

Qpid extensions to AMQP

Overview

This page is an attempt to collect in a single place all the extensions that have been made (through the use of arguments, options, etc.) to AMQP across the Qpid Java and C++ Brokers.

Ultimately the aim is to try to get both brokers implementing as much common functionality as possible through common extensions - and to advertise which extensions are available in a common way, so that clients can take advantage of functions that are present (or work around functions that are not).

Connection

Connection.Start

Options are carried in the server-properties field.

Name	C++	Java	Description
qpid.federation_tag	Y	Y	

Connection.Start-Ok

Options are carried in the client-properties field.

Name	C++	Java	Description
qpid.client_pid	Y	N	Allows the process id of a client to be reported by mgmt tools
qpid.client_ppid	Y	N	Allows the parent process id of a client to be reported by mgmt tools
qpid.client_process	Y	N	Allows the process name of a client to be reported by mgmt tools

Session

???

Exchange

Exchange.Declare

Name	C++	Java	Description
qpid.ive	Y	N	Specifies 'initial value exchange' behaviour is desired
qpid.msg_sequence	Y	N	Requests that the exchange sequences all messages routed through it and adds the sequence number to the message headers

Binding

Exchange.Bind

Options are carried in the arguments field.

Name	C++	Java	Description
qpid.fed.origin	Y	Y	

x-filter-jms-selector	N	Y*	(Java Broker topic exchange only currently) add a JMS Selector to the binding to filter messages against an SQL style query
-----------------------	---	----	---

Queue

Queue.Declare

Options are carried in the arguments field.

Name	C++	Java	Description
no-local	Y	Y	(AMQP 0-10 only). Specifies that the queue should discard any messages enqueued by sessions on the same connection as that which declares the queue
qpid.policy_type	Y	N	Valid values "reject", "ring", "self-destruct"
qpid.max_size	Y	N	Defines the maximum size of message data (in bytes) that a queue can contain before the action dictated by the policy_type is taken.
qpid.max_count	Y	N	Defines the maximum number of messages that a queue can contain before the action dictated by the policy_type is taken.
qpid.file_count	Y	N	This is really a property of a particular store implementation (sets the number of files to use for the queue's 'journal')
qpid.file_size	Y	N	This is really a property of a particular store implementation (sets the size of the files to use for the queue's 'journal')
qpid.last_value_queue	Y	Y	Enables last value queue behaviour
qpid.last_value_queue_key	Y	Y	Defines the key to use for LVQ
qpid.last_value_queue_no_browse	Y	N	Enables special mode for last value queue behaviour (see QPID-2104), now deprecated
qpid.queue_msg_sequence	Y	N	Causes a sequence number to be added to headers of enqueued messages (non-persistent at present)
qpid.trace.id	Y	Y	Adds the given trace id as to the application header "x-qpid.trace" in messages sent from the queue
qpid.trace.exclude	Y	Y	Does not send on messages which include one of the given (comma separated) trace ids
x-qpid-priorities	Y	Y	Defines the number of distinct priority levels supported by the queue
x-qpid-maximum-message-age	N	Y	Specifies that if the oldest message on the queue gets above this age then alerts should be sent
x-qpid-maximum-message-size	Y	Y	Specifies that if the queue gets above this size (in bytes) an alert should be sent
x-qpid-maximum-message-count	Y	Y	Specified that if the queue gets above this size (in message count) an alert should be sent
x-qpid-minimum-alert-repeat-gap	Y	Y	Specified the minimum time gap between consecutive alerts

x-qpid-capacity	N	Y	Defines the size of the queue in bytes at which flow control on producers will be brought into affect
x-qpid-flow-resume-capacity	N	Y	Defines the size on bytes of the queue when flow control will be rescinded
qpid.flow_stop_count	Y	N	Defines the queue depth in messages at which flow control of producer will come into affect
qpid.flow_resume_count	Y	N	Defines the queue depth in messages at which inflow from producers will no longer be restricted
qpid.flow_stop_size	Y	N	Defines the queue depth in bytes at which flow control of producer will come into affect
qpid.flow_resume_size	Y	N	Defines the queue depth in bytes at which inflow from producers will no longer be restricted
qpid.alert_size	Y	N	Specifies that if the queue gets above this size (in bytes) an alert should be sent (alias for x-qpid-maximum-message-size)
qpid.alert_count	Y	N	Specified that if the queue gets above this size (in message count) an alert should be sent (alias for x-qpid-maximum-message-count)
qpid.alert_repeat_gap	Y	N	Specified the minimum time gap between consecutive alerts (alias for x-qpid-minimum-alert-repeat-gap)
qpid.priorities	Y	N	Defines the number of distinct priority levels supported by the queue (alias for x-qpid-priorities)
qpid.auto_delete_timeout	Y	N	Delays auto-deletion of the queue by the specified number of seconds
qpid.browse-only	Y	N	All users of queue are forced to browse. Limit queue size with ring, LVQ, or TTL.

Subscription

Message.Subscribe (Basic.Consume in 0-8/0-9)

Name	C++	Java	Description
x-filter-jms-selector	N	Y	add a JMS Selector to the subscription to filter messages against an SQL style query
x-filter-no-consume	N	Y	(0-8/0-9 only) Implements browsing for 0-8/0-9 - messages sent on the subscription are not acquired
x-filter-auto-close	N	Y	(0-8/0-9 only) The server closes the subscription when the queue becomes empty