified by an operation.

MFS   See Message Format Service.

Microsoft Cluster Server (MSCS)
A technology that provides high availability by grouping computers into MSCS clusters. If one of the computers in the cluster hits any one of a range of problems, MSCS shuts down the disrupted application in an orderly manner, transfers its state data to another computer in the cluster, and re-initiates the application there.

Microsoft Transaction Server (MTS)
A facility that helps Windows users run business logic applications in a middle tier server. MTS divides work up into activities, which are short independent chunks of business logic.

MID   See message input descriptor.

MOD   See message output descriptor.

model queue object
A set of queue attributes that act as a template when a program creates a dynamic queue.

MQAI   See WebSphere MQ Administration Interface.

MQI   See Message Queue Interface.

MQI channel
A connection between a WebSphere MQ client and a queue manager on a server system. An MQI channel transfers only MQI calls and responses in a bidirectional manner.

MQM   See message queue management.

MQSC
See WebSphere MQ script commands.

MQSeries
A previous name for WebSphere MQ.

MSCS   See Microsoft Cluster Server.

MTS   See Microsoft Transaction Server.

multi-hop
To pass through one or more intermediate queue managers when there is no direct communication link between a source queue manager and the target queue manager.

N

namelist
A WebSphere MQ object that contains a list of names, for example, queue names.

name service
In WebSphere MQ on UNIX systems and WebSphere MQ for Windows, the facility that determines which queue manager owns a specified queue.

name service interface (NSI)
The WebSphere MQ interface to which customer- or vendor-written programs that resolve queue-name ownership must conform. A part of the WebSphere MQ Framework.

name transformation
In WebSphere MQ on UNIX systems and WebSphere MQ for Windows, an

internal process that changes a queue manager name so that it is unique and valid for the system being used. Externally, the queue manager name remains unchanged.

nested bag
In the WebSphere MQ Administration Interface (MQAI), a system bag that is inserted into another data bag

nesting
In the WebSphere MQ Administration Interface (MQAI), a means of grouping information returned from WebSphere MQ.

NetBIOS (Network Basic Input/Output System)
A standard interface to networks, and personal computers that is used on local area networks to provide message, print-server, and file-server functions.

Network Basic Input/Output System
See NetBIOS.

New Technology File System (NTFS)
A Windows recoverable file system that provides security for files.

node In Microsoft Cluster Server (MSCS), each computer in the cluster.

nondurable subscription
A subscription that exists only as long as the subscribing application's connection to the queue manager remains open. The subscription is removed when the subscribing application disconnects from the queue manager either deliberately or by loss of connection. Also see durable subscription.

nonpersistent message
A message that does not survive a restart of the queue manager. Also see persistent message.

NSI See name service interface.

NTFS See New Technology File System.

NUL See null character.

null character (NUL)
The character hex 00 used to represent the absence of a displayed or printed character.

O

OAM See object authority manager.

object In WebSphere MQ, a queue manager, a queue, a process definition, a channel, a namelist, authentication information object, administrative topic object, listener, service object, or (z/OS only) a CF structure object or a storage class.

In object-oriented design or programming, a concrete realization (instance) of a class that consists of data and the operations associated with that data. An object contains the instance data that is defined by the class, but the class owns the operations that are associated with the data.

object authority manager (OAM)
In WebSphere MQ on UNIX systems, WebSphere MQ for i5/OS, and WebSphere MQ for Windows, the default authorization service for

command and object management. The OAM can be replaced by, or run in combination with, a customer-supplied security service.

object descriptor
A data structure that identifies a particular WebSphere MQ object. Included in the descriptor are the name of the object and the object type.

object handle
The identifier or token by which a program accesses the WebSphere MQ object with which it is working.

object-oriented programming
A programming approach based on the concepts of data abstraction and inheritance. Unlike procedural programming techniques, object-oriented programming concentrates not on how something is accomplished but instead on what data objects comprise the problem and how they are manipulated.

offloading
In WebSphere MQ for z/OS, an automatic process whereby a queue manager's active log is transferred to its archive log.

open To establish access to an object, such as a queue or a topic.

Open Services Gateway Initiative (OSGi)
OSGi provides a general purpose, secure, and managed Java framework, which supports the deployment of applications that come in the form of bundles. OSGi compliant devices can download and install bundles, and remove them when they are no longer required. The framework manages the installation and update of bundles in a dynamic and scalable fashion. WebSphere MQ classes for JMS includes OSGi bundles.

open systems interconnection (OSI)
The interconnection of open systems in accordance with standards of the International Organization for Standardization (ISO) for the exchange of information.

Open Transaction Manager Access (OTMA)
A component of IMS that implements a transaction-based, connectionless client/server protocol in an MVS sysplex environment. The domain of the protocol is restricted to the domain of the MVS Cross-System Coupling Facility (XCF). OTMA connects clients to servers so that the client can support a large network (or a large number of sessions) while maintaining high performance.

