
Database Design

Specification

For

RESTful WHOIS

CNNIC

Revision Sheet

| Release No. | Date | Revision Description |
|-------------|------------|-----------------------|
| 1.0 | 2014.02.14 | Initial |
| 1.1 | 2014.04.10 | Redesign the database |
| 1.2 | 2014.12.15 | Modify for update API |

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1.Introduction

This database design is for RESTful WHOIS.

RESTful WHOIS is an implementation of RDAP (Registration Data Access Protocol), and it is used to retrieve registration information from registries using RESTful (HTTP+JSON) web access patterns.

2.Database Diagram

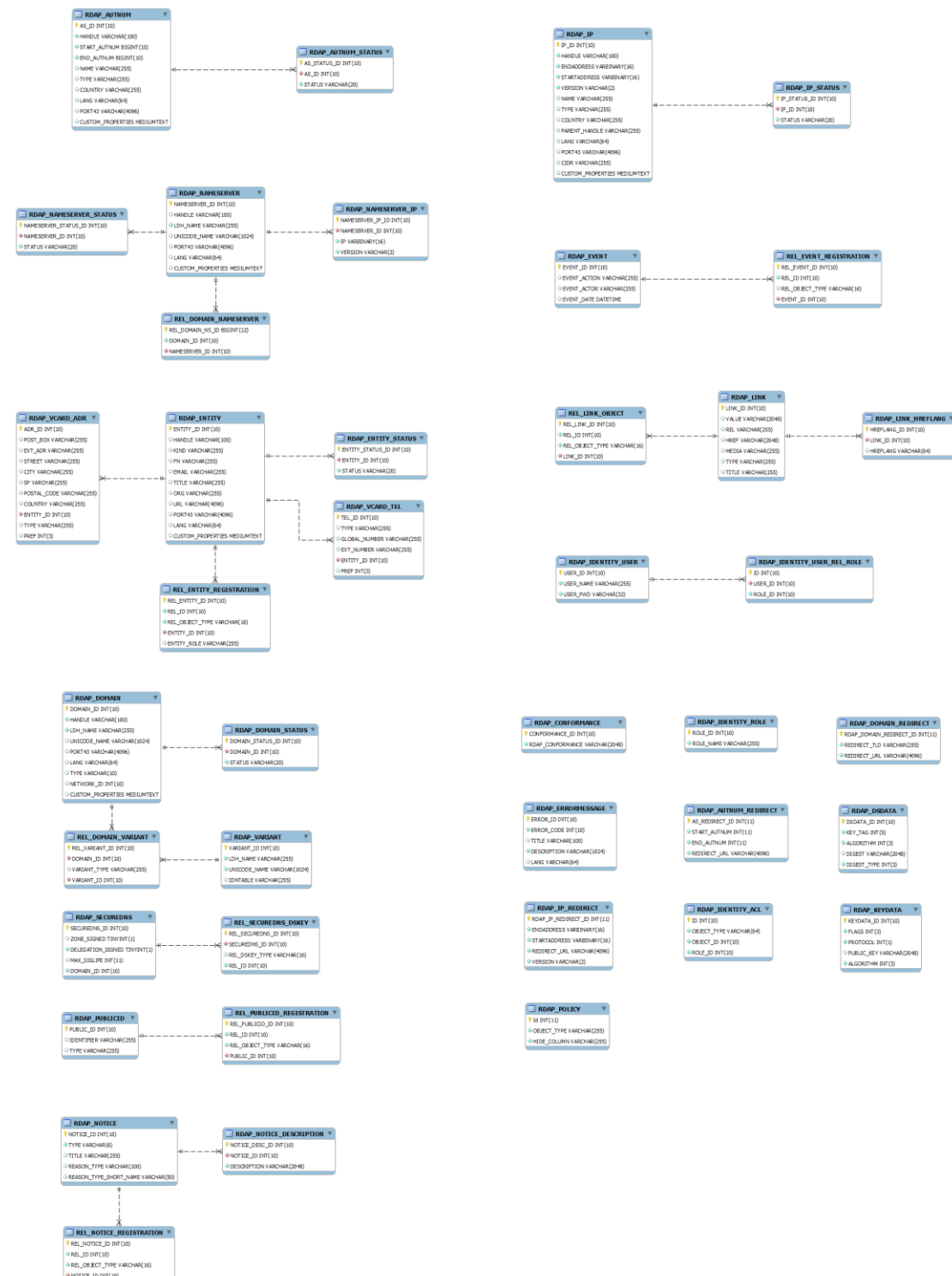


Figure2-1 database diagram

3. Table Details

3.1. Table: RDAP_AUTNUM

Comment: Represent Autonomous System Number (autnum).

