ByteballCore

Database model documentation

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1. Model details

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Model name:

 ByteballCore

Version:

 2.3

Database engine:

 MySQL

Description:

2. Tables

2.1. Table units

2.1.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
creation_date	timestamp		
version	varchar(10)		
alt	varchar(3)		
witness_list_unit	char(44)	null	
last_ball_unit	char(44)	null	
content_hash	char(44)	null	
headers_commission	int		
payload_commission	int		
is_free	tinyint		
is_on_main_chain	tinyint		
main_chain_index	int	null	
latest_included_mc_index	int	null	
level	int	null	
witnessed_level	int	null	
is_stable	tinyint		
sequence	enum('good','temp-bad','final-bad')		
best_parent_unit	char(44)	null	

2.1.2. Indexes

Index name	Columns	Description
byMainChain	is_on_main_chain (ASC)	
byMcIndex	main_chain_index (ASC)	

byLimci	latest_included_mc_index (ASC)	
byLevel	level (ASC)	
byFree	is_free (ASC)	
byStableMci	is_stable (ASC), main_chain_index (ASC)	
byDate	creation_date (ASC)	
bySequence	sequence (ASC)	

2.2. Table balls

2.2.1. Columns

Column name	Type	Properties	Description
ball	char(44)	PK	
creation_date	timestamp		
unit	char(44)		
count_paid_witnesses	tinyint	null	

2.2.2. Alternate keys

Key name	Columns	Description
AK_0	unit	

2.2.3. Indexes

Index name	Columns	Description
byCountPaidWitnesses	count_paid_witnesses (ASC)	

2.3. Table skiplist_units

2.3.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
skiplist_unit	char(44)	PK	

2.4. Table parenthoods

2.4.1. Columns

Column name	Type	Properties	Description
child_unit	char(44)	PK	
parent_unit	char(44)	PK	

2.5. Table definitions

2.5.1. Columns

Column name	Type	Properties	Description
definition_chash	char(32)	PK	
definition	text		
has_references	tinyint		

2.6. Table addresses

2.6.1. Columns

Column name	Type	Properties	Description
address	char(32)	PK	
creation_date	timestamp		

2.7. Table unit_authors

2.7.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
address	char(32)	PK	
definition_chash	char(32)	null	
_mci	int	null	

2.7.2. Indexes

Index name	Columns	Description
unitAuthorsIndexByAddressDefinitionChash	address (ASC), definition_chash (ASC)	
unitAuthorsIndexByAddressMci	address (ASC), _mci (ASC)	

2.8. Table authentifiers

2.8.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
address	char(32)	PK	
path	varchar(40)	PK	
authentifier	varchar(4096)		

2.9. Table unit_witnesses

2.9.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
address	varchar(32)	PK	

2.9.2. Indexes

Index name	Columns	Description
byAddress	address (ASC)	

2.10. Table witness_list_hashes

2.10.1. Columns

Column name	Type	Properties	Description
witness_list_unit	char(44)	PK	
witness_list_hash	char(44)		
creation_date	timestamp		

2.10.2. Alternate keys

Key name	Columns	Description
AK_1	witness_list_hash	

2.11. Table earned_headers_commission_recipients

2.11.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
address	varchar(32)	PK	
earned_headers_commission_share	int		

2.11.2. Indexes

Index name	Columns	Description
byAddress	address (ASC)	

2.12. Table messages

2.12.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint	PK	
app	varchar(30)		
payload_location	enum('inline','uri','none')		
payload_hash	varchar(44)		
payload	text	null	
payload_uri_hash	varchar(44)	null	
payload_uri	varchar(500)	null	

2.13. Table spend_proofs

2.13.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint	PK	
spend_proof_index	tinyint	PK	
spend_proof	char(44)		
address	char(32)		

2.13.2. Alternate keys

Key name	Columns	Description
bySpendProof	spend_proof, unit	

2.14. Table address_definition_changes

2.14.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint	PK	
address	char(32)		
definition_chash	varchar(32)		