OPM See original program model.

origin context
Information, usually supplied by the queue manager, that describes the application that put the message on the queue on which the message is currently stored.

original program model (OPM)
The set of functions for compiling source code and creating high-level language programs on the system before the Integrated Language Environment (ILE) model was introduced.

OSGi See Open Services Gateway Initiative.

OSI See open systems interconnection.

OSI directory standard
The standard, known as X.500, that defines a comprehensive directory

service, including an information model, a namespace, a functional model, and an authentication framework. X.500 also defines the Directory Access Protocol (DAP) used by clients to access the directory. The Lightweight Directory Access Protocol (LDAP) removes some of the burden of X.500 access from directory clients, making the directory available to a wider variety of machines and applications.

OTMA
See Open Transaction Manager Access.

outbound channel
A channel that takes messages from a transmission queue and sends them to another queue manager.

output log-buffer
In WebSphere MQ for z/OS, a buffer that holds recovery log records before they are written to the archive log.

output parameter
A parameter of an MQI call in which the queue manager returns information when the call completes or fails.

overloading
The existence of more than one flavor of method with the same name or operator, but with different signatures, within a class. The name or operator remains the same, but the method parameters differ, with each signature requiring a separate implementation. Such methods usually exhibit the same behavior, despite differences in signature.

P

page set
A VSAM data set used when WebSphere MQ for z/OS moves data (for example, queues and messages) from buffers in main storage to permanent backing storage (DASD). Also see buffer pool.

parent class
A class from which another class inherits instance methods, attributes, and instance variables. Also see abstract class.

partial repository
A partial set of information about queue managers in a cluster. A partial repository is maintained by all cluster queue managers that do not host a full repository. Also see full repository.

partner queue manager
A term that is sometimes used to refer to the remote queue manager. Also see local queue manager.

PCF   See programmable command format.

pending event
An unscheduled event that occurs as a result of a connect request from a CICS adapter.

percolation
In error recovery, the passing along a preestablished path of control from a recovery routine to a higher-level recovery routine.

performance event
A category of event indicating that a limit condition has occurred.

performance trace
A WebSphere MQ trace option where the trace data is to be used for performance analysis and tuning.

permanent dynamic queue
A dynamic queue that is deleted when it is closed only if deletion is explicitly requested. Permanent dynamic queues are recovered if the queue manager fails, so they can contain persistent messages. Also see temporary dynamic queue.

persistent message
A message that survives a restart of the queue manager. Also see nonpersistent message.

PID See process ID.

ping The command that sends an Internet Control Message Protocol (ICMP) echo-request packet to a gateway, router, or host with the expectation of receiving a reply.

PKI See public key infrastructure.

plaintext
In cryptography, any message that is not encrypted. Also see ciphertext.

platform
In WebSphere MQ, the operating system under which a queue manager is running.

point of recovery
In WebSphere MQ for z/OS, a set of backup copies of WebSphere MQ for z/OS page sets and the corresponding log data sets required to recover these page sets. These backup copies provide a potential restart point in the event of page set loss (for example, page set I/O error).

point-to-point
A style of messaging application in which the sending application knows the destination of the message. Contrast with publish/subscribe messaging.

polymorphism
An object-oriented programming characteristic that allows a method to perform differently, depending on the class that implements it. Polymorphism allows a subclass to override an inherited method without affecting the parent class's method. Polymorphism also enables a client to access two or more implementations of an object from a single interface.

preemptive shutdown
In WebSphere MQ, a shutdown of a queue manager that does not wait for connected applications to disconnect, or for current MQI calls to complete. Also see controlled shutdown, immediate shutdown.

preferred computer
The primary computer used by an application running under Microsoft Cluster Server control. After a failover to another computer, MSCS monitors the preferred computer until it is repaired, and as soon as it is running correctly again, moves the application back to it.

principal
In WebSphere MQ on UNIX systems and WebSphere MQ for Windows, a term used for a user identifier. Used by the object authority manager for checking authorizations to system resources.

privately defined object
See locally defined object. Also see globally defined object.

private methods and instance data
In object-oriented programming, methods and instance data that are only accessible to the implementation of the same class.

process definition object
A WebSphere MQ object that contains the definition of a WebSphere MQ application. For example, a queue manager uses the definition when it works with trigger messages.

process ID
The identifier of the process that opened the queue.

producer
A generic term for an application that creates and sends messages. Also see message producer.

programmable command format (PCF)
A type of WebSphere MQ message used by the following applications: user administration applications, to put PCF commands onto the system command input queue of a specified queue manager, user administration applications, to get the results of a PCF command from a specified queue manager, and a queue manager, as a notification that an event has occurred. Also see WebSphere MQ script commands.

program temporary fix (PTF)
For zSeries®, i5/OS, and POWER® products, a fix that is made available to all customers. A program temporary fix is tested by IBM. It contains a PTF record.

property
A characteristic of an object that describes the object. A property can be changed or modified. Properties can describe an object's name, type, value, or behavior, among other things.

protected methods and instance data
In object-oriented programming, methods and instance data that are only accessible to the implementations of the same or derived classes, or from friend classes.