Keys:

| Name | Type | Extras | Comment |
|--------------------|--------------------------|--------|---------|
| Primary Key | AS_ID | unique | |
| IDX_AS_END_AUTNUM | END_AUTNUM, START_AUTNUM | | |
| UK_AS_HANDLE | HANDLE | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|-------------------|---------------|------|------------------|---|
| AS_ID | int(10) | No | <auto_increment> | Primary key |
| HANDLE | varchar(100) | No | | Registry-unique identifiers of a referenced object. Should be ASCII and '-/_'. |
| START_AUTNUM | bigint(10) | No | 0 | The starting number in the block of autonomous system numbers |
| END_AUTNUM | bigint(10) | No | | The ending number in the block of autonomous system numbers |
| NAME | varchar(255) | Yes | <NULL> | An identifier assigned to the autnum registration by the registration holder |
| TYPE | varchar(255) | Yes | <NULL> | A string containing an RIR-specific classification of a autnum |
| COUNTRY | varchar(255) | Yes | <NULL> | A string containing the name of the 2 character country code of a autnum |
| LANG | varchar(64) | Yes | <NULL> | Language Identifier. For example: "en" |
| PORT43 | varchar(4096) | Yes | <NULL> | Port 43 WHOIS Server |
| CUSTOM_PROPERTIES | mediumtext | Yes | | Custom properties key-value, JSON format. For example: {"customKey1":"value1","customKey2":"value2" } |

3.2. Table: RDAP_AUTNUM_REDIRECT

Comment: autnum redirect table.

Keys:

| Name | Type | Extras | Comment |
|--------------------|----------------|--------|---------|
| Primary Key | AS_REDIRECT_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|-----------------------|---------------------|------|------------------|---|
| AS_REDIRECT_ID | int(11) unsigned | No | <auto_increment> | Primary key |
| START_AUTNUM | int(11) unsigned | No | 0 | The starting number in the block of autonomous system numbers |
| END_AUTNUM | int(11) unsigned | No | 0 | The ending number in the block of autonomous system numbers |
| REDIRECT_URL | varchar(4096) | No | | Url for redirect |

3.3. Table: RDAP_AUTNUM_STATUS

Comment: status of an autnum, reference to <http://tools.ietf.org/html/rfc7483#section-10.2.2>

Keys:

| Name | Type | Extras | Comment |
|--------------------|--------------|--------|---------|
| Primary Key | AS_STATUS_ID | unique | |
| IDX_STATUS_AS_ID | AS_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|---------------------|-------------|------|------------------|---------------------------------|
| AS_STATUS_ID | int(10) | No | <auto_increment> | Primary key |
| AS_ID | int(10) | No | | Table RDAP_AUTNUM's primary key |
| STATUS | varchar(20) | No | | Autnum Status. |

3.4. Table: RDAP_CONFORMANCE

Comment: The rdap conformance which provides a hint as to the specifications used in the construction of the response. Reference to <http://tools.ietf.org/html/rfc7483#section-4.1>

Keys:

| Name | Type | Extras | Comment |
|--------------------|----------------|--------|---------|
| Primary Key | CONFORMANCE_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|-----------------------|------------------|------|---------|----------------------------------|
| CONFORMANCE_ID | int(10) unsigned | No | | Primary Key |
| RDAP_CONFORMANCE | varchar(2048) | No | | For example: ["rdap_level_0"] |

3.5. Table: RDAP_DOMAIN

Comment: Represents a DNS name and point of delegation. Reference to <http://tools.ietf.org/html/rfc7483#section-5.3>

Keys:

| Name | Type | Extras | Comment |
|-------------------------|--------------|--------|---------|
| Primary Key | DOMAIN_ID | unique | |
| IDX_DOMAIN_LDH_NAME | LDH_NAME | | |
| IDX_DOMAIN_UNICODE_NAME | UNICODE_NAME | | |
| UK_DOMAIN_HANDLE | HANDLE | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|------------------|---------------|------|------------------|--|
| DOMAIN_ID | int(10) | No | <auto_increment> | Primary Key |
| HANDLE | varchar(100) | No | | Registry-unique identifiers of a referenced object. Should be ASCII and '-'/'_.' |
| LDH_NAME | varchar(255) | No | | Punycode name of domain. Can't contain the last '.' of a domain. Must be lowercased |
| UNICODE_NAME | varchar(1024) | Yes | <NULL> | Unicode name of a domain. This field is identical with ldh name if it is an ASCII domain |
| PORT43 | varchar(4096) | Yes | <NULL> | Port 43 WHOIS Server |
| LANG | varchar(64) | Yes | <NULL> | Language Identifier. For example: "en" |
| TYPE | varchar(10) | Yes | dnr | Domain type: dnr: dnr domain |

| | | | | |
|-------------------|------------|-----|--------|---|
| | | | | rir: rir domain |
| NETWORK_ID | int(10) | Yes | <NULL> | Network id |
| CUSTOM_PROPERTIES | mediumtext | Yes | | Custom properties key-value, JSON format. For example: {"customKey1":"value1","customKey2":"value2" } |

3.6. Table: RDAP_DOMAIN_REDIRECT

Comment: domain redirect table.

Keys:

| Name | Type | Extras | Comment |
|--------------------|-------------------------|--------|---------|
| Primary Key | RDAP_DOMAIN_REDIRECT_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|--------------------------------|---------------------|------|------------------|------------------|
| RDAP_DOMAIN_REDIRECT_ID | int(11) unsigned | No | <auto_increment> | Primary Key |
| REDIRECT_TLD | varchar(255) | No | | Redirect tld |
| REDIRECT_URL | varchar(4096) | No | | Url for redirect |

3.7. Table: RDAP_DOMAIN_STATUS

Comment: status of a domain.

