

**Oracle® Adaptive Access Manager**

Reference Guide

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# Preface

The *Oracle Adaptive Access Manager Reference Guide* provides information on base models, device identification, KBA Base Security Solution Models, IP location data import, database schema; and fraud definitions.

This Preface covers the following topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Related Documents](#)
- [Conventions](#)

## Audience

This guide is intended for:

- **Fraud Analysts**—The fraud analyst identifies potential and existing fraudulent activities that could occur against the organization's online applications and defines the parameters for each potential fraudulent activity.
- **Rule Designers**—The rules designer groups fraud scenarios into logical models and maps potential fraudulent activity into an implementation design to be used by the rules engineer.
- **Rules Engineers**—The rules engineer configures the fraud management tool to protect against the potential fraudulent activity, monitors the fraud tool to identify fraudulent attempts and opportunities for optimization, and reports fraudulent attempts.

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## Related Documents

For more information, see the following documents in the Oracle Adaptive Access Manager 10.1.4.5 documentation set:

- *Oracle Adaptive Access Manager Release Notes*
- *Oracle Adaptive Access Manager Administrator's Guide*
- *Oracle Adaptive Access Manager Developer's Guide*
- *Oracle Adaptive Access Manager Concepts*
- *Oracle Adaptive Access Manager Installation and Configuration Guide*

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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# Base Security Models

This chapter describes the base security models contained in the Oracle Adaptive Access Manager package. These models contain both business and security rules necessary for basic operation. Additional models are available as needed for advanced security.

With additional effort and time, the base models can be extended to support deployment specific requirements. These would include additional data types, transaction runtimes and rules.

## 1.1 Base Security Models

Security models contain the security rules which can be universally enforced across all users or to a specific list of user groups. The security rules involve decisions based on risk evaluation of the time, user, device, and location information.

The security rules are based on known risk conditions and potentially risky behavior and are categorized into the following Models:

- Fraud - Cant Challenge
- Fraud - Challenge
- Risky IP nested model
- System - Post Blocking
- System - Pre Blocking
- System - Questions Check
- System Challenge Question
- System Forgot Password

### Assumptions

A registered user is a user who has an image, a phrase, and challenge questions on file. Users will be answering challenge questions using the QuestionPad.

The base models and rules described below assume that groups are pre-populated with data (i.e. IP Intelligence data, list of device IDs, etc.) in the Oracle Adaptive Access Manager Engine. Some of this data is not provided with Oracle Adaptive Access Manager and must be acquired through third party providers.

Not all deployments will have a need for all of these base rules. Rules can easily be deleted if desired.

### 1.1.1 Fraud - Cant Challenge

This Post-Authentication model is applied to users with no challenge questions active. For most rules only alerts are generated.

Rule	Description	Conditions	Action Group	Alert Group
Device 1st time for user	This rule will trigger if this device has not been successfully used by this user before.	Device: Device first time for user. If this device is used for the first time by this user <ul style="list-style-type: none"> <li>Is: true</li> </ul>	None	User 1st time on device
Device multiple users	If multiple users are using the same device within a short time frame this rule will trigger.	Device: Login count. Check unique user count using this device in past x seconds <ul style="list-style-type: none"> <li>Seconds elapsed: 300</li> <li>The maximum number of users allowed: 3</li> </ul>	None	Device Multiple Users
From anonymizer	If a login comes from an anonymizer this rule will trigger.	Location: IP routing type. Routing type for the IP. It could be fixed/static, anonymizer, AOL, POP, Super POP, Satellite, Cache Proxy, International Proxy, Regional Proxy, Mobile Gateway or Unknown <ul style="list-style-type: none"> <li>Is: true</li> <li>Routing type: Anonymizer</li> </ul>	Block	Anonymizer IP
IP with max users	If there are more than the max users from an IP this rule will trigger. This rule will not trigger for users from AOL.	LOCATION: IP in group. If the IP is in the IP group <ul style="list-style-type: none"> <li>If the IP is in the IP group: true</li> <li>IP list:</li> </ul> LOCATION: IP is AOL. Check to see if the IP is from AOL Proxy <ul style="list-style-type: none"> <li>Is Aol: false</li> </ul> Location: IP Max Users. Maximum number of users using the current ip address within the given time duration <ul style="list-style-type: none"> <li>Seconds elapsed: 300</li> <li>The maximum number of users: 3</li> </ul>	None	IP Multiple Users

Rule	Description	Conditions	Action Group	Alert Group
Max devices for user	If a user uses multiple devices within the specified time the rule will trigger.	User: Devices. Number of devices tried in given time <ul style="list-style-type: none"> <li>Max number of devices: 1</li> <li>within duration (seconds): 28800</li> </ul>	None	max devices for users
Monitor countries	If a login is from one of the monitor countries this rule will trigger.	Location: In Country group. If the IP is in the given country group <ul style="list-style-type: none"> <li>Country in country group: Monitor Countries</li> <li>Is in list: true</li> </ul>	None	Monitored Country
Risky connection type	This rule triggers if the connection type was previously deemed high risk.	Location: IP Routing Type in group. Check to see if the IP Routing Type is in the group <ul style="list-style-type: none"> <li>Is in list: true</li> <li>Routing type in group: high risk routing type</li> </ul>	Block	Risky Connections
Unsuccessful from device	If there are more than the max unsuccessful attempts within the set time from a device this rule will trigger.	Device: Timed not status. Maximum login attempts for all but the given status within the given time period <ul style="list-style-type: none"> <li>Authentication status is not: Success</li> <li>within duration (seconds): 3600</li> <li>for more than: 4</li> </ul>	None	Device: Many Failures
User not from city	This rule will trigger if the city they are trying to access from has not been used by them in the time specified.	User: Location Used Timed. If user used this location within the given time period <ul style="list-style-type: none"> <li>Is: false</li> <li>Min Records Needed for the Check: 1</li> <li>Time: Months</li> <li>Used Location (Attribute): city</li> <li>within: 2</li> </ul>	None	User not from city

Rule	Description	Conditions	Action Group	Alert Group
User not from state	If multiple users are using the same device within a short time frame this rule will trigger.	User: Location Used Timed. If user used this location within the given time period <ul style="list-style-type: none"> <li>■ Is: false</li> <li>■ Min Records Needed for the Check: 1</li> <li>■ Time: Months</li> <li>■ Used Location (Attribute): state</li> <li>■ within: 2</li> </ul>	None	User not from state

## 1.1.2 Fraud Challenge

These rules are run for users who have opted for challenge question using TextPad.