PTF   See program temporary fix.

publication
In publish/subscribe messaging, a piece of information about a specified topic that is available to a queue manager, for delivery to subscribed applications.

public key cryptography
A cryptography system that uses two keys: a public key known to everyone and a private or secret key known only to the recipient of the message. The public and private keys are related in such a way that only the public key can be used to encrypt messages and only the corresponding private key can be used to decrypt them.

public key infrastructure (PKI)
A system of digital certificates, certification authorities, and other registration authorities that verify and authenticate the validity of each party involved in an Internet transaction.

public methods and instance data
In object oriented programming, methods and instance data that are accessible to all classes.

public-private key
A cryptography system that uses two keys: a public key known to everyone and a private or secret key known only to the recipient of the message. The public and private keys are related in such a way that only the public key can be used to encrypt messages and only the corresponding private key can be used to decrypt them. Also see asymmetric key cryptography, symmetric key cryptography.

publish
To make information about a specified topic available to a queue manager in a publish/subscribe system.

publisher
An application that makes information about a specified topic available to a queue manager in a publish/subscribe system. Also see producer.

publish/subscribe
A style of messaging application in which the providers of information (publishers) are de-coupled from the consumers of that information (subscribers) by using a topic. Contrast with point-to-point messaging.

publish/subscribe cluster
A set of queue managers that are fully interconnected and that form part of a multi-queue manager network for publish/subscribe applications.

put In message queuing, to use the MQPUT or MQPUT1 calls to place messages on a queue. Also see get and browse.

Q

queue A WebSphere MQ object to which message queuing applications can put messages, and from which they can get messages. Local queues can contain a list of messages waiting to be processed. Queues of other types cannot contain messages: they point to other queues, or can be used as models for dynamic queues.

queued publish/subscribe daemon
A program that supports the migration of publish/subscribe applications from a WebSphere MQ Version 6.0 environment (where publish/subscribe is performed by the broker) to an environment where publish/subscribe is supported by function in WebSphere MQ Version 7.0.

queue index
In WebSphere MQ for z/OS, a` list of message identifiers or a list of correlation identifiers that can be used to increase the speed of MQGET operations on the queue.

queue manager
A system program that provides queuing services to applications. It provides an application programming interface so that programs can access messages on the queues that the queue manager owns.

An object that defines the attributes of a particular queue manager.

queue manager event
An event that indicates one of the following: an error condition has occurred in relation to the resources used by a queue manager. For

example, a queue is unavailable, or a significant change has occurred in the queue manager. For example, a queue manager has stopped or started.

queue manager level security
In WebSphere MQ for z/OS, the authorization checks that are performed using RACF profiles specific to a queue manager.

queue manager set
A grouping of queue managers in WebSphere MQ Explorer that allows you to perform actions on all of the queue managers in the group.

queue-sharing group
In WebSphere MQ for z/OS, a group of queue managers in the same sysplex that can access a single set of object definitions stored in the shared repository, and a single set of shared queues stored in the coupling facility. Also see shared queue.

queue-sharing group level security
In WebSphere MQ for z/OS, the authorization checks that are performed using RACF profiles that are shared by all queue managers in a queue-sharing group.

quiesced shutdown
A type of shutdown of the CICS adapter where the adapter disconnects from WebSphere MQ, but only after all the currently active tasks have been completed. Also see forced shutdown.

In WebSphere MQ, a shutdown of a queue manager that allows all connected applications to disconnect. Also see immediate shutdown, preemptive shutdown.

quiescing
In WebSphere MQ, the state of a queue manager before it stops. In this state, programs are allowed to finish processing, but no new programs are allowed to start.

quorum disk
The disk accessed exclusively by Microsoft Cluster Server to store the cluster recovery log, and to determine whether a server is up or down. Only one server can own the quorum disk at a time. Servers in the cluster can negotiate for the ownership.

R

RACF See Resource Access Control Facility.

RAID See Redundant Array of Independent Disks.