Keys:

| Name | Type | Extras | Comment |
|--------------------|------------------|--------|---------|
| Primary Key | DOMAIN_STATUS_ID | unique | |
| IDX_DOMAIN_ID | DOMAIN_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|-------------------------|-------------|------|------------------|---------------------------------|
| DOMAIN_STATUS_ID | int(10) | No | <auto_increment> | Primary key |
| DOMAIN_ID | int(10) | No | | Table RDAP_DOMAIN's primary key |
| STATUS | varchar(20) | No | | Domain status |

3.8. Table: RDAP_DSDATA

Comment: Ds data for domain DNSSEC.

Keys:

| Name | Type | Extras | Comment |
|--------------------|-----------|--------|---------|
| Primary Key | DSDATA_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|------------------|---------------|------|------------------|---|
| DSDATA_ID | int(10) | No | <auto_increment> | Primary key |
| KEY_TAG | int(5) | No | | The key tag field of a DNS DS record as specified by RFC 4034 |
| ALGORITHM | int(3) | No | | The algorithm field of a DNS DS record as described by RFC 4034 |
| DIGEST | varchar(2048) | Yes | <NULL> | The digest field of a DNS DS record as specified by RFC 4034 |
| DIGEST_TYPE | int(3) | No | | The digest type field of a DNS DS record as specified by RFC 4034 |

3.9. Table: RDAP_ENTITY

Comment: Represents the information of organizations, corporations, governments, non-profits, clubs, individual persons and informal groups of people.

Keys:

| Name | Type | Extras | Comment |
|--------------------|-----------|--------|---------|
| Primary Key | ENTITY_ID | unique | |
| IDX_ENTITY_FN | FN | | |
| UK_ENTITY_HANDLE | HANDLE | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|------------------|--------------|------|------------------|---|
| ENTITY_ID | int(10) | No | <auto_increment> | Primary key |
| HANDLE | varchar(100) | Yes | <NULL> | Registry-unique identifiers of a referenced object. Should be |

| | | | | |
|-------------------|---------------|-----|--------|---|
| | | | | ASCII and '-'/'_'. http://tools.ietf.org/html/rfc6350#section-6.1.4 |
| KIND | varchar(255) | Yes | <NULL> | |
| FN | varchar(255) | Yes | <NULL> | Entity name |
| EMAIL | varchar(255) | Yes | <NULL> | Email |
| TITLE | varchar(255) | Yes | <NULL> | http://tools.ietf.org/html/rfc6350#section-6.6.1 |
| ORG | varchar(255) | Yes | <NULL> | Org |
| URL | varchar(4096) | Yes | <NULL> | http://tools.ietf.org/html/rfc6350#section-6.7.8 |
| PORT43 | varchar(4096) | Yes | <NULL> | Port 43 WHOIS Server |
| LANG | varchar(64) | Yes | <NULL> | Language Identifier. For example: "en" |
| CUSTOM_PROPERTIES | mediumtext | Yes | | Custom properties key-value, JSON format. For example: {"customKey1":"value1","customKey2":"value2" } |

3.10.Table: RDAP_ENTITY_STATUS

Comment: status of entity.

Keys:

| Name | Type | Extras | Comment |
|----------------------|------------------|--------|---------|
| Primary Key | ENTITY_STATUS_ID | unique | |
| IDX_STATUS_ENTITY_ID | ENTITY_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|-------------------------|-------------|------|------------------|---------------------------------|
| ENTITY_STATUS_ID | int(10) | No | <auto_increment> | Primary key |
| ENTITY_ID | int(10) | No | | Table RDAP_ENTITY's primary key |
| STATUS | varchar(20) | No | | Entity Status. |

3.11.Table: RDAP_ERRORMESSAGE

Comment:Error message. Reference to <http://tools.ietf.org/html/rfc7483#section-6>

Keys:

| Name | Type | Extras | Comment |
|--------------------|------------|--------|---------|
| Primary Key | ERROR_ID | unique | |
| UK_ERROR_CODE | ERROR_CODE | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|-----------------|---------------|------|------------------|--|
| ERROR_ID | int(10) | No | <auto_increment> | Primary key |
| ERROR_CODE | int(10) | No | | Error code |
| TITLE | varchar(100) | Yes | <NULL> | Error description's title |
| DESCRIPTION | varchar(1024) | No | | Error Description |
| LANG | varchar(64) | Yes | <NULL> | Language Identifier. For example: "en" |

3.12.Table: RDAP_EVENT

Comment: Events that have occurred on an instance of an object class, reference to <http://tools.ietf.org/html/rfc7483#section-4.5>

Keys:

| Name | Type | Extras | Comment |
|--------------------|-------------|--------|---------|
| Primary Key | EVENT_ID | unique | |
| IDX_EVENT_ACTOR | EVENT_ACTOR | | |

Fields:

| Name | Type | NULL | Default | Comment |
|-----------------|--------------|------|------------------|---|
| EVENT_ID | int(10) | No | <auto_increment> | Primary key |
| EVENT_ACTION | varchar(255) | Yes | <NULL> | A string denoting the reason for the event |
| EVENT_ACTOR | varchar(255) | Yes | <NULL> | Denoting the actor responsible for the event |
| EVENT_DATE | datetime | Yes | <NULL> | Event UTC date time. Format example: 2015-01-01T01:01:01Z |

3.13.Table: RDAP_IDENTITY_ACL

Comment: define Access Control Entry.