2.14.2. Alternate keys

Key name	Columns	Description
byAddressUnit	address, unit	

2.15. Table data_feeds

2.15.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint		
feed_name	varchar(64)	PK	
value	varchar(64)	null	
int_value	bigint	null	

2.15.2. Indexes

Index name	Columns	Description
byNameStringValue	feed_name (ASC), value (ASC)	
byNameIntValue	feed_name (ASC), int_value (ASC)	

2.16. Table polls

2.16.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint		
question	varchar(4096)		

2.17. Table poll_choices

2.17.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
choice_index	tinyint	PK	
choice	varchar(32)		

2.17.2. Alternate keys

Key name	Columns	Description
AK_2	unit, choice	

2.18. Table votes

2.18.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint	PK	
poll_unit	char(44)		
choice	varchar(32)		

2.18.2. Alternate keys

Key name	Columns	Description
AK_3	unit, choice	

2.19. Table attestations

2.19.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint	PK	
attestor_address	varchar(32)		
address	varchar(32)		

2.19.2. Indexes

Index name	Columns	Description
byAddress	address (ASC)	

2.20. Table assets

2.20.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint		
cap	bigint	null	
is_private	tinyint		
is_transferrable	tinyint		
auto_destroy	tinyint		
fixed_denominations	tinyint		
issued_by_definer_only	tinyint		
cosigned_by_definer	tinyint		
spender_attested	tinyint		
issue_condition	text	null	
transfer_condition	text	null	

2.21. Table asset_denominations

2.21.1. Columns

Column name	Type	Properties	Description
asset	char(44)	PK	
denomination	int	PK	
count_coins	bigint	null	
max_issued_serial_number	bigint		

2.22. Table asset_attestors

2.22.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint	PK	
asset	char(44)		
attestor_address	char(32)		

2.22.2. Alternate keys

Key name	Columns	Description
byAssetAttestorUnit	asset, attestor_address, unit	

2.23. Table inputs

2.23.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint	PK	
input_index	tinyint	PK	
asset	char(44)	null	
denomination	int		
is_unique	tinyint	null	
type	enum('transfer', 'headers_commission','witnessing','issue')		
src_unit	char(44)	null	

src_message_index	tinyint	null	
src_output_index	tinyint	null	
from_main_chain_index	int	null	
to_main_chain_index	int	null	
serial_number	bigint	null	
amount	bigint	null	
address	char(32)		

2.23.2. Alternate keys

Key name	Columns	Description
bySrcOutput	src_unit, src_message_index, src_output_index, is_unique	
byIndexAddress	type, from_main_chain_index, address, is_unique	
byAssetDenominationSerialAddress	asset, denomination, serial_number, address, is_unique	

2.23.3. Indexes

Index name	Columns	Description
byAssetType	asset (ASC), type (ASC)	
byAddressTypeToMci	address (ASC), type (ASC), to_main_chain_index (ASC)	

2.24. Table outputs

2.24.1. Columns

Column name	Type	Properties	Description
output_id	int	PK	
unit	char(44)		
message_index	tinyint		

output_index	tinyint		
asset	char(44)	null	
denomination	int		
address	varchar(32)	null	
amount	bigint		
blinding	char(16)	null	
output_hash	char(44)	null	
is_serial	tinyint	null	
is_spent	tinyint		

2.24.2. Alternate keys

Key name	Columns	Description
AK_4	unit, message_index, output_index	

2.24.3. Indexes

Index name	Columns	Description
byAddressSpent	address (ASC), is_spent (ASC)	
bySerial	is_serial (ASC)	

2.25. Table headers_commission_contributions

2.25.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
address	char(32)	PK	
amount	bigint		
creation_date	timestamp		

2.25.2. Indexes

Index name	Columns	Description
byAddress	address (ASC)	