RBA See relative byte address.

read ahead
An option that allows messages to be sent to a client ahead of an application requesting them.

reason code
A return code that describes the reason for the failure or partial success of a Message Queue Interface (MQI) call.

receive exit
A type of channel exit program that is called just after the message channel agent (MCA) has regained control following a communications receive and has received a unit of data from a communications connection. Also see send exit.

receiver channel
In message queuing, a channel that responds to a sender channel, takes messages from a communication link, and puts them on a local queue.

recovery log
In WebSphere MQ for z/OS, data sets containing information needed to recover messages, queues, and the WebSphere MQ subsystem. WebSphere MQ for z/OS writes each record to a data set called the active log. When the active log is full, its contents are off-loaded to a DASD or tape data set called the archive log.

recovery termination manager (RTM)
A program that handles all normal and abnormal termination of tasks by passing control to a recovery routine associated with the terminating function.

Redundant Array of Independent Disks (RAID)
A collection of two or more disk physical drives that present to the host an image of one or more logical disk drives. In the event of a single physical device failure, the data can be read or regenerated from the other disk drives in the array due to data redundancy.

reference message
A message that refers to a piece of data that is to be transmitted. The reference message is handled by message exit programs, which attach and detach the data from the message so allowing the data to be transmitted without having to be stored on any queues.

registry
In a Microsoft Windows operating system, a database that contains system configuration information regarding the user, the hardware, and the programs and applications that are installed. Windows operating systems refer to the registry during operation.

Registry Editor
In Windows, the program item that allows the user to edit the registry.

registry hive
In Windows systems, the structure of the data stored in the registry.

relative byte address (RBA)
The offset of a data record or control interval from the beginning of the storage space that is allocated to the data set or file to which it belongs.

remote queue
A queue that belongs to a remote queue manager. Programs can put messages on remote queues, but they cannot get messages from remote queues. Also see local queue.

remote queue manager
To a program, a queue manager that is not the one to which the program is connected. Sometimes referred to as the partner queue manager or the target queue manager. Also see local queue manager.

remote queue object
A WebSphere MQ object belonging to a local queue manager. This object defines the attributes of a queue that is owned by another queue manager. In addition, it is used for queue-manager aliasing and reply-to-queue aliasing.

remote queuing

In message queuing, the provision of services to enable applications to put messages on queues belonging to other queue managers.

reply message

A type of message used for replies to request messages. Also see report message, request message.

reply-to queue

The name of a queue to which the program that issued an MQPUT call wants a reply message or report message sent.

report message

A type of message that gives information about another message. A report message can indicate that a message has been delivered, has arrived at its destination, has expired, or could not be processed for some reason. Also see reply message, request message.

repository

A collection of information about the queue managers that are members of a cluster. This information includes queue manager names, their locations, their channels, what queues they host, and so on. See full repository and partial repository.

repository queue manager

A queue manager that hosts the full repository of information about a cluster.

requester channel

In message queuing, a channel that can be started locally to initiate operation of a server channel. Also see server channel.

request message

A type of message used to request a reply from another program. Also see reply message, report message.

request/reply

A type of messaging application in which a request message is used to request a reply from another application.

RESLEVEL

In WebSphere MQ for z/OS, an option that controls the number of user IDs checked for API-resource security.

resolution path

The set of queues that are opened when an application specifies an alias or a remote queue on input to an MQOPEN call.

resource

Any facility of a computing system or operating system required by a job, task, or executing program. Resources include main storage, input/output devices, the processing unit, data sets, files, libraries, folders, and control or processing programs. In WebSphere MQ for z/OS, examples of resources are buffer pools, page sets, log data sets, queues, and messages.

Resource Access Control Facility (RACF)

An IBM licensed program that provides access control by identifying users to the system; verifying users of the system; authorizing access to protected resources; logging detected, unauthorized attempts to enter the system; and logging detected accesses to protected resources.

resource adapter
An implementation of the Java Enterprise Edition Connector Architecture that allows JMS applications and message driven beans, running in an application server, to access the resources of a WebSphere MQ queue manager.

resource manager
An application, program, or transaction that manages and controls access to shared resources such as memory buffers and data sets.

Resource Recovery Services (RRS)
A z/OS facility that provides two-phase sync point support across participating resource managers.

responder
In distributed queuing, a program that replies to network connection requests from another system. Also see initiator.

resynch
In WebSphere MQ, an option to direct a channel to start up and resolve any in-doubt status messages, but without restarting message transfer.

retained publication
A published message that is kept at the queue manager for propagation to clients that subscribe in the future.

return code
The collective name for completion codes and reason codes.

return-to-sender
An option available to an MCA that is unable to deliver a message. The MCA can send the message back to the originator.

Rivest-Shamir-Adleman algorithm (RSA)
A public-key encryption technology developed by RSA Data Security, Inc, and used in our implementation of SSL. The acronym stands for Rivest, Shamir, and Adelman, the inventors of the technique.

rollback
See backout. Also see commit.

RRS See Resource Recovery Services.

RSA See Rivest-Shamir-Adleman algorithm.

RTM See recovery termination manager.

rules table
A control file containing one or more rules that the dead-letter queue handler applies to messages on the dead-letter queue (DLQ).