Keys:

| Name | Type | Extras | Comment |
|--------------------|------|--------|---------|
| Primary Key | ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|-------------|-------------|------|------------------|--|
| ID | int(10) | No | <auto_increment> | Primary key |
| OBJECT_TYPE | varchar(64) | No | | object type: domain,nameServer,entity,autnum, ip, event,link,publicId,help, remark, notice, variant,secureDns, dsData, keyData |
| OBJECT_ID | int(10) | No | | Object id |
| ROLE_ID | int(10) | No | | Role id |

3.14.Table: RDAP_IDENTITY_ROLE

Comment: role of users.

Keys:

| Name | Type | Extras | Comment |
|--------------------|-----------|--------|---------|
| Primary Key | ROLE_ID | unique | |
| ROLE_NAME | ROLE_NAME | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|----------------|--------------|------|---------|-------------|
| ROLE_ID | int(10) | No | | Primary key |
| ROLE_NAME | varchar(255) | No | | Role name |

3.15.Table: RDAP_IDENTITY_USER

Comment: User information.

Keys:

| Name | Type | Extras | Comment |
|--------------------|-----------|--------|---------|
| Primary Key | USER_ID | unique | |
| USER_NAME | USER_NAME | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|----------------|--------------|------|---------|-------------|
| USER_ID | int(10) | No | | Primary key |
| USER_NAME | varchar(255) | No | | User name |

| | | | | |
|----------|-------------|----|--|---------------|
| USER_PWD | varchar(32) | No | | User password |
|----------|-------------|----|--|---------------|

3.16.Table: RDAP_IDENTITY_USER_REL_ROLE

Comment: define relation between User and Role.

Keys:

| Name | Type | Extras | Comment |
|--------------------|---------|--------|---------|
| Primary Key | ID | unique | |
| USER_ID | USER_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|-----------|---------|------|------------------|-------------|
| ID | int(10) | No | <auto_increment> | Primary key |
| USER_ID | int(10) | No | | User id |
| ROLE_ID | int(10) | No | | Role id |

3.17.Table: RDAP_IP

Comment: IP network registrations for RIRs. Reference to <http://tools.ietf.org/html/rfc7483#section-5.4>

Keys:

| Name | Type | Extras | Comment |
|--------------------|--------|--------|---------|
| Primary Key | IP_ID | unique | |
| UK_IP_HANDLE | HANDLE | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|--------------|---------------|------|------------------|--|
| IP_ID | int(10) | No | <auto_increment> | Primary Key |
| HANDLE | varchar(100) | No | | Registry-unique identifiers of a referenced object. Should be ASCII and '-'/'_'. |
| ENDADDRESS | varbinary(16) | No | | The ending number in the block of network |
| STARTADDRESS | varbinary(16) | No | | The starting number in the block of network |
| VERSION | varchar(2) | No | | not null, value: v4/v6 |
| NAME | varchar(2) | Yes | <NULL> | An identifier assigned to the |

| | | | | |
|-------------------|---------------|-----|--------|---|
| | 55) | | | network registration by the registration holder |
| TYPE | varchar(255) | Yes | <NULL> | A string containing an RIR-specific classification of the network |
| COUNTRY | varchar(255) | Yes | <NULL> | A string containing the two-character country code of the network |
| PARENT_HANDLE | varchar(255) | Yes | <NULL> | Parent network of this network registration |
| LANG | varchar(64) | Yes | <NULL> | Language Identifier. For example: "en" |
| PORT43 | varchar(4096) | Yes | <NULL> | Port 43 WHOIS Server |
| CIDR | varchar(255) | Yes | <NULL> | Formatted network used to generate self link for query. http://tools.ietf.org/html/rfc4632 . For example: 92.168.99.0/24 |
| CUSTOM_PROPERTIES | mediumtext | Yes | | Custom properties key-value, JSON format. For example: {"customKey1":"value1","customKey2":"value2" } |

3.18.Table: RDAP_IP_REDIRECT

Comment: IP redirect table.

Keys:

| Name | Type | Extras | Comment |
|--------------------|---------------------|--------|---------|
| Primary Key | RDAP_IP_REDIRECT_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|----------------------------|------------------|------|------------------|---|
| RDAP_IP_REDIRECT_ID | int(11) unsigned | No | <auto_increment> | Primary key |
| ENDADDRESS | varbinary(16) | No | | The ending number in the block of network |
| STARTADDRESS | varbinary(16) | No | | The starting number in the block of network |
| REDIRECT_URL | varchar(4096) | No | | Url for redirect http://tools.ietf.org/html/rfc635 |

| | | | | |
|---------|-------------|----|--|---------------------------------|
| | | | | 0#section-6.7.8 |
| VERSION | varchar(20) | No | | Ip version: v4 v6 |

3.19.Table: RDAP_IP_STATUS

Comment: status of IP Network object.