2.26. Table headers_commission_outputs

2.26.1. Columns

Column name	Type	Properties	Description
main_chain_index	int	PK	
address	char(32)	PK	
amount	bigint		
is_spent	tinyint		
creation_date	timestamp		

2.26.2. Alternate keys

Key name	Columns	Description
AK_5	address, main_chain_index	
AK_6	address, is_spent, main_chain_index	

2.27. Table paid_witness_events

2.27.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
address	char(32)	PK	
delay	tinyint	null	

2.28. Table witnessing_outputs

2.28.1. Columns

Column name	Type	Properties	Description
main_chain_index	int	PK	
address	char(32)	PK	
amount	bigint		
is_spent	tinyint		
creation_date	timestamp		

2.28.2. Alternate keys

Key name	Columns	Description
AK_7	address, main_chain_index	
AK_8	address, is_spent, main_chain_index	

2.29. Table dependencies

2.29.1. Columns

Column name	Type	Properties	Description
unit	char(44)		
depends_on_unit	char(44)	null	
creation_date	timestamp		

2.29.2. Alternate keys

Key name	Columns	Description
AK_9	depends_on_unit, unit	

2.29.3. Indexes

Index name	Columns	Description
byUnit	unit (ASC)	

2.30. Table unhandled_joints

2.30.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
peer	varchar(100)		
json	longtext		
creation_date	timestamp		

2.31. Table archived_joints

2.31.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
reason	enum('uncovered' ,'voided')		
json	longtext		
creation_date	timestamp		

2.32. Table known_bad_joints

2.32.1. Columns

Column name	Type	Properties	Description
joint	char(44)	null	
unit	char(44)	null	
json	longtext		
error	text		
creation_date	timestamp		

2.32.2. Alternate keys

Key name	Columns	Description
AK_10	joint	
AK_11	unit	

2.33. Table joints

2.33.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
json	longtext		
creation_date	timestamp		

2.34. Table unhandled_private_payments

2.34.1. Columns

Column name	Type	Properties	Description
unit	char(44)	PK	
message_index	tinyint	PK	

output_index	tinyint	PK	
json	longtext		
peer	varchar(100)		
linked	tinyint		
creation_date	timestamp		

2.35. Table hash_tree_balls

2.35.1. Columns

Column name	Type	Properties	Description
ball_index	int	PK	
ball	char(44)		
unit	char(44)		

2.35.2. Alternate keys

Key name	Columns	Description
AK_12	ball	
AK_13	unit	

2.36. Table catchup_chain_balls

2.36.1. Columns

Column name	Type	Properties	Description
member_index	int	PK	
ball	char(44)		

2.36.2. Alternate keys

Key name	Columns	Description
AK_14	ball	

2.37. Table peer_hosts

2.37.1. Columns

Column name	Type	Properties	Description
peer_host	varchar(100)	PK	
creation_date	timestamp		

count_new_good_j oints	int		
count_invalid_jo ints	int		
count_nonserial_ joints	int		

2.38. Table peers

2.38.1. Columns

Column name	Type	Properties	Description
peer	varchar(100)	PK	
peer_host	varchar(100)		
learnt_from_peer _host	varchar(100)	null	
is_self	tinyint		
creation_date	timestamp		

2.39. Table peer_events

2.39.1. Columns

Column name	Type	Properties	Description
peer_host	varchar(100)		
event_date	timestamp		
event	enum('new_good', 'invalid','nonse rial','known_goo d','known_bad')		

2.40. Table peer_host_urls

2.40.1. Columns

Column name	Type	Properties	Description
peer_host	varchar(100)		
url	varchar(100)		
creation_date	timestamp		
is_active	tinyint	null	
revocation_date	timestamp	null	

2.40.2. Alternate keys

Key name	Columns	Description
byHostActive	peer_host, is_active	

2.41. Table wallets

2.41.1. Columns

Column name	Type	Properties	Description
wallet	char(44)	PK	
account	int		
definition_template	text		
creation_date	timestamp		
full_approval_date	timestamp	null	
ready_date	timestamp	null	