S

SAF See System Authorization Facility.

SDK See software development kit.

SDWA
See system diagnostic work area.

SECMEC
See security mechanism.

Secure Sockets Layer (SSL)
A security protocol that provides communication privacy. SSL enables

client/server applications to communicate in a way that is designed to prevent eavesdropping, tampering, and message forgery.

security enabling interface (SEI)
The WebSphere MQ interface to which customer- or vendor-written programs that check authorization, supply a user identifier, or perform authentication must conform. A part of the WebSphere MQ Framework.

security exit
A channel exit program that is called immediately after the initial data negotiation has completed on channel startup. Security exits normally work in pairs and can be called on both message channels and MQI channels. The primary purpose of the security exit is to enable the message channel agent (MCA) at each end of a channel to authenticate its partner.

security identifier
On Windows systems, a supplement to the user ID that identifies the full user account details on the Windows security account manager database where the user is defined.

security mechanism (SECMEC)
A technical tool or technique that is used to implement a security service. A mechanism might operate by itself, or in conjunction with others, to provide a particular service. Examples of security mechanisms include access control lists, cryptography, and digital signatures.

security message
One of the messages, sent by security exits that are called at both ends of a channel, to communicate with each other. The format of a security message is not defined and is determined by the user.

security service
A service within a computer system that protect its resources. Access control is an example of a security service.

Security Support Provider Interface (SSI)
The means for networked applications to call one of several security support providers (SSPs) to establish authenticated connections and to exchange data securely over those connections. It is available for use on Windows systems.

segmentation
See message segment.

SEI   See security enabling interface.

selector
An identifier for a data item. See message selector. Also see system selector and user selector.

semaphore
In UNIX systems, a general method of communication between two processes that extends the features of signals.

sender channel
In message queuing, a channel that initiates transfers, removes messages from a transmission queue, and moves them over a communication link to a receiver or requester channel.

send exit
A type of channel exit program that is called just before a message channel

agent (MCA) issues a communications send to send a unit of data over a communications connection. Also see receive exit.

Sequenced Packet Exchange protocol (SPX)
A session-oriented network protocol that provides connection-oriented services between two nodes on the network, and is used primarily by client/server applications. It relies on the Internet Packet Exchange (IPX) protocol, provides flow control and error recovery, and guarantees reliability of the physical network.

sequence number wrap value
In WebSphere MQ, a method of ensuring that both ends of a communication link reset their current message sequence numbers at the same time. Transmitting messages with a sequence number ensures that the receiving channel can reestablish the message sequence when storing the messages.

serialization
In object-oriented programming, the writing of data in sequential fashion to a communications medium from program memory.

server In WebSphere MQ, a queue manager that provides queue services to client applications running on a remote workstation.

In a network, hardware or software that provides facilities to other stations. For example, a file server, a printer server, or a mail server. The station making the request of the server is usually called the client. Also see client.

server channel
In message queuing, a channel that responds to a requester channel, removes messages from a transmission queue, and moves them over a communication link to the requester channel. Also see requester channel.

server connection channel type
The type of MQI channel definition by which a client connects to a queue manager on a server. Also see client connection channel type.

service interval
A time interval, against which the elapsed time between a put or a get and a subsequent get is compared by the queue manager in deciding whether the conditions for a service interval event have been met. The service interval for a queue is specified by a queue attribute.

service interval event
An event related to the service interval.

service object
A means by which additional processes can be started when the queue manager starts, and stopped when the queue manager stops.

session
A logical or virtual connection between two stations, programs, or devices on a network that allows the two elements to communicate and exchange data, or the activities that occur during the establishment, maintenance, and release of the connection. A session can be activated and deactivated as requested. In the JMS model, a session is an interface that provides a context for producing and consuming messages.

session level authentication
In Systems Network Architecture (SNA), a session level security protocol

that enables two logical units (LUs) to authenticate each other while they are activating a session. Session level authentication is also known as LU-LU verification.

session level cryptography
In Systems Network Architecture (SNA), a method of encrypting and decrypting data that flows on a session between two logical units (LUs).

shared inbound channel
In WebSphere MQ for z/OS, a channel that was started by a listener using the group port. The channel definition of a shared channel can be stored either on page set zero (private) or in the shared repository (global).

shared outbound channel
In WebSphere MQ for z/OS, a channel that moves messages from a shared transmission queue. The channel definition of a shared channel can be stored either on page set zero (private) or in the shared repository (global).

shared queue
In WebSphere MQ for z/OS, a type of local queue. The messages on the queue are stored in the coupling facility and can be accessed by one or more queue managers in a queue-sharing group. The definition of the queue is stored in the shared repository. Also see queue-sharing group.

shared repository
In WebSphere MQ for z/OS, a shared DB2® database that is used to hold object definitions that have been defined globally.