Keys:

| Name | Type | Extras | Comment |
|---------------------|--------------|--------|---------|
| Primary Key | IP_STATUS_ID | unique | |
| IDX_IP_STATUS_IP_ID | IP_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|---------------------|-------------|------|------------------|-----------------------------|
| IP_STATUS_ID | int(10) | No | <auto_increment> | Primary key |
| IP_ID | int(10) | No | | Table RDAP_IP's primary key |
| STATUS | varchar(20) | No | | Ip Status |

3.20.Table: RDAP_KEYDATA

Comment: Key data for domain DNSSEC.

Keys:

| Name | Type | Extras | Comment |
|--------------------|------------|--------|---------|
| Primary Key | KEYDATA_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|-------------------|---------------|------|------------------|--|
| KEYDATA_ID | int(10) | No | <auto_increment> | Primary key |
| FLAGS | int(3) | No | | The flags field value in the DNSKEY record as specified by RFC 4034 |
| PROTOCOL | int(1) | No | | The protocol field value of the DNSKEY record as specified by RFC 4034 |
| PUBLIC_KEY | varchar(2048) | Yes | <NULL> | The public key in the DNSKEY record as specified by RFC 4034 |
| ALGORITHM | int(3) | No | | The algorithm field of a DNSKEY record as specified |

| | | | |
|--|--|--|-------------|
| | | | by RFC 4034 |
|--|--|--|-------------|

3.21.Table: RDAP_LINK

Comment: Signify links to other resources on the Internet. The relationship of these links is defined by the IANA registry described by [RFC5988]. Reference to <http://tools.ietf.org/html/rfc7483#section-4.2>.

Keys:

| Name | Type | Extras | Comment |
|--------------------|---------|--------|---------|
| Primary Key | LINK_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|----------------|---------------|------|------------------|---|
| LINK_ID | int(10) | No | <auto_increment> | Primary key |
| VALUE | varchar(2048) | Yes | <NULL> | For example: "http://example.com/context_uri" |
| REL | varchar(255) | Yes | <NULL> | For example: "self" |
| HREF | varchar(2048) | Yes | <NULL> | For example: "http://example.com/target_uri" |
| MEDIA | varchar(255) | Yes | <NULL> | For example: "screen" |
| TYPE | varchar(255) | Yes | <NULL> | For example: "application/json" |
| TITLE | varchar(255) | Yes | <NULL> | http://tools.ietf.org/html/rfc5988#section-5 |

3.22.Table: RDAP_LINK_HREFLANG

Comment: href of link.

Keys:

| Name | Type | Extras | Comment |
|---------------------------|-------------|--------|---------|
| Primary Key | HREFLANG_ID | unique | |
| IDX_LINK_HREFLANG_LINK_ID | LINK_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|--------------------|-------------|------|------------------|--------------------------|
| HREFLANG_ID | int(10) | No | <auto_increment> | Primary key |
| LINK_ID | int(10) | No | | Link id |
| HREFLANG | varchar(64) | Yes | <NULL> | Language Identifier. For |

| | | | |
|--|--|--|---------------|
| | | | example: "en" |
|--|--|--|---------------|

3.23.Table: RDAP_NAMESERVER

Comment: Represents information regarding DNS name servers used in both forward and reverse DNS. Reference to <http://tools.ietf.org/html/rfc7483#section-5.2>

Keys:

| Name | Type | Extras | Comment |
|-----------------------------|---------------|--------|---------|
| Primary Key | NAMESERVER_ID | unique | |
| IDX_NAMESERVER_LDH_NAME | LDH_NAME | | |
| IDX_NAMESERVER_UNICODE_NAME | UNICODE_NAME | | |
| UK_NAMESERVER_HANDLE | HANDLE | unique | |

Fields:

| Name | Type | NU LL | Default | Comment |
|----------------------|---------------|----------|------------------|---|
| NAMESERVER_ID | int(10) | No | <auto_increment> | Primary key |
| HANDLE | varchar(100) | Yes | <NULL> | Registry-unique identifiers of a referenced object. Should be ASCII and '-'/'_'. |
| LDH_NAME | varchar(255) | No | | Puny name of nameserver. Can't contain last '.' of domain. Must be lowercased. |
| UNICODE_NAME | varchar(1024) | Yes | <NULL> | This field is identical with ldhName if it is an ASCII nameserver |
| PORT43 | varchar(4096) | Yes | <NULL> | Port 43 WHOIS Server |
| LANG | varchar(64) | Yes | <NULL> | Language Identifier. For example: "en" |
| CUSTOM_PROPERTIES | mediumtext | Yes | | Custom properties key-value, JSON format. For example: {"customKey1":"value1","customKey2":"value2" } |

3.24.Table: RDAP_NAMESERVER_IP

Comment: IP of a nameserver.