2.42. Table my_addresses

2.42.1. Columns

Column name	Type	Properties	Description
address	char(32)	PK	
wallet	char(44)		
is_change	tinyint		
address_index	int		
definition	text		
creation_date	timestamp		

2.42.2. Alternate keys

Key name	Columns	Description
byWalletPath	wallet, is_change, address_index	

2.43. Table my_witnesses

2.43.1. Columns

Column name	Type	Properties	Description
address	varchar(32)	PK	

2.44. Table devices

2.44.1. Columns

Column name	Type	Properties	Description
device_address	char(33)	PK	
pubkey	char(44)		
temp_pubkey_package	text	null	
creation_date	timestamp		

2.45. Table device_messages

2.45.1. Columns

Column name	Type	Properties	Description
message_hash	char(44)	PK	
device_address	char(33)		
message	longtext		
creation_date	timestamp		

2.46. Table correspondent_devices

2.46.1. Columns

Column name	Type	Properties	Description
device_address	char(33)	PK	
name	varchar(100)		
pubkey	char(44)		
hub	varchar(100)		
is_confirmed	tinyint		
is_indirect	tinyint		
creation_date	timestamp		
my_record_pref	integer	null	

peer_record_pref	integer	null	

2.47. Table pairing_secrets

2.47.1. Columns

Column name	Type	Properties	Description
pairing_secret	varchar(40)	PK	
is_permanent	tinyint		
creation_date	timestamp		
expiry_date	timestamp		

2.48. Table extended_pubkeys

2.48.1. Columns

Column name	Type	Properties	Description
wallet	char(44)	PK	
extended_pubkey	char(112)	null	
device_address	char(33)	PK	
creation_date	timestamp		
approval_date	timestamp	null	
member_ready_date	timestamp	null	

2.49. Table wallet_signing_paths

2.49.1. Columns

Column name	Type	Properties	Description
wallet	char(44)		
signing_path	varchar(255)	null	
device_address	char(33)		
creation_date	timestamp		

2.49.2. Alternate keys

Key name	Columns	Description
byWalletSigningPath	wallet, signing_path	

2.50. Table shared_addresses

2.50.1. Columns

Column name	Type	Properties	Description
shared_address	char(32)	PK	
definition	text		
creation_date	timestamp		

2.51. Table pending_shared_addresses

2.51.1. Columns

Column name	Type	Properties	Description
definition_template_chash	char(32)	PK	
definition_template	text		
creation_date	timestamp		

2.52. Table pending_shared_address_signing_paths

2.52.1. Columns

Column name	Type	Properties	Description
definition_template_chash	char(32)	PK	
device_address	char(33)		
signing_path	varchar(255)	PK	
address	char(32)	null	
device_addresses_by_relative_signing_paths	text	null	
creation_date	timestamp		
approval_date	timestamp	null	

2.53. Table shared_address_signing_paths

2.53.1. Columns

Column name	Type	Properties	Description

shared_address	char(32)		
signing_path	varchar(255)	null	
address	char(32)		
member_signing_path	varchar(255)	null	
device_address	char(33)		
creation_date	timestamp		

2.53.2. Alternate keys

Key name	Columns	Description
bySharedAddressSigningPath	shared_address, signing_path	

2.54. Table outbox

2.54.1. Columns

Column name	Type	Properties	Description
message_hash	char(44)	PK	
to	char(33)		
message	longtext		
creation_date	timestamp		
last_error	text	null	

2.55. Table watched_light_addresses

2.55.1. Columns

Column name	Type	Properties	Description
peer	varchar(100)	PK	
address	char(32)	PK	
creation_date	timestamp		

2.55.2. Indexes

Index name	Columns	Description
byAddress	address (ASC)	

2.56. Table push_registrations

2.56.1. Columns

Column name	Type	Properties	Description
registrationId	varchar(200)	null	
device_address	char(33)	PK	