sharing conversations
The sharing of a channel instance by more than one conversation, in an environment where sharing conversations is permitted.

shell A software interface between users and the operating system that interprets commands and user interactions and communicates them to the operating system. A computer may have several layers of shells for various levels of user interaction.

signal In UNIX systems a simple method of communicating between two processes. One process can inform the other when an event occurs.

signaling
In WebSphere MQ for z/OS and WebSphere MQ for Windows, a feature that allows the operating system to notify a program when an expected message arrives on a queue.

signature
The collection of types associated with a method (the type of the return value, if any, as well as the number, order, and type of each of the method's arguments).

single logging
A method of recording WebSphere MQ for z/OS activity where each change is recorded on one data set only. Also see dual logging.

single-phase backout
A method in which an action in progress must not be allowed to finish, and all changes that are part of that action must be undone.

single-phase commit
A method in which a program can commit updates to a commitment

resource without coordinating those updates with updates the program has made to resources controlled by another resource manager. Also see two-phase commit.

SIT   See system initialization table.

SMF   See System Management Facility.

SNA   See Systems Network Architecture.

software development kit (SDK)
A set of tools, APIs, and documentation to assist with the development of software in a specific computer language or for a particular operating environment.

source queue manager
A term that is sometimes used to refer to the local queue manager. Also see remote queue manager.

SPX   See Sequenced Packet Exchange protocol.

SQL   See Structured Query Language.

SQL92
A version of the SQL standard.

SSI   See Security Support Provider Interface.

SSL   See Secure Sockets Layer

stanza A group of lines in a configuration file that assigns a value to a parameter modifying the behavior of a queue manager, client, or channel. In WebSphere MQ on UNIX systems a configuration (.ini) file can contain a number of stanzas. Also see configuration file.

star-connected communications network
A network in which all nodes are connected to a central node.

storage class
In WebSphere MQ for z/OS, an object that refers to the page set that is to hold the messages for a particular queue. The storage class is specified when the queue is defined.

store and forward
The temporary storing of packets, messages, or frames in a data network before they are retransmitted toward their destination.

streaming
In object-oriented programming, the serialization of class information and object instance data.

Structured Query Language (SQL)
A standardized language for defining and manipulating data in a relational database.

subscribe
To request information about a topic.

subscriber
A publish/subscribe application that requests information about a topic.

subscription
A subscription is a record that contains the information about the topic or

topics that the subscriber is interested in and wishes to receive information about. The subscription information determines which publications are forwarded to the subscriber.

subsystem
In z/OS, a service provider that performs one or many functions, but does nothing until asked. For example, each WebSphere MQ for z/OS queue manager is a z/OS subsystem.

supervisor call (SVC)
An instruction that interrupts the program being run and passes control to the supervisor so that it can perform the specific service indicated by the instruction.

SVC See supervisor call.

switch profile
In WebSphere MQ for z/OS, a RACF profile used when WebSphere MQ starts up or when a refresh security command is issued. Each switch profile that WebSphere MQ detects turns off checking for the specified resource.

symmetric key cryptography
A system of cryptography in which the sender and receiver of a message share a single, common, secret key that is used to encrypt and decrypt the message. Also see public-private key, asymmetric key cryptography.

symptom string
Diagnostic information displayed in a structured format designed for searching the IBM software support database.

synchronous messaging
A method of communication between programs in which a program places a message on a message queue and then waits for a reply to its message before resuming its own processing. Also see asynchronous messaging.

sync point
An intermediate or end point during processing of a transaction at which the transaction's protected resources are consistent. At a syncpoint, changes to the resources can safely be committed, or they can be backed out to the previous syncpoint.

SYS1.LOGREC
A service aid that contains important information about program and hardware errors.

sysplex
See system complex.

System Authorization Facility (SAF)
A z/OS facility through with programs communicate with an external security manager such as RACF.

system bag
A type of data bag that is created by the MQAI.

system complex (sysplex)
A set of z/OS systems communicating and cooperating with each other through certain multisystem hardware components and software services to process customer workloads.

system control commands
Commands used to manipulate platform-specific entities such as buffer pools, storage classes, and page sets.

system diagnostic work area (SDWA)
In a z/OS environment, the data that is recorded in a SYS1.LOGREC entry that describes a program or hardware error.

system initialization table (SIT)
A table containing parameters used by CICS on start up.

system item
A type of data item that is created by the MQAI.

System Management Facility (SMF)
A z/OS facility that collects and records a variety of system and job-related information. For example, statistics, accounting information, and performance data.

system selector
In the WebSphere MQ Administration Interface (MQAI), a system item identifier that is included in the data bag when it is created.