Keys:

| Name | Type | Extras | Comment |
|---------------------------------|------------------|--------|---------|
| Primary Key | NAMESERVER_IP_ID | unique | |
| IDX_NAMESERVER_IP_NAMESERVER_ID | NAMESERVER_ID | | |

Fields:

| Name | Type | NUL L | Default | Comment |
|-------------------------|---------------|----------|------------------|-------------------------------------|
| NAMESERVER_IP_ID | int(10) | No | <auto_increment> | Primary key |
| NAMESERVER_ID | int(10) | No | | Table RDAP_NAMESERVER's primary key |
| IP | varbinary(16) | No | | The number of network |
| VERSION | varchar(2) | No | | Ip version: v4 v6 |

3.25.Table: RDAP_NAMESERVER_STATUS

Comment: nameserver status.

Keys:

| Name | Type | Extras | Comment |
|-------------------------------------|----------------------|--------|---------|
| Primary Key | NAMESERVER_STATUS_ID | unique | |
| IDX_NAMESERVER_STATUS_NAMESERVER_ID | NAMESERVER_ID | | |

Fields:

| Name | Type | NUL L | Default | Comment |
|-----------------------------|-------------|----------|------------------|-------------------------------------|
| NAMESERVER_STATUS_ID | int(10) | No | <auto_increment> | Primary key |
| NAMESERVER_ID | int(10) | No | | Table RDAP_NAMESERVER's primary key |
| STATUS | varchar(20) | No | | Nameserver Status |

3.26.Table: RDAP_NOTICE

Comment: table for the "notices", "help" and "remarks", reference to <http://tools.ietf.org/html/rfc7483#section-10.2.1>

Keys:

| Name | Type | Extras | Comment |
|--------------------|-----------|--------|---------|
| Primary Key | NOTICE_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|------------------------|--------------|------|------------------|--|
| NOTICE_ID | int(10) | No | <auto_increment> | Primary key |
| TYPE | varchar(6) | No | | Notice type: notice remark help |
| TITLE | varchar(255) | Yes | <NULL> | Title |
| REASON_TYPE | varchar(100) | Yes | <NULL> | Reason type |
| REASON_TYPE_SHORT_NAME | varchar(50) | Yes | <NULL> | Reason type short name |

3.27.Table: RDAP_NOTICE_DESCRIPTION

Comment: Description for notice.

Keys:

| Name | Type | Extras | Comment |
|----------------------------------|----------------|--------|---------|
| Primary Key | NOTICE_DESC_ID | unique | |
| IDX_NOTICE_DESCRIPTION_NOTICE_ID | NOTICE_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|-----------------------|---------------|------|------------------|---------------------------------|
| NOTICE_DESC_ID | int(10) | No | <auto_increment> | Primary key |
| NOTICE_ID | int(10) | No | | Table RDAP_NOTICE's primary key |
| DESCRIPTION | varchar(2048) | No | | Notice Description |

3.28.Table: RDAP_POLICY

Comment: entries in this table will not be shown in query response.

Keys:

| Name | Type | Extras | Comment |
|--------------------|------|--------|---------|
| Primary Key | Id | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|-------------|--------------|------|------------------|--|
| Id | int(11) | No | <auto_increment> | Primary key |
| OBJECT_TYPE | varchar(255) | No | | Object type: domain,nameServer,entity,autnum,ip, event,link,publicId,help,remark, notice, variant,secureDns,dsData, keyData |
| HIDE_COLUMN | varchar(255) | No | | Hide column name |

3.29.Table: RDAP_PUBLICID

Comment: The publicid maps a public identifier to a registration object, reference to <http://tools.ietf.org/html/rfc7483#section-4.8>

Keys:

| Name | Type | Extras | Comment |
|--------------------|-----------|--------|---------|
| Primary Key | PUBLIC_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|------------------|--------------|------|------------------|---|
| PUBLIC_ID | int(10) | No | <auto_increment> | Primary key |
| IDENTIFIER | varchar(255) | Yes | <NULL> | A public identifier |
| TYPE | varchar(255) | Yes | <NULL> | A string denoting the type of public identifier |

3.30.Table: RDAP_SECUREDNS

Comment: secure DNS information about domains.

Keys:

| Name | Type | Extras | Comment |
|-------------------------|--------------|--------|---------|
| Primary Key | SECUREDNS_ID | unique | |
| IDX_SECUREDNS_DOMAIN_ID | DOMAIN_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|---------------------|------------|------|------------------|---|
| SECUREDNS_ID | int(10) | No | <auto_increment> | Primary key |
| ZONE_SIGNED | tinyint(1) | Yes | <NULL> | 1: if the zone has been signed 0:otherwise. |
| DELEGATION_SIGNED | tinyint(1) | No | | 1: if there are DS records in the parent 0:otherwise. |
| MAX_SIGLIFE | int(11) | Yes | <NULL> | The signature life time in seconds to be used when creating the RRSIG DS record |
| DOMAIN_ID | int(10) | No | | Domain id |

3.31.Table: RDAP_VARIANT

Comment: table for domain's Internationalized Domain Names (IDNs), reference to <http://tools.ietf.org/html/rfc7483#section-10.2.5>

Keys:

| Name | Type | Extras | Comment |
|--------------------|------------|--------|---------|
| Primary Key | VARIANT_ID | unique | |

Fields:

| Name | Type | NULL | Default | Comment |
|-------------------|---------------|------|------------------|---|
| VARIANT_ID | int(10) | No | <auto_increment> | Primary key |
| LDH_NAME | varchar(255) | No | | Variant's ldhName.Can't contain last '.' of domain. Must be lowercased. |
| UNICODE_NAME | varchar(1024) | No | | Variant's unicodeName |
| IDNTABLE | varchar(255) | Yes | <NULL> | The name of the IDN table of codepoints |

3.32.Table: RDAP_VCARD_ADR

Comment: Entity address.