2.57. Table chat_messages

2.57.1. Columns

Column name	Type	Properties	Description
id	integer	PK	
correspondent_address	char(33)		
message	longtext		
creation_date	timestamp		
is_incoming	tinyint		
type	char(15)		

2.57.2. Indexes

Index name	Columns	Description
chatMessagesIndexByDeviceAddress	correspondent_address (ASC), id (ASC)	

2.58. Table watched_light_units

2.58.1. Columns

Column name	Type	Properties	Description
peer	varchar(100)	PK	
unit	char(44)	PK	
creation_date	timestamp		

2.58.2. Indexes

Index name	Columns	Description
wlabyUnit	unit (ASC)	

2.59. Table bots

2.59.1. Columns

Column name	Type	Properties	Description
id	integer	PK	
rank	integer		
name	varchar(100)		
pairing_code	varchar(200)		
description	longtext		

2.59.2. Alternate keys

Key name	Columns	Description
AK_15	name	

2.60. Table asset_metadata

2.60.1. Columns

Column name	Type	Properties	Description
asset	char(44)	PK	
metadata_unit	char(44)		
registry_address	char(32)	null	
suffix	varchar(20)	null	
name	varchar(20)	null	
decimals	tinyint	null	
creation_date	timestamp		

2.60.2. Alternate keys

Key name	Columns	Description
byNameRegistry	name, registry_address	

2.61. Table sent_mnemonics

2.61.1. Columns

Column name	Type	Properties	Description
unit	char(44)		

address	char(32)		
mnemonic	varchar(107)		
textAddress	varchar(120)		
creation_date	timestamp		

2.61.2. Indexes

Index name	Columns	Description
sentByAddress	address (ASC)	

2.62. Table private_profiles

2.62.1. Columns

Column name	Type	Properties	Description
private_profile_id	integer	PK	
unit	char(44)		
payload_hash	char(44)		
attestor_address	char(32)		
address	char(32)		
src_profile	text		
creation_date	timestamp		

2.63. Table private_profile_fields

2.63.1. Columns

Column name	Type	Properties	Description
private_profile_id	integer		
field	varchar(50)		
value	varchar(50)		
blinding	char(16)		
creation_date	timestamp		

2.63.2. Alternate keys

Key name	Columns	Description

byProfileIdField	private_profile_id, field	

2.63.3. Indexes

Index name	Columns	Description
ppfByField	field (ASC)	