Systems Network Architecture (SNA)
An architecture that describes the logical structure, formats, protocols, and operational sequences for transmitting information units through the networks and also the operational sequences for controlling the configuration and operation of networks. The layered structure of SNA allows the ultimate origins and destinations of information (the users) to be independent of and unaffected by the specific SNA network services and facilities that are used for information exchange.

T

tampering
A breach of communication security in which information in transit is changed or replaced and then sent on to the recipient. Also see eavesdropping, impersonation.

target library high-level qualifier (thlqual)
A high-level qualifier for z/OS target data set names.

target queue manager
A term that is sometimes used to refer to the remote queue manager. Also see local queue manager.

task control block (TCB)
A z/OS control block used to communicate information about tasks, within an address space, that are connected to a z/OS subsystem such as WebSphere MQ for z/OS or CICS.

task switching
The overlapping of I/O operations and processing between several tasks. In WebSphere MQ for z/OS, the task switcher optimizes performance by allowing some MQI calls to be executed under subtasks rather than under the main CICS TCB.

TCB See task control block.

TCP See Transmission Control Protocol.

TCP/IP
See Transmission Control Protocol/Internet Protocol.

temporary dynamic queue
A dynamic queue that is deleted when it is closed. Temporary dynamic queues are not recovered if the queue manager fails, so they can contain nonpersistent messages only. Also see permanent dynamic queue.

teraspace
A one terabyte temporary storage area that provides storage that is private to a process.

termination notification
A pending event that is activated when a CICS subsystem successfully connects to WebSphere MQ for z/OS.

this   In object-oriented programming, a keyword that identifies a special type of pointer that references the class object in a member function.

thlqual
See target library high-level qualifier.

thread The basic unit of program execution. Several threads can run concurrently, performing different jobs.

thread ID
The identifier of the thread within the application process that has opened the queue.

TID   See transaction identifier. Also see thread ID.

time-independent messaging
See asynchronous messaging. Also see synchronous messaging.

TMF   See Transaction Manager Facility.

TMI   See trigger monitor interface.

topic   In publish/subscribe messaging, a destination to which messages are published. Also see topic object and topic string.

topic alias
See alias queue.

topic object
In publish/subscribe messaging, an object that is stored on a queue manager and that defines the behavior and security characteristics of messages that are published on a named topic.

topic string
In publish/subscribe messaging, the name of a topic, defined as a character string, that describes the nature of the data that is published and that is used as the identifier for the topic.

topic wildcard
See wildcard.

TP   See transaction program.

trace   A facility for recording WebSphere MQ activity. The destinations for trace entries can include generalized trace facility (GTF) and the system management facility (SMF).

transaction
A unit of processing consisting of one or more application programs, affecting one or more objects, that is initiated by a single request.

transaction ID
     See transaction identifier.

transaction identifier (TID transaction ID)
     A unique name that is assigned to a transaction and is used to identify the actions associated with that transaction.

transaction manager
     A software unit that coordinates the activities of resource managers by managing global transactions and coordinating the decision to commit them or roll them back. WebSphere MQ can act as a transaction manager on non z/OS platforms.

Transaction Manager Facility (TMF)
     In MQSeries for Compaq NonStop Kernel, a subsystem to protect your business transactions and the integrity of your databases. Often used synonymously with NonStop Transaction Manager/MP.

transaction program (TP)
     A program that processes transactions in an SNA network.

Transmission Control Protocol (TCP)
     A communications protocol used in the Internet and in any network that follows the Internet Engineering Task Force (IETF) standards for internetwork protocol. TCP provides a reliable host-to-host protocol between hosts in packet-switched communications networks and in interconnected systems of such networks. It uses the Internet Protocol (IP) as the underlying protocol. Also see Internet Protocol.

Transmission Control Protocol/Internet Protocol (TCP/IP)
     An industry-standard, nonproprietary set of communications protocols that provide reliable end-to-end connections between applications over interconnected networks of different types.

transmission program
     See message channel agent.

transmission queue
     A local queue on which prepared messages destined for a remote queue manager are temporarily stored.

trigger event
     An event, such as a message arriving on a queue, that causes a queue manager to create a trigger message on an initiation queue.

triggered queue
     A local queue which, when it has triggering set on and when the triggering conditions are met, requires that trigger messages are written.

triggering
     In Websphere MQ, a facility that allows a queue manager to start an application automatically when predetermined conditions on a queue are satisfied.

trigger message
     A message that contains information about the program that a trigger monitor is to start.

trigger monitor
     A continuously running application that serves one or more initiation queues. When a trigger message arrives on an initiation queue, the trigger

monitor retrieves the message. It uses the information in the trigger message to start a process that serves the queue on which a trigger event occurred.

trigger monitor interface (TMI)
The WebSphere MQ interface to which customer- or vendor-written trigger monitor programs must conform. A part of the WebSphere MQ Framework.

two-phase commit
A protocol for the coordination of changes to recoverable resources when more than one resource manager is used by a single transaction. Also see single-phase commit.

type A fundamental data type of computer architecture, including, for example, character, string and integer.