Keys:

| Name | Type | Extras | Comment |
|--------------------|-----------|--------|---------|
| Primary Key | ADR_ID | unique | |
| IDX_ADR_ENTITY_ID | ENTITY_ID | | |

Fields:

| Name | Type | NUL L | Default | Comment |
|---------------|--------------|----------|------------------|--|
| ADR_ID | int(10) | No | <auto_increment> | Primary key |
| POST_BOX | varchar(255) | Yes | <NULL> | Postbox |
| EXT_ADR | varchar(255) | Yes | <NULL> | The extended address |
| STREET | varchar(255) | Yes | <NULL> | Street address |
| CITY | varchar(255) | Yes | <NULL> | City |
| SP | varchar(255) | Yes | <NULL> | The region. For example:state or province |
| POSTAL_CODE | varchar(255) | Yes | <NULL> | Postal code |
| COUNTRY | varchar(255) | Yes | <NULL> | A string containing the name of the 2 character country code |
| ENTITY_ID | int(10) | No | | Entity id |
| TYPE | varchar(255) | Yes | <NULL> | http://tools.ietf.org/html/rfc6350#section-5.6 |
| PREF | int(3) | Yes | <NULL> | Preference. http://tools.ietf.org/html/rfc6350#section-5.3 |

3.33.Table: RDAP_VCARD_TEL

Comment: Entity telephone.

Keys:

| Name | Type | Extras | Comment |
|--------------------|-----------|--------|---------|
| Primary Key | TEL_ID | unique | |
| IDX_TEL_ENTITY_ID | ENTITY_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|---------------|--------------|------|------------------|--|
| TEL_ID | int(10) | No | <auto_increment> | Primary key |
| TYPE | varchar(255) | Yes | <NULL> | Type |
| GLOBAL_NUMBER | varchar(255) | Yes | <NULL> | Global number |
| EXT_NUMBER | varchar(255) | Yes | <NULL> | The extended number |
| ENTITY_ID | int(10) | No | | Entity id |
| PREF | int(3) | Yes | <NULL> | Preference. http://tools.ietf.org/html/rfc6350#section-5.3 |

3.34.Table: REL_DOMAIN_NAMESERVER

Comment: define relationship between domain and its nameserver.

Keys:

| Name | Type | Extras | Comment |
|---|------------------|--------|---------|
| Primary Key | REL_DOMAIN_NS_ID | unique | |
| IDX_REL_DOMAIN_NAMESERVER_DOMAIN_ID | DOMAIN_ID | | |
| IDX_REL_DOMAIN_NAMESERVER_NAMESERVER_ID | NAMESERVER_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|-------------------------|------------------------|------|------------------|---------------|
| REL_DOMAIN_NS_ID | bigint(12) unsigned | No | <auto_increment> | Primary key |
| DOMAIN_ID | int(10) | No | | Domain id |
| NAMESERVER_ID | int(10) | No | | Nameserver id |

3.35.Table: REL_DOMAIN_VARIANT

Comment: define relationship between domain and its variants.

Keys:

| Name | Type | Extras | Comment |
|-----------------------------------|----------------|--------|---------|
| Primary Key | REL_VARIANT_ID | unique | |
| IDX_REL_DOMAIN_VARIANT_DOMAIN_ID | DOMAIN_ID | | |
| IDX_REL_DOMAIN_VARIANT_VARIANT_ID | VARIANT_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|-----------------------|--------------|------|------------------|--------------|
| REL_VARIANT_ID | int(10) | No | <auto_increment> | Primary key |
| DOMAIN_ID | int(10) | No | | Domain id |
| VARIANT_TYPE | varchar(255) | Yes | <NULL> | Variant type |
| VARIANT_ID | int(10) | No | | Variant id |

3.36.Table: REL_ENTITY_REGISTRATION

Comment: define relationship between an entity and the registration object (entity, domain, IP network, autnum and nameserver)

Keys:

| Name | Type | Extras | Comment |
|--------------------------|-------------------------|--------|---------|
| Primary Key | REL_ENTITY_ID | unique | |
| IDX_REL_ENTITY_ENTITY_ID | ENTITY_ID | | |
| IDX_REL_ENTITY_REL_ID | REL_ID, REL_OBJECT_TYPE | | |

Fields:

| Name | Type | NULL | Default | Comment |
|----------------------|--------------|------|------------------|--|
| REL_ENTITY_ID | int(10) | No | <auto_increment> | Primary key |
| REL_ID | int(10) | No | | Relationship id |
| REL_OBJECT_TYPE | varchar(16) | No | | Relation object type: domain,nameServer,entity,autnum,ip |
| ENTITY_ID | int(10) | No | | Entity id |
| ENTITY_ROLE | varchar(255) | Yes | <NULL> | Entity role |

3.37.Table: REL_EVENT_REGISTRATION

Comment: define relationship between Event and the registration object (entity, domain, IP network, autnum and nameserver)

Keys:

| Name | Type | Extras | Comment |
|------------------------|-------------------------|--------|---------|
| Primary Key | REL_EVENT_ID | unique | |
| IDX_REL_EVENT_EVENT_ID | EVENT_ID | | |
| IDX_REL_EVENT_REL_ID | REL_ID, REL_OBJECT_TYPE | | |

Fields:

| Name | Type | NUL L | Default | Comment |
|---------------------|-------------|----------|------------------|---|
| REL_EVENT_ID | int(10) | No | <auto_increment> | Primary key |
| REL_ID | int(10) | No | | Relationship id |
| REL_OBJECT_TYPE | varchar(16) | Yes | <NULL> | Relation object type domain,nameServer,entity,autnum, ip event,remark/notice,help,dsData, keyData |
| EVENT_ID | int(10) | No | | Event id |

3.38.Table: REL_LINK_OBJECT

Comment: define relationship between Link and registration object (entity, domain, IP network, autnum, nameserver, remark, notice .etc)

Keys:

| Name | Type | Extras | Comment |
|----------------------|-------------------------|--------|---------|
| Primary Key | REL_LINK_ID | unique | |
| IDX_REL_LINK_LINK_ID | LINK_ID | | |
| IDX_REL_LINK_REL_ID | REL_ID, REL_OBJECT_TYPE | | |

Fields:

| Name | Type | NUL L | Default | Comment |
|--------------------|-------------|----------|------------------|---|
| REL_LINK_ID | int(10) | No | <auto_increment> | Primary key |
| REL_ID | int(10) | No | | Relationship id |
| REL_OBJECT_TYPE | varchar(16) | No | | Relation object type: domain,nameServer,entity,autnum, ip |

| | | | | |
|---------|---------|----|--|---|
| | | | | event,remark/notice,help,dsData,keyData |
| LINK_ID | int(10) | No | | Link id |

3.39.Table: REL_NOTICE_REGISTRATION

Comment: define relationship between remark and registration object (entity, domain, IP network, autnum and nameserver)

Keys:

| Name | Type | Extras | Comment |
|--------------------------|-------------------------|--------|---------|
| Primary Key | REL_NOTICE_ID | unique | |
| IDX_REL_NOTICE_NOTICE_ID | NOTICE_ID | | |
| IDX_REL_NOTICE_REL_ID | REL_ID, REL_OBJECT_TYPE | | |

Fields:

| Name | Type | NULL | Default | Comment |
|----------------------|-------------|------|------------------|--|
| REL_NOTICE_ID | int(10) | No | <auto_increment> | Primary key |
| REL_ID | int(10) | No | | Relationship id |
| REL_OBJECT_TYPE | varchar(16) | No | | object type domain, autnum, nameServer, ip, entity |
| NOTICE_ID | int(10) | No | | Notice id |

3.40.Table: REL_PUBLICID_REGISTRATION

Comment: define relationship between PublicID and some registration

object (entity, domain, IP network, autnum and nameserver)

Keys:

| Name | Type | Extras | Comment |
|----------------------------|----------------------------|--------|---------|
| Primary Key | REL_PUBLICID_ID | unique | |
| IDX_REL_PUBLICID_PUBLIC_ID | PUBLIC_ID | | |
| IDX_REL_PUBLICID_REL_ID | REL_ID, REL_OBJECT_TYPE | | |

Fields:

| Name | Type | NULL | Default | Comment |
|------------------------|-------------|------|------------------|-----------------------|
| REL_PUBLICID_ID | int(10) | No | <auto_increment> | Primary key |
| REL_ID | int(10) | No | | Relationship id |
| REL_OBJECT_TYPE | varchar(16) | No | | Relation object type: |

| | | | | |
|-----------|---------|----|--|---|
| | | | | domain, entity |
| PUBLIC_ID | int(10) | No | | Table RDAP_PUBLICID's primary key |

3.41.Table: REL_SECUREDNS_DSKEY

Comment: define relationship between securedns and dsdata or keydata.

Keys:

| Name | Type | Extras | Comment |
|--------------------------------|---------------------------|--------|---------|
| Primary Key | REL_SECUREDNS_ID | unique | |
| IDX_REL_SECUREDNS_REL_ID | REL_ID, REL_DSKEY_TYPE | | |
| IDX_REL_SECUREDNS_SECUREDNS_ID | SECUREDNS_ID | | |

Fields:

| Name | Type | NULL | Default | Comment |
|-------------------------|-------------|------|------------------|---|
| REL_SECUREDNS_ID | int(10) | No | <auto_increment> | Primary key |
| SECUREDNS_ID | int(10) | No | | secureDns id |
| REL_DSKEY_TYPE | varchar(16) | Yes | <NULL> | Relation dskey type: keyData dsData |
| REL_ID | int(10) | No | | Relationship id |