3. References

3.1. Reference unitsByLastBallUnit

units	0..*	units
unit	<->	last_ball_unit

3.2. Reference byBestParentUnit

units	0..*	units
unit	<->	best_parent_unit

3.3. Reference unitsByWitnessListUnit

units	0..*	units
unit	<->	witness_list_unit

3.4. Reference byUnit

units	0..1	balls
unit	<->	unit

3.5. Reference byUnit

units	0..*	skiplist_units
unit	<->	unit

3.6. Reference bySkiplistUnit

units	0..*	skiplist_units
unit	<->	skiplist_unit

3.7. Reference parenthoodsByChild

units	0..*	parenthoods
unit	<->	child_unit

3.8. Reference parenthoodsByParent

units	0..*	parenthoods
unit	<->	parent_unit

3.9. Reference byUnit

units	0..*	unit_authors
unit	<->	unit

3.10. Reference unitAuthorsByAddress

addresses	0..*	unit_authors
address	<->	address

3.11. Reference byDefinition

definitions	0..*	unit_authors
definition_chash	<->	definition_chash

3.12. Reference byUnit

units	0..*	authentifiers
unit	<->	unit

3.13. Reference authentifiersByAddress

addresses	0..*	authentifiers
address	<->	address

3.14. Reference byUnit

units	0..*	unit_witnesses
unit	<->	unit

3.15. Reference byUnit

units	0..1	witness_list_hashes
unit	<->	witness_list_unit

3.16. Reference byUnit

units	0..*	earned_headers_commission_recipients
unit	<->	unit

3.17. Reference byUnit

units	0..*	messages
unit	<->	unit

3.18. Reference byUnit

units	0..*	spend_proofs
unit	<->	unit

3.19. Reference spendProofsByAddress

addresses	0..*	spend_proofs
address	<->	address

3.20. Reference byUnit

units	0..*	address_definition_changes
unit	<->	unit

3.21. Reference addressDefinitionChangesByAddress

addresses	0..*	address_definition_changes
address	<->	address

3.22. Reference byUnit

units	0..*	data_feeds
unit	<->	unit

3.23. Reference byUnit

units	0..1	polls
unit	<->	unit

3.24. Reference byPoll

polls	0..*	poll_choices
unit	<->	unit

3.25. Reference votesByChoice

poll_choices	0..*	votes
unit	<->	poll_unit
choice	<->	choice

3.26. Reference byUnit

units	0..*	votes
unit	<->	unit

3.27. Reference attestationsByAttestorAddress

addresses	0..*	attestations
address	<->	attestor_address

3.28. Reference byUnit

units	0..*	attestations
unit	<->	unit

3.29. Reference byUnit

units	0..1	assets
unit	<->	unit

3.30. Reference byAsset

assets	0..*	asset_denominations
unit	<->	asset

3.31. Reference byUnit

units	0..*	asset_attestors
unit	<->	unit

3.32. Reference assetAttestorsByAsset

assets	0..*	asset_attestors
unit	<->	asset

3.33. Reference byUnit

units	0..*	inputs
unit	<->	unit

3.34. Reference inputsBySrcUnit

units	0..*	inputs
unit	<->	src_unit

3.35. Reference inputsByAddress

addresses	0..*	inputs
address	<->	address

3.36. Reference inputsByAsset

assets	0..*	inputs
unit	<->	asset

3.37. Reference byUnit

units	0..*	outputs
unit	<->	unit

3.38. Reference outputsByAsset

assets	0..*	outputs
unit	<->	asset

3.39. Reference byUnit

units	0..*	headers_commission_contributions
unit	<->	unit

3.40. Reference byUnit

units	0..*	paid_witness_events
unit	<->	unit

3.41. Reference byWitnessAddress

addresses	0..*	paid_witness_events
address	<->	address

3.42. Reference byWitnessAddress

addresses	0..*	witnessing_outputs
address	<->	address

3.43. Reference byLearntFromPeerHost

peer_hosts	0..*	peers
peer_host	<->	learnt_from_peer_host

3.44. Reference byPeerHost

peer_hosts	0..*	peers
peer_host	<->	peer_host

3.45. Reference byPeerHost

peer_hosts	0..*	peer_events
peer_host	<->	peer_host

3.46. Reference byPeerHost

peer_hosts	0..*	peer_host_urls
peer_host	<->	peer_host

3.47. Reference byWallet

wallets	0..*	my_addresses
wallet	<->	wallet

3.48. Reference byAddress

devices	0..*	device_messages
device_address	<->	device_address

3.49. Reference byWallet

wallets	0..*	wallet_signing_paths
wallet	<->	wallet

3.50. Reference byTemplate

pending_shared_addresses	0..*	pending_shared_address_signing_paths
definition_template_chash	<->	definition_template_chash

3.51. Reference bySharedAddress

shared_addresses	0..*	shared_address_signing_paths
shared_address	<->	shared_address

3.52. Reference byAddress

correspondent_devices	0..*	chat_messages
device_address	<->	correspondent_address

3.53. Reference byAsset

assets	0..1	asset_metadata
unit	<->	asset

3.54. Reference byMetadataUnit

units	0..*	asset_metadata
unit	<->	metadata_unit

3.55. Reference FK_0

units	0..*	sent_mnemonics
unit	<->	unit

3.56. Reference FK_1

units	0..*	private_profiles
unit	<->	unit

3.57. Reference FK_2

private_profiles	0..*	private_profile_fields
private_profile_id	<->	private_profile_id