U

UDP See User Datagram Protocol.

unauthorized access
Gaining access to resources within a computer system without permission.

undelivered message queue
See dead-letter queue.

undo/redo record
A log record used in recovery. The redo part of the record describes a change to be made to a WebSphere MQ object. The undo part describes how to back out the change if the work is not committed.

unit of recovery
A recoverable sequence of operations within a single resource manager, such as an instance of DB2 Universal Database for z/OS. Also see transaction.

unit of work
A recoverable sequence of operations performed by an application between two points of consistency. A unit of work begins when a transaction starts or at a user-requested syncpoint or when requested by the application. It ends either at a user-requested syncpoint or at the end of a transaction.

user bag
In the WebSphere MQ Administration Interface (MQAI), a type of data bag that is created by the user.

User Datagram Protocol (UDP)
In the Internet suite of protocols, a protocol that provides unreliable, connectionless datagram service. It enables an application program on one machine or process to send a datagram to an application program on another machine or process.

user item
In the MQAI, a type of data item that is created by the user.

user selector
In the WebSphere MQ Administration Interface (MQAI), the identifier that is placed with a data item into a data bag to identify the data item. WebSphere MQ provides predefined user selectors for WebSphere MQ objects.

utility In WebSphere MQ, a supplied set of programs that provide the system

operator or system administrator with facilities in addition to those provided by the WebSphere MQ commands.

V

value The content of a data item. This can be an integer, a string, or the handle of another bag.

virtual method
In object-oriented programming, a method that exhibits polymorphism.

VSAM
Virtual Storage Access Method, an access method for direct or sequential processing of fixed-length and variable-length records on disk devices.

W

WebSphere MQ
A family of IBM licensed programs that provides message queuing services.

WebSphere MQ classes for C++
A set of classes that encapsulate the WebSphere MQ Message Queue Interface (MQI) in the C++ programming language.

WebSphere MQ classes for Java
A set of classes that encapsulate the WebSphere MQ Message Queue Interface (MQI) in the Java programming language.

WebSphere MQ classes for JMS
The Java Message Service (JMS) provider that is supplied with WebSphere MQ. As well as implementing the interfaces defined in the javax.jms package, WebSphere MQ classes for JMS provides two sets of extensions to the JMS API.

WebSphere MQ classes for .NET
A set of classes that allow a program written in the .NET programming framework to connect to WebSphere MQ as a WebSphere MQ client or to connect directly to a WebSphere MQ server.

WebSphere MQ Administration Interface (MQAI)
A programming interface that performs administration tasks on a WebSphere MQ queue manager through the use of data bags. Data bags allow the user to handle properties (or parameters) of WebSphere MQ objects.

WebSphere MQ client
Part of a WebSphere MQ product that can be installed on a system without installing the full queue manager. The WebSphere MQ client accepts MQI calls from applications and communicates with a queue manager on a server system. Also see client.

WebSphere MQ Explorer
The graphical user interface in which you can administer and monitor WebSphere MQ objects, whether they are hosted by your local computer or on a remote system.

WebSphere MQ Internet pass-thru (IPT)
A WebSphere MQ base product extension supplied in SupportPac™ MS81. It enables two queue managers to exchange messages, or a WebSphere MQ client application to connect to a queue manager, over the Internet without requiring a direct TCP/IP connection.

WebSphere MQ script commands (MQSC)
Human readable commands, uniform across all platforms, that are used to manipulate WebSphere MQ objects. Also see programmable command format.

WebSphere MQ server
A queue manager that provides queuing services to one or more clients. All the WebSphere MQ objects, for example queues, exist only on the queue manager system, that is, on the MQI server machine. A server can support local MQI applications as well.

wildcard
A character that can be specified in subscriptions to match a range of topics.

Windows NT® Challenge/Response
The authentication protocol that is used on networks that include Windows NT systems and on standalone systems.

wiretapping
The act of gaining access to information that is flowing along a wire or any other type of conductor used in communications. The objective of wiretapping is to gain unauthorized access to information without being detected.

X

XCF See cross-system coupling facility.

X/Open XA
The X/Open Distributed Transaction Processing XA interface. A proposed standard for distributed transaction communication. The standard specifies a bidirectional interface between resource managers that provide access to shared resources within transactions, and between a transaction service that monitors and resolves transactions.

X.500 The directory services standard of the International Telecommunication Union (ITU), the International Standards Organization (ISO), and the International Electrotechnical Commission (IEC).

X.509 The International Telecommunication Union standard for a public key infrastructure (PKI) and Privilege Management Infrastructure (PMI).

X.509 certificate
A certificate that contains information that is defined by the X.509 standard.

Y

Z

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