Rule	Description	Conditions	Action Group	Alert Group
Device 1st time for user	This rule will trigger if this device has not been successfully used by this user before.	Device: Device first time for user. If this device is used for the first time by this user <ul style="list-style-type: none"> <li>■ Is: true</li> </ul>	ChallengeQuesti onPad	User 1st time on device
Device IP surge	If a device has not used an IP recently and a sudden surge of traffic occurs this rule will trigger.	Device: Device in group. Check to see if this device is in group <ul style="list-style-type: none"> <li>■ Is in group: true</li> <li>■ Device in group:</li> </ul> Device: Excessive use. Device is excessively used but not used before <ul style="list-style-type: none"> <li>■ Number of users: 2</li> <li>■ within (hours): 24</li> <li>■ and not used in (days): 30</li> </ul>	ChallengeQuesti onPad	Device_IP surge
Device max velocity	This rule will trigger if a device has had a login a further away than possible at jet speed.	Device: Velocity from last login. Triggers when miles per hour is more than specified value <ul style="list-style-type: none"> <li>■ Last login within (Seconds): 72000</li> <li>■ Miles per Hour is more than: 600</li> </ul>	ChallengeQuesti onPad	Device max velocity
Device multiple users	If multiple users are using the same device within a short time frame this rule will trigger.	Device: Login count. Check unique user count using this device in past x seconds <ul style="list-style-type: none"> <li>■ Seconds elapsed: 3600</li> <li>■ The maximum number of users allowed: 3</li> </ul>	ChallengeQuesti onPad	Device Multiple Users



Rule	Description	Conditions	Action Group	Alert Group
From anonymizer	If a login comes from an anonymizer this rule will trigger.	Location: IP routing type. Routing type for the IP. It could be fixed/static, anonymizer, AOL, POP, Super POP, Satellite, Cache Proxy, International Proxy, Regional Proxy, Mobile Gateway or Unknown <ul style="list-style-type: none"> <li>▪ Is: true</li> <li>▪ Routing type: Anonymizer</li> </ul>	ChallengeQuesti onPad	Anonymizer IP
IP surge	If an IP has not been used lately but experiences a sudden surge in users this rule will trigger.	LOCATION: IP in group. If the IP is in the IP group <ul style="list-style-type: none"> <li>▪ Is in list: true</li> <li>▪ IP list</li> </ul> Location: IP Excessive use. IP is excessively used but not used before <ul style="list-style-type: none"> <li>▪ Number of users: 5</li> <li>▪ and not used in (days): 30</li> <li>▪ within (hours): 24</li> </ul>	ChallengeQuesti onPad	IP surge
IP with max users	If there are more than the max users from an IP this rule will trigger. This rule will not trigger for users from AOL.	LOCATION: IP in group. If the IP is in the IP group <ul style="list-style-type: none"> <li>▪ If the IP is in the IP group: true</li> <li>▪ IP list:</li> </ul> LOCATION: IP is AOL. Check to see if the IP is from AOL Proxy <ul style="list-style-type: none"> <li>▪ Is Aol: false</li> </ul> Location: IP Max Users. Maximum number of users using the current ip address within the given time duration <ul style="list-style-type: none"> <li>▪ Seconds elapsed: 300</li> <li>▪ The maximum number of users: 3</li> </ul>	ChallengeQuesti onPad	IP Multiple Users
Max devices for user	If a user uses multiple devices within the specified time the rule will trigger.	User: Devices. Number of devices tried in given time <ul style="list-style-type: none"> <li>▪ Max number of devices: 1</li> <li>▪ within duration (seconds): 28800</li> </ul>	ChallengeQuesti onPad	max devices for users

Rule	Description	Conditions	Action Group	Alert Group
Monitor countries	If a login is from one of the monitor countries this rule will trigger.	<p>Location: In Country group. If the IP is in the given country group</p> <ul style="list-style-type: none"> <li>Country in country group: Monitor Countries</li> <li>Is in list: true</li> </ul>	ChallengeQuesti onPad	Monitored Country
No challenge in 30 days	User has not been successfully challenged in the last 30 days.	<p>User: Challenge timed. Check to see if user answered challenge question successfully in last n days</p> <ul style="list-style-type: none"> <li>Is: false</li> <li>Within Minutes: 43200</li> </ul>	ChallengeQuesti onPad	30 day challenge
Risky IP?	This rule checks to see if an IP has enough users to warrant higher security. 5 or more users in the last week will trigger this rule.	<p>LOCATION: IP in group. If the IP is in the IP group</p> <ul style="list-style-type: none"> <li>If the IP is in the IP group: true</li> <li>IP list:</li> </ul> <p>LOCATION: IP is AOL. Check to see if the IP is from AOL Proxy</p> <ul style="list-style-type: none"> <li>Is Aol:</li> </ul> <p>Location: IP Max Users. Maximum number of users using the current ip address within the given time duration</p> <ul style="list-style-type: none"> <li>Seconds elapsed: 604800</li> <li>The maximum number of users: 5</li> </ul>	None	None
Risky connection type	This rule triggers if the connection type was previously deemed high risk.	<p>Location: IP Conn Type in group. Check to see if the IP Routing Type is in the group</p> <ul style="list-style-type: none"> <li>Is in list: true</li> <li>Routing type in group: high risk routing type</li> </ul>	ChallengeQuesti onPad	Risky Connections
Unsuccessful from device	If there are more than the max unsuccessful attempts within the set time from a device this rule will trigger.	<p>Device: Timed not status. Maximum login attempts for all but the given status within the given time period</p> <ul style="list-style-type: none"> <li>Authentication status is not: Success</li> <li>within duration (seconds): 3600</li> <li>for more than: 4</li> </ul>	ChallengeQuesti onPad	Device: Many Failures

Rule	Description	Conditions	Action Group	Alert Group
User blocked recently	If a user has been blocked more than the maximum allowed number of times in a row within the time specified this rule will trigger.	User: Action Timed. Maximum number of actions in the past x seconds <ul style="list-style-type: none"> <li>Action: Block</li> <li>in seconds: 28800</li> <li>more than: 2</li> </ul>	ChallengeQuesti onPad	User blocked recently
User not from city	This rule will trigger if the city they are trying to access from has not been used by them in the time specified.	User: Location Used Timed. If user used this location within the given time period <ul style="list-style-type: none"> <li>Is: false</li> <li>Min Records Needed for the Check: 1</li> <li>Time: Months</li> <li>Used Location (Attribute): city</li> <li>within: 2</li> </ul>	ChallengeQuesti onPad	User not from city
User not from state	If multiple users are using the same device within a short time frame this rule will trigger.	User: Location Used Timed. If user used this location within the given time period <ul style="list-style-type: none"> <li>Is: false</li> <li>Min Records Needed for the Check: 1</li> <li>Time: Months</li> <li>Used Location (Attribute): state</li> <li>within: 2</li> </ul>	ChallengeQuesti onPad	User not from state

### 1.1.3 Risky IP nested model

These rules will run for a user that has questions active and if they are coming from an IP with high traffic.

Rule	Description	Conditions	Action Group	Alert Group
Device w/ max users	If a device from a risky IP has more than the max number this rule will trigger.	Device: Login count. Check unique user count using this device in past x seconds <ul style="list-style-type: none"> <li>Seconds elapsed: 2592000</li> <li>The maximum number of users allowed: 3</li> </ul>	ChallengeQuesti onPad	Device Multiple Users

Rule	Description	Conditions	Action Group	Alert Group
device w/ max failures	If there are more than the max unsuccessful attempts within the set time from a device on a risky IP this rule will trigger.	Device: Timed not status. Maximum login attempts for all but the given status within the given time period <ul style="list-style-type: none"> <li>▪ Authentication status is not: Success</li> <li>▪ within duration (seconds): 2592000</li> <li>▪ for more than: 5</li> </ul>	ChallengeQuesti onPad	Device: Many Failures

### 1.1.4 System - Post Blocking

System fraud rules. Executed for all users.

Rule	Description	Conditions	Action Group	Alert Group
Max Failed Challenges	If a user fails more than the maximum number of allowed consecutive challenges this rule will be triggered. The failure counter looks across all user sessions so these consecutive failures may not have been in the same session.		Challenge Block	Max Failed Challenges
Max Questions Presented	This rule looks to see if a user has been presented with two or more questions without a successful answer.	User: Challenge Questions Failure Checks to see how many questions have failures <ul style="list-style-type: none"> <li>▪ Failures more than or equal to: 2</li> </ul>	Challenge Block	Max Questions Presented

### 1.1.5 System - Pre Blocking

This model stops fraudulent login attempts before the password is entered.

Rule	Description	Conditions	Action Group	Alert Group
Black listed IPs	This rule will trigger if an IP address has been black listed previously.	LOCATION: IP in group. If the IP is in the IP group. <ul style="list-style-type: none"> <li>▪ Is in list: true</li> <li>▪ IP list: Restricted IPs</li> </ul>	Block	Restricted IP
Black listed ISPs	This rule will trigger is a login is attempted from an ISP that was previously blacklisted.	Location: ISP in group. Check to see if the ISP for the current IP address is (or is not) in the ISP group. <ul style="list-style-type: none"> <li>▪ Is in list: true</li> <li>▪ ISP in ISP group: Restricted ISPs</li> </ul>	Block	Restricted ISP

Rule	Description	Conditions	Action Group	Alert Group
Black listed countries	This rule will trigger if a country has been blacklisted in the past.	Location: In Country group. If the IP is in the given country group <ul style="list-style-type: none"> <li>Country in country group: Restricted Countries</li> <li>Is in list: true</li> </ul>	Block	Restricted Country
Black listed devices	This rule will trigger if the device used has been black listed in the past.	Device: Device in group. Check to see if this device is in group <ul style="list-style-type: none"> <li>Is in group: true</li> <li>Device in group: restricted devices</li> </ul>	Block	Restricted device
Black listed users	This rule will trigger if a user has previously been black listed.	User: In Group. If the user is in the given group <ul style="list-style-type: none"> <li>Is in group: true</li> <li>User Group: restricted users</li> </ul>	Block	Restricted user
WEBZIP used	This rule will trigger if there is a login attempt using the WEBZIP browser. The WEBZIP browser is often utilized by fraudsters to record a website in preparation for a phishing exercise. For this reason it is too risky to allow the use of WEBZIP.	Device: Browser header substring. Checks whether the supplied string exists as a substring in the browsers header information <ul style="list-style-type: none"> <li>Substring to check for: WEBZIP</li> </ul>	Block	Restricted software

### 1.1.6 System - Questions Check

This model routes users based on whether they have challenge questions active or not. User who have active questions will go to the Fraud - Challenge model users without active questions will go to the Fraud - Alert Only model.

Rule	Description	Conditions	Action Group	Alert Group
Questions active?	This rule will trigger if a user has active challenge questions.	User: Question Status. Question status of the user <ul style="list-style-type: none"> <li>User Question Status: Set</li> <li>is: true</li> </ul>	None	None

### 1.1.7 System Challenge Question

System block rules for challenge runtime.

Rule	Description	Conditions	Action Group	Alert Group
Max failed challenges	Failed Max Consecutive Challenges.		Challenge Block	

### 1.1.8 System Forgot Password

This model contains rules which can block the logins

Rule	Description	Conditions	Action Group	Alert Group
Anonymizer used	If an anonymizing proxy is used this rule will trigger.	Location: IP routing type. Routing type for the IP. It could be fixed/static, anonymizer, AOL, POP, Super POP, Satellite, Cache Proxy, International Proxy, Regional Proxy, Mobile Gateway or Unknown <ul style="list-style-type: none"> <li>■ Is: true</li> <li>■ Routing type: Anonymizer</li> </ul>	ChallengeQuestionPad	Anonymizer IP
City first time for user	This rule will trigger the first time a user logs in from a new city.	User: City first time for user. Is the user using this City for the first time <ul style="list-style-type: none"> <li>■ Is: true</li> </ul>	ChallengeQuestionPad	User not from city
Device 1st time for user	This rule will trigger if this device has not been successfully used by this user before.	Device: Used count for User. Device used count <ul style="list-style-type: none"> <li>■ Authentication status: Success</li> <li>■ more than: 0</li> <li>■ Is: false</li> </ul>	ChallengeQuestionPad	New Device
Device IP surge	If a device has not used an IP recently and a sudden surge of traffic occurs this rule will trigger.	Device: Device in group. Check to see if this device is in group <ul style="list-style-type: none"> <li>■ Is in group: true</li> <li>■ Device in group: Device: Excessive use. Device is excessively used but not used before</li> <li>■ Number of users: 2</li> <li>■ within (hours): 24</li> <li>■ and not used in (days): 30</li> </ul>	ChallengeQuestionPad	Device_IP surge

Rule	Description	Conditions	Action Group	Alert Group
Device multiple users	If multiple users are using the same device within a short time frame this rule will trigger.	Device: Login count. Check unique user count using this device in past x seconds <ul style="list-style-type: none"> <li>Seconds elapsed: 600</li> <li>The maximum number of users allowed: 3</li> </ul>	ChallengeQuestionPad	Device Multiple Users
Failed Max Challenges				
IP Max users	Logins to different accounts have been attempted from the same IP address within a given time frame.	LOCATION: IP in group. If the IP is in the IP group <ul style="list-style-type: none"> <li>Is in list: true</li> <li>IP list:</li> </ul> LOCATION: IP is AOL. Check to see if the IP is from AOL Proxy <ul style="list-style-type: none"> <li>Is Aol: false</li> </ul> Location: IP Max Users. Maximum number of users using the current ip address within the given time duration <ul style="list-style-type: none"> <li>Seconds elapsed: 300</li> <li>The maximum number of users: 3</li> </ul>	ChallengeQuestionPad	IP Multiple Users
IP surge	If an IP has not been used lately but experiences a sudden surge in users this rule will trigger.	LOCATION: IP in group. If the IP is in the IP group <ul style="list-style-type: none"> <li>Is in list: true</li> <li>IP list</li> </ul> Location: IP Excessive use. IP is excessively used but not used before <ul style="list-style-type: none"> <li>Number of users: 5</li> <li>and not used in (days): 30</li> <li>within (hours): 24</li> </ul>	ChallengeQuestionPad	IP surge
Max password failures	This rule will trigger if there have been invalid passwords entered more than the amount allowed on a device.	Device: Used count for User. Device used count <ul style="list-style-type: none"> <li>Authentication status: wrong password</li> <li>More than: 5</li> <li>Is: true</li> </ul>	ChallengeQuestionPad	Device max failed PWS

Rule	Description	Conditions	Action Group	Alert Group
No questions active	If a user does not have any challenge questions active they will not be allowed to enter the forgot password flow.	User: Question Status. Question status of the user <ul style="list-style-type: none"> <li>User Question Status: Set</li> <li>Is: false</li> </ul>	Block	None
Restricted Countries	User logins from these countries are restricted.	Location: In Country group. If the IP is in the given country group <ul style="list-style-type: none"> <li>Country in country group: restricted countries</li> <li>Is in list: true</li> </ul>	Block	Restricted country
Restricted Devices	Logins from these devices are restricted	Device: Device in group. Check to see if this device is in group <ul style="list-style-type: none"> <li>Is in group: true</li> <li>Device in group: restricted device list</li> </ul>	Block	Restricted devices
Restricted IPs	Logins from these IPs should be blocked.	LOCATION: IP in group. If the IP is in the IP group <ul style="list-style-type: none"> <li>Is in list: true</li> <li>IP list: Restricted IPs</li> </ul>	Block	IP multiple users
Risky connection type	This rule triggers if the connection type was previously deemed high risk.	Location: IP Conn Type in group. Check to see if the IP Connection Type is in the group. <ul style="list-style-type: none"> <li>Is in list: true</li> <li>Connection type in group: high risk connections</li> </ul>	ChallengeQuestionPad	Risky Connections
State first time for user	The first time a user logs in from a new state this rule will trigger.	User: State first time for user. Is the user using this State for the first time. <ul style="list-style-type: none"> <li>Is: true</li> </ul>	ChallengeQuestionPad	User not from state
User blocked recently	If a user has been blocked more than the maximum allowed number of times in a row within the time specified this rule will trigger.	User: Action Timed. Maximum number of actions in the past x seconds <ul style="list-style-type: none"> <li>Action: Block</li> <li>in seconds: 86400</li> <li>more than: 1</li> </ul>	ChallengeQuestionPad	User blocked recently



Rule	Description	Conditions	Action Group	Alert Group
User max velocity	This rule will trigger if the physical distance from which the user is attempting to login is a non-plausible distance from the location of the last successful login in respect to the time elapsed.	User: Velocity from last successful login. Velocity from last successful login. <ul style="list-style-type: none"> <li>▪ Miles per Hour is more than:500</li> <li>▪ ignore if last login device is same: true</li> </ul>	Block	user max velocity
unsuccessful from device	If there are more than the max unsuccessful attempts within the set time from a device this rule will trigger.	Device: Timed not status. Maximum login attempts for all but the given status within the given time period <ul style="list-style-type: none"> <li>▪ Authentication status is not: success</li> <li>▪ within duration (seconds): 3600</li> <li>▪ for more than: 4</li> </ul>	ChallengeQuestionPad	Device: many failures



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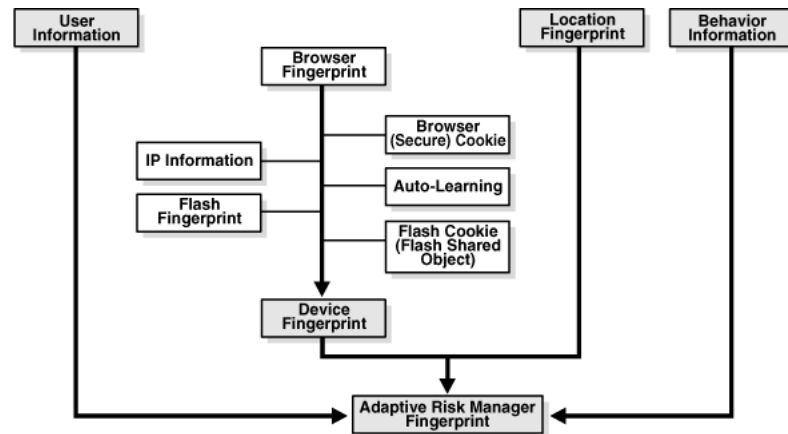
## Device Identification

This chapter provides an in-depth understanding of Oracle Adaptive Access Manager's device fingerprinting technology. Oracle Adaptive Access Manager identifies devices based on combinations of the device ID tentacles; secure cookie, flash object, user agent string, browser characteristics, device hardware configuration, network characteristics, geo-location and historical context. The intelligent identification does not rely on any single tentacle so it can function on user devices not following strict specifications. This is especially important in consumer facing deployments.

The device is identified using proprietary logic and a configurable set of nested models. This document lists some of the conditions that are used to identify the device. These conditions evaluate historical user behavior and cases where some tentacles are not available such as cookies, Flash. As well, the specialized models detect high-risk situations such as out-of-sync or manipulated cookies.

### 2.1 What is Device Fingerprinting

Oracle Adaptive Access Manager device fingerprinting is a mechanism to recognize the devices a customer uses to login – whether it is a desktop computer, laptop computer or other web enabled device. Oracle Adaptive Access Manager uses dozens of attributes, including proprietary OTS (One Time Secure) cookies, flash objects and advanced "Auto-Learning" device identification logic, to "fingerprint" the device. Oracle Adaptive Access Manager's patent-pending fingerprinting process produces a fingerprint that is not vulnerable to "replay attacks" and does not have any logic on the client side where it's vulnerable to exploit. The device identification is not merely a static list off attributes but a dynamic capture and evaluation of the specific combinations of attributes.



## 2.2 When is a device fingerprinted?

A device is fingerprinted as soon as it hits the system, prior to any authentication attempt. This way the device identification information is available for risk evaluation at any runtime. Some common runtimes are pre-authentication, post-authentication and in-session/transaction.

Generally the login page is embedded with a few lines of static html snippet code. The html snippet also has code to include a flash object and image tags to collect advanced device characteristics. The flash code internally makes a call to the application server thereby uploading the device characteristics.

Oracle Adaptive Access Manager generates a unique Secure Cookie for each session and looks for the same cookie the next time any user logs in from the device. The cookie is only valid for that session on that particular device. The cookies are retrieved or set using the following mechanisms:

- Image tags - An image tag might be introduced in the login page, which makes a call to the server to get the image. This request sends the cookies from the browser, which is used for finger printing the device. The image tags could also be used to compute the network bandwidth and the processing speed of the device. These additional data points could also be used by Oracle Adaptive Access Manager to uniquely identify the network/computer device while authenticating the user.
- HTTP Requests - In cases where images are blocked, the cookies might be extracted from the login request itself. Oracle Adaptive Access Manager uses these different modes of collecting the cookies to overcome some technical difficulties imposed by browser or the security settings on the device.

The request from the flash client and image request need to be handled by the application server and passed on to the Oracle Adaptive Access Manager client code. This client code extracts the device characteristics information from the request and calls the Oracle Adaptive Access Manager server.

The Oracle Adaptive Access Manager client library is given with the source code. The customer can use it directly or customize it to suite their environment.

## 2.3 Device Fingerprinting Attributes

This section provides information about the device fingerprinting attributes including secure browser cookies, Flash Shared Objects, and locations information

### 2.3.1 Secure Cookie and Browser Characteristics

As mentioned above, secure browser cookies are one of the mechanisms used to identify the device and create the Oracle Adaptive Access Manager Intelligent Fingerprint. The secure cookies are rotated every time the user logs in. The Secure Cookies are extracted from the HTTP request. Along with the secure cookie, the Oracle Adaptive Access Manager also extracts the Browser characteristics, like user agent, time zone, locale, etc.

For additional characteristics that are used to create a unique fingerprint for the device, refer to the table below.

OS/Browser	Characteristics
Operating System	Operating System Version Patch
Browser	Browser Version Patch Support levelJavaScript Support Image

### 2.3.2 Flash Shared Object and Device Characteristics

Similar to Secure Cookie, Oracle Adaptive Access Manager uses Flash Shared Objects to store rotating digital cookie and update it on each login request. The cookie is sent to the server using an HTTP request. Along with the cookie, the Flash movie also sends the device characteristics, such as does the computer have a microphone, audio, etc., thereby creating an additional fingerprint to the device. For additional characteristics, refer to the table below.

Hardware/Software	Characteristics
Hardware	Screen DPI Screen color Screen resolution Has audio card Has printer support Has microphone
Software	Has audio encoder Supports Video Has MP3 encoder Can play streaming Audio Can play streaming Video Has Video encoder

### 2.3.3 IP Intelligence

The locations information used by the user is also stored in the Oracle Adaptive Access Manager database and used by the rules engine to identify anomalies in user login patterns and also to validate whether the location is blacklisted and if the user is permitted to login from the location.

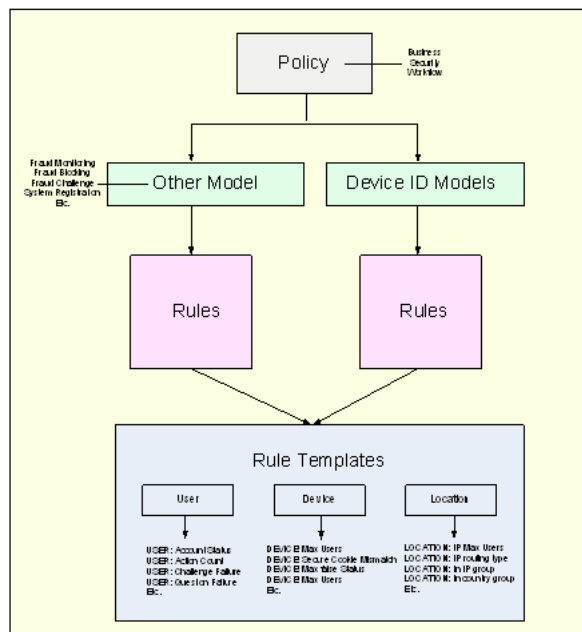
Oracle Adaptive Access Manager's method for device fingerprinting generates a one-time fingerprint for each user session which is unique to the individual's device and which is replaced upon each subsequent visit with another unique fingerprint. This ensures that even a stolen fingerprint cannot be reused for fraud.

Some of the attributes collected to generate the location fingerprint are listed below:

- IP address
- City, State, Country information and confidence factors
- Connection type
- Connection speed
- IP routing type
- ISP flag
- ASN
- Carrier name
- Top-level domain
- Second-level domain
- Registering organization
- A list of anonymizing proxies
- Hostnames and routers

## 2.4 Models

Oracle Adaptive Access Manager includes robust risk models (containing pre-packaged rules) for security, business, workflow and 3rd party data, which are evaluated by the system in real time. Oracle Adaptive Access Manager's base models include many rules that use device rule templates.



Customizing the rules that come standard with the product and adding new rules require minimal effort on the part of the institution due to the intuitive rule template editor accessible in Oracle Adaptive Access Manager.

## 2.4.1 Device Identification Models

To view the list of Device Identification models, choose **Models** from the **Admin** menu. Then, from the **Models** menu, select **List Models**.

With the **Device Identification** item selected for the **Run Time**, click **Run Query**.

## 2.4.2 Rule Templates

To view the list of rule templates, choose **Rule Templates** from the **Admin** menu. Then, from the **Rule Templates** menu, select **List Rule Templates**.

With the **All** item selected for the **Rule Type**, **Rule Status**, click **Run Query**.

Device templates are prefixed with Device or DEVICE.

## 2.5 Use Cases and False Positives

Oracle Adaptive Access Manager's fingerprinting technology does not solely rely on one element. Oracle Adaptive Access Manager uses dozens of attributes to recognize and "fingerprint" the device you typically use to login, providing greater "coverage" for an institution's customer base. For example, in the case where certain elements are unavailable, the system can still provide robust security utilizing other objects (secure cookie, flash cookie, HTTP header, Real Media, QuickTime, etc.). Oracle Adaptive Access Manager's secure device fingerprinting technology allows for a higher non-repudiation in associating device with user and transaction, reducing false positives that other fingerprinting technologies cannot overcome currently.

Oracle Adaptive Access Manager recognizes that institutions need solutions that are non-intrusive for their end users, making device identification increasingly crucial to all rules incorporating device fingerprinting.

Non-repudiation = authentication that with high assurance can be asserted to be genuine, and that can not subsequently be refuted.

### 2.5.1 Device Risk Gradient

These use cases help to define Oracle Adaptive Access Manager's device risk gradient. The device risk gradient specifies the certainty of the device being identified. It is standard in almost all rules as a pre-condition. For example, a device risk gradient of 0 is an exact match whereas a device gradient of 500 is a "similar" device, and a score of 1000 a "different" device.

## 2.6 Device Identification FAQ

1. Are you reading the device characteristics at every logon time and matching them to the previously stored fingerprint in the cookie?

The device characteristics are read at each logon. The fingerprint is not in a cookie. It is in a database.

2. How does introducing the session factor prevent against a stolen (persistent) cookie scenario? Does the product have to keep the last session id of each device per user on the backend adaptive store?

You could steal the cookie, but it is a "one-time" use cookie. So there are two options; either:

- a. the real user has already used his cookie once and the system has updated (changed, used up) the stale cookie so it is no good, or
- b. the fraudster uses the cookie before the real user. It is certainly possible that the hacker could beat the user to use the one-time cookie but the device fingerprint would be different for the rogue user and they would then have to answer the user's KBA questions

On the possibility that the fraudster does use the cookie first and it succeeds (this might not even be possible), then the real user can receive a warning that their cookie is now stale, and that may tip them off that something is wrong. The real user can then change their password, and so on.

3. Is it a persistent cookie that stores the device characteristics?

It is not in a cookie. It is stored in a database.

4. Do you have a database store keeping those fingerprints per user device to match against what you read from device at logon time?

Yes, Oracle Adaptive Access Manager has its own database in which device fingerprints and other operational information are stored. There is a separate fingerprint for each user that has used a machine. The fingerprint is not stored locally on the machine.

5. What if persistent cookies are disabled?

Oracle Adaptive Access Manager uses different pieces of information about a machine to develop the "device fingerprint". If persistent cookies are disabled, Oracle Adaptive Access Manager still has other information to use in identifying the machine.

Each feature standing on its own is not sufficient to secure the session; it is the combination of device fingerprint, IP, location, time, behavioral analysis, behavioral analysis as it relates to past behavior, etc.

6. What if secure cookies are deleted?

Oracle Adaptive Access Manager's fingerprinting technology does not solely rely on one element. Oracle Adaptive Access Manager uses dozens of attributes to recognize and "fingerprint" the device you typically use to login, providing greater "coverage" for an institution's customer base. If secure cookies are missing or disabled, Oracle Adaptive Access Manager uses other elements such as flash object and HTTP headers for device identification.

7. What if flash is not enabled?

Oracle Adaptive Access Manager's fingerprinting technology does not solely rely on one element. Oracle Adaptive Access Manager uses dozens of attributes to recognize and "fingerprint" the device you typically use to login, providing greater "coverage" for an institution's customer base. If flash is not enabled, Oracle Adaptive Access Manager uses other elements such as secure cookie and HTTP headers for device identification.

8. How are device scores determined

Device scores are determined using Oracle Adaptive Access Manager's proprietary algorithm. A device score is made up of many elements. Each element can have a range of values. These values are used to determine the device score.



When a customer has the appropriate device scoring models deployed they can see these individual rule scores. The session holds the values that make up this score.

9. Why are there so many device ID models

Our team has created many device ID models to take into account the various use cases that we've learned through our Fraud Intelligence Network. By creating these device ID models, we have created a robust device identification mechanism and reduced false positives as a result.

10. Are device ID models configurable?

Yes, device ID models are configurable.

11. Can we add new device ID models? If so, how?

Yes, new device ID models can be added. We recommend that you work with our Professional Services team to create any new device ID models

## 2.7 Device Identification Models Reference

To view the list of Device Identification models, choose **Models** from the **Admin** menu. Then, from the **Models** menu, select **List Models**.

With the **Device Identification** item selected for the **Runtime**, click **Run Query**.

The Device Identification Models provided are:

- 201 Cookie enable check
- 202 Flash missing
- 203 Cookie missing
- 204 Http header mismatch
- 205 Hdr mismatch No Flash
- 206 Hdr mismatch No SC
- 207 Device upgrade
- 208 Brwsr Device upgrade
- 209 SecureCookie mismatch
- 210 Same device DigCookie
- 211 out of sync cookie
- 301 First time browser
- 401 GeoCheck Flash Came
- systemDeviceID

## 2.8 Device Identification Rules Reference

To view the list of Device Identification rule templates, choose **Rule Templates** from the **Admin** menu. Then, from the **Rule Templates** menu, select **List Rule Templates**.

With the **Device ID Rules** item selected for the **Runtime**, click **Run Query**.

The Device ID rule templates provided are:

- Cookies Match

- Header data match
- Header data match percentage
- Header data present
- Http Header data Browser match
- Http Header data Browser upgrade
- Http Header data OS match
- Http Header data OS upgrade
- Is Cookie Valid
- Is Cookie empty
- Is Cookie from same device
- Known header data match percentage

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## IP Location Data Import

This chapter describes a utility for importing the IP location data into the Oracle Adaptive Access Manager database. This data is used by the risk policies framework to determine the risk of fraud associated with a given IP address.

This chapter is divided into three major sections. The first section, "How to run the load utility," documents the details necessary to run the import utility. System Behavior defines the expected inputs and outputs of the system. Design Specification gives a technical description of how the utility works behind the scenes.

### 3.1 How to Run the Load Utility

This section contains information about running the load utility.

#### 3.1.1 Setting Up IP Location Loader Properties

1. Rename `bharosa_location.properties.sample` to `bharosa_location.properties`.
2. Update `bharosa_location.properties` file to set appropriate values for the following properties.

Please note that the properties marked as "Advanced" are not to be changed in general.

**Table 3–1 IP Loader Properties**

IP Loader Properties	Description
<code>location.data.provider</code>	quova or ip2location or maxmind
<code>location.data.file</code>	only if quova location data is to be loaded; else leave this property unset/blank
<code>location.data.ref.file</code>	only if quova location data is to be loaded; else leave this property unset/blank
<code>location.data.anonymizer.file</code>	only if anonymizer data is to be loaded; else leave this property unset/blank
<code>location.data.location.file</code>	only if maxmind location data is to be loaded; else leave this property unset/blank
<code>location.data.blocks.file</code>	only if maxmind location data is to be loaded; else leave this property unset/blank
<code>location.data.country.code.file</code>	only if maxmind location data is to be loaded; else leave this property unset/blank
<code>location.data.sub.country.code.file</code>	only if maxmind location data is to be loaded; else leave this property unset/blank
<code>location.loader.database.pool.size</code>	number of threads to use to update the database

**Table 3–1 (Cont.) IP Loader Properties**

IP Loader Properties	Description
location.loader.dbqueue.maxsize	Advanced: maximum number of location records to be kept in queue for database threads
location.loader.cache.location.maxcount	Advanced: maximum number of location records to be kept in cache, while updating existing location data
location.loader.cache.split.maxcount	Advanced: maximum number of location split records to be kept in cache, while updating existing location data
location.loader.cache.anonymizer.maxcount	Advanced: maximum number of anonymizer records to be kept in cache, while updating existing location data
location.loader.database.commit.batch.size	Maximum number of location records to batch before issuing a database commit
location.loader.database.commit.batch.seconds	Maximum time to hold an uncommitted batch
location.loader.cache.isp.maxcount	Maximum number of ISP records to be kept in cache

### 3.1.2 Setting Up Database Properties - TopLink

Follow the instructions in this section when using TopLink.

#### 3.1.2.1 Database Configuration Fields

Update conf/sessions.xml file to set the following database configuration fields.

**Table 3–2 Database Configuration Fields**

Configuration Fields	Description
<platform-class>	TopLink database platform class
<driver-class>	The name of the JDBC Driver class
<connection-url>	The database URL
<user-name>	The database username
<password>	The password should be TopLink encrypted password
<max-connections>, <min-connections> in <write-connection-pool>	The <max-connections>, <min-connections> in <write-connection-pool> must be set to at least 1 higher than the value of property "location.loader.database.pool.size" (in bharosa_location.properties)

#### 3.1.2.2 Encrypt Password Command

To encrypt the password, use the following command:

##### For Windows

```
java -classpath "vcrypt.jar;toplink.jar"
com.bharosa.vcrypt.utility.cmdline.BharosaCmdLine -toplink-password-encrypt
mydbpassword
```

##### For UNIX

```
echo "mydbpassword" | $JAVA_HOME/bin/java -classpath
./vcrypt.jar:./toplink.jar:./log4j-1.2.9.jar
com.bharosa.vcrypt.utility.cmdline.BharosaCmdLine -toplink-password-encrypt
```

### 3.1.3 Setting Up Log Properties

Update conf/log4j.xml file to set the log file name

### 3.1.4 Setting Up for SQL Server Database

To load data to Microsoft SQL Server database, sqljdbc.jar should be copied to a third party directory. This file can be downloaded for free from Microsoft at [tap://www.microsoft.com/downloads/details.aspx?FamilyID=6d483869-816a-44cb-9787-a866235efc7c&DisplayLang=en](http://tap://www.microsoft.com/downloads/details.aspx?FamilyID=6d483869-816a-44cb-9787-a866235efc7c&DisplayLang=en)

### 3.1.5 Setting Up for Loading MaxMind IP data

Before running the IP location loader, Blocks.csv file from MaxMind needs to be preprocessed with the following commands:

```
$ mv Blocks.csv Blocks-original.csv
$ sed -e 's/\\/g' Blocks-original.csv | sort -n -t, -k1,1 -o Blocks.csv
```

### 3.1.6 Setting Up Encryption

Please refer to Chapter 10, "Setting Up Encryption," of the *Oracle Adaptive Access Manager Installation and Configuration Guide* to set up encryption.

### 3.1.7 Loading Location and/or Anonymizer Data

After completing the setup detailed above, run the following command to load the location and/or anonymizer data into the Oracle Adaptive Access Manager database.

From bash shell, execute `loadIPLocationData.sh`

From Windows command prompt, execute `loadIPLocationData.cmd`

The command returns 0 when the data load is successful; on failure it returns 1.

---

**Note:** a single script is provided to load location data from any provider (Quova, IP2Location, MaxMind). The earlier versions separate scripts were used for each provider.

---

## 3.2 System Behavior

The IP location loader utility reads the information from the IP location data files (from Quova or IP2Location) to populate the IP location tables in the Oracle Adaptive Access Manager system. The first time the utility is run against a new database, it will insert a new row into the `vdecrypt_ip_location_map` for each record in the data file. It will also create a new record in `vdecrypt_country` for each unique country name in the data file, a new record in `vdecrypt_state` for each unique combination of country name and state name in the data file, and a new record in `vdecrypt_city` for each unique combination of country name, state name, and city name in the data file.

When the IP location loader utility is run with a new data file against an already populated database, it will skip records in the datafile who have matching, identical records in the `vdecrypt_ip_location_map` table. It will create a new row in the `vdecrypt_ip_location_map` for each record in the data file whose `FROM_IP_ADDR` does not already appear in the database. It will update the rows in the `vdecrypt_ip_location_map` whose `FROM_IP_ADDR` matches the record in the data file, but has different data in other

columns. The utility will also create new countries, states, and cities that do not already exist in the database.

### 3.3 Quova File Layout

The Quova data file is a pipe-delimited ('|') file, with 29 fields on each line, and one record per line. The information in these tables comes from Quova's GeoPoint Data Glossary. In the following table, IP represents the `vdecrypt_ip_location_map` table, CO represents the `vdecrypt_country` table, ST represents the `vdecrypt_state` table, and CI represents the `vdecrypt_city` table.

The file layout is as follows:

**Table 3–3 Quova File Layout**

Quova Field	Oracle Adaptive Access Manager Field	Description
Start IP	IP.from_ip_addr	The beginning of the IP range, also used as an alternate primary key on the <code>vdecrypt_ip_location_map</code> table.
End IP	IP.to_ip_addr	The end of the IP range.
CIDR	(not used)	
Continent	(not used)	
Country	CO.country_name	The country name.
Country ISO2	(not used)	
Region	(not used)	
State	ST.state_name	The state name.
City	CI.city_name	The city name.
Postal code	(not used)	
Time zone	(not used)	
Latitude	CI.latitude	The latitude of the IP address. Positive numbers represent North, and negative numbers represent South.
Longitude	CI.longitude	The latitude of the IP address. Positive numbers represent East, and negative numbers represent West.
Phone number prefix	(not used)	
AOL Flag	mapped to IP.isp_id	Tells whether or not the IP address is an AOL IP address.
DMA	(not used)	
MSA	(not used)	
PMSA	(not used)	
Country CF	IP.country_cf	The confidence factor (1-99) that the correct country has been identified.
State CF	IP.state_cf	The confidence factor (1-99) that the correct state has been identified.

**Table 3–3 (Cont.) Quova File Layout**

<b>Quova Field</b>	<b>Oracle Adaptive Access Manager Field</b>	<b>Description</b>
City CF	IP.city_cf	The confidence factor (1-99) that the correct city has been identified.
Connection type	mapped to IP.connection_type	Describes the data connection between the device or LAN and the internet. See the Connection Type mapping, below.
IP routing type	mapped to IP.routing_type	Tells how the user is routed to the internet. See the IP Routing Type mapping, below.
Line speed	mapped to IP.connection_speed	Describes the connection speed. This is dependent upon connection type. See the Connection Speed mapping, below.
ASN	IP.asn	Globally unique number assigned to a network or group of networks that is managed by a single entity.
Carrier	IP.carrier	The name of the entity that manages the ASN entry.
Second Level Domain	mapped to IP.sec_level_domain	The second level domain of the URL, e.g. Oracle in www.oracle.com. This is mapped through the Quova reference file.
Top Level Domain	mapped to IP.top_level_domain	The top level domain of the URL, e.g. come in www.oracle.com. This is mapped through the Quova reference file.
Registering Organization	(not used)	

### 3.3.1 Routing Types Mapping

A table for routing types mapping is shown below.

**Table 3–4 Routing Types Mappings**

<b>Routing Type</b>	<b>Oracle Adaptive Access Manager ID</b>	<b>Description</b>
fixed	1	User IP is at the same location as the user.
anonymizer	2	User IP is located within a network block that has tested positive for anonymizer activity.
aol	3	User is a member of the AOL service; The user country can be identified in most cases; any regional info more granular than country is not possible.
aol pop	4	User is a member of the AOL service; The user country can be identified in most cases; any regional info more granular than country is not possible.

**Table 3–4 (Cont.) Routing Types Mappings**

<b>Routing Type</b>	<b>Oracle Adaptive Access Manager ID</b>	<b>Description</b>
aol dialup	5	User is a member of the AOL service; The user country can be identified in most cases; any regional info more granular than country is not possible.
aol proxy	6	User is a member of the AOL service; The user country can be identified in most cases; any regional info more granular than country is not possible.
pop	7	User is dialing into a regional ISP and is likely to be near the IP location; the user could be dialing across geographical boundaries
superpop	8	User is dialing into a multi-state or multi-national ISP and is not likely to be near the IP location; the user could be dialing across geographical boundaries.
satellite	9	A user connecting to the Internet through a consumer satellite or a user connecting to the Internet with a backbone satellite provider where no information about the terrestrial connection is available.
cache proxy	10	User is proxied through either an internet accelerator or content distribution service.
international proxy	11	A proxy that contains traffic from multiple countries.
regional proxy	12	A proxy (not anonymizer) that contains traffic from multiple states within a single country.
mobile gateway	13	A gateway to connect mobile devices to the public internet. For example, WAP is a gateway used by mobile phone providers.
none	14	Routing method is not known or is not identifiable in the above descriptions.
unknown	99	Routing method is not known or is not identifiable in the above descriptions.

### 3.3.2 Connection Types Mapping

A table for connection types mapping is shown below.



**Table 3–5 Connection Types Mappings**

Connection Type	Oracle Adaptive Access Manager ID	Description
ocx	1	This represents OC-3 circuits, OC-48 circuits, etc. which are used primarily by large backbone carriers.
tx	2	This includes T-3 circuits and T-1 circuits still used by many small and medium companies.
satellite	3	This represents high-speed or broadband links between a consumer and a geosynchronous or lowearth orbiting satellite.
framerelay	4	Frame relay circuits may range from low to highspeed and are used as a backup or alternative to T-1. Most often they are high-speed links, so GeoPoint classifies them as such.
dsl	5	Digital Subscriber Line broadband circuits, which include aDSL, iDSL, sDSL, etc. In general ranges in speed from 256k to 20MB per second.
cable	6	Cable Modem broadband circuits, offered by cable TV companies. Speeds range from 128k to 36MB per second, and vary with the load placed on a given cable modem switch.
isdn	7	Integrated Services Digital Network high-speed copper-wire technology, support 128K per second speed, with ISDN modems and switches offering 1MB per second and greater speed. Offered by some major telcos.
dialup	8	This category represents the consumer dialup modem space, which operates at 56k per second. Providers include Earthlink, AOL and Netzero.
fixed wireless	9	Represents fixed wireless connections where the location of the receiver is fixed. Category includes WDSL providers such as Sprint Broadband Direct, as well as emerging WiMax providers.
mobile wireless	10	Represents cellular network providers such as Cingular, Sprint and Verizon Wireless who employ CDMA, EDGE, EV-DO technologies. Speeds vary from 19.2k per second to 3MB per second.
consumer satellite	11	

**Table 3–5 (Cont.) Connection Types Mappings**

Connection Type	Oracle Adaptive Access Manager ID	Description
unknown high	12	GeoPoint was unable to obtain any connection type or the connection type is not identifiable in the above descriptions.
unknown medium	13	GeoPoint was unable to obtain any connection type or the connection type is not identifiable in the above descriptions.
unknown low	14	GeoPoint was unable to obtain any connection type or the connection type is not identifiable in the above descriptions.
unknown	99	GeoPoint was unable to obtain any connection type or the connection type is not identifiable in the above descriptions.

### 3.3.3 Connection Speed Mapping

A table of connection speed mapping is shown below.

**Table 3–6 Connection Speed Mappings**

Connection Speed	Oracle Adaptive Access Manager ID	Description
high	1	OCX, TX, and Framrelay.
medium	2	Satellite, DSL, Cable, Fixed Wireless, and ISDN.
low	3	Dialup and Mobile Wireless.
unknown	99	Quova was unable to obtain any line speed information.

## 3.4 Oracle Adaptive Access Manager Tables

This section contains the tables used by the ETL process

### 3.4.1 Anonymizer

The following tables and sequences are used for uploading the Anonymizer data. Please make sure the ETL process has sufficient privileges to read and update these tables.

**Table 3–7 Anonymizer Data**

Name	Table/Sequence
V_LONG_VALUE_ELEM_SEQ	Sequence
VCRYPT_LONG_VALUE_ELEMENT	Table
VCRYPT_VALUE_LIST	Table
V_VALUE_LIST_SEQ	Sequence
VCRYPT_CACHE_STATUS	Table
VCRYPT_CACHE_STATUS_SEQ	Sequence

## 3.5 Tables in Location Loading

The IP location loader requires read/write access to the following tables:

- VCRYPT\_IP\_LOCATION\_MAP
- V\_IP\_LOCATION\_MAP\_SEQ
- V\_IP\_LOC\_MAP\_HIST
- V\_IP\_LOC\_MAP\_HIST\_SEQ
- V\_IP\_LOC\_MAP\_SPLIT
- V\_IP\_LOC\_MAP\_SPLIT\_SEQ
- V\_IP\_LOC\_MAP\_SPLIT\_HIST
- V\_IP\_LOC\_MAP\_SPLIT\_HIST\_SEQ
- VCRYPT\_COUNTRY
- V\_COUNTRY\_SEQ
- V\_COUNTRY\_HIST
- V\_COUNTRY\_HIST\_SEQ
- VCRYPT\_STATE
- V\_STATE\_SEQ
- V\_STATE\_HIST
- V\_STATE\_HIST\_SEQ
- VCRYPT\_CITY
- V\_CITY\_SEQ
- V\_CITY\_HIST
- V\_CITY\_HIST\_SEQ
- VCRYPT\_ISP
- VCRYPT\_ISP\_SEQ
- V\_ISP\_HIST
- V\_ISP\_HIST\_SEQ
- V\_LOC\_LOOKUP
- V\_LOC\_LOOKUP\_SEQ
- V\_LOC\_UPD\_SESS
- V\_LOC\_UPD\_SESS\_SEQ
- V\_UPD\_LOGS
- V\_UPD\_LOGS\_SEQ
- VCRYPT\_LONG\_VALUE\_ELEMENT
- V\_LONG\_VALUE\_ELEM\_SEQ
- VCRYPT\_VALUE\_LIST
- V\_VALUE\_LIST\_SEQ
- VCRYPT\_VALUE\_LIST\_HIST

- V\_VALUE\_LIST\_HIST\_SEQ
- VCRYPT\_CACHE\_STATUS
- VCRYPT\_CACHE\_STATUS\_SEQ

## 3.6 Troubleshooting

The following section contains information about troubleshooting.

### 3.6.1 Characters Added During Transfer of Files

During the transfer/ftp of files, characters such as carriage return "\r" are added. To resolve the issue, run dos2unix against the files. When you are running the .sh file, use either dos2unix <filename> or dos2unix \*.\* .

### 3.6.2 "TNS:no appropriate service handler found" error

If you get the following error

```
TNS:no appropriate service handler found
```

it may be that the number of processes in your database is set to a minimal value.

Use the following commands to check the number of process set in the database

```
SQL> show parameter process
```

```
SQL> alter system set processes=100 scope=spfile;
```

### 3.6.3 Verifying When the Loading was a Success

The loader script returns 0 when the data load is successful; on failure it returns 1.

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## Fraud Definitions

In today's online environment, real-time fraud detection and multifactor online authentication security have become necessities.

- Consumers are wary of sophisticated online attacks
- Industry and Government continue to raise the bar with regulations

This chapter contains a list of definitions that are prevalent in today's fraud related discussions. These definitions are extracted from Wikipedia (<http://www.wikipedia.org/>).

### 4.1 Definitions

(In Alphabetical Order)

#### 4.1.1 Bots

Internet bots, also known as web robots, WWW robots or simply bots, are software applications that run automated tasks over the internet. Typically, bots perform tasks that are both simple and structurally repetitive, at a much higher rate than would be possible for a human editor alone. The largest use of bots is in web spidering, in which an automated script fetches, analyses and files information from web servers at many times the speed of a human. Each server can have a file called robots.txt, containing rules for the spidering of that server that the bot is supposed to obey.

#### 4.1.2 Carding

Carding is a term used for a process to verify the validity of stolen card data. The thief presents the card information on a website that has real-time transaction processing. If the card is processed successfully, the thief knows that the card is still good. The specific item purchased is immaterial, and the thief does not need to purchase an actual product; a Web site subscription or charitable donation would be sufficient. The purchase is usually for a small monetary amount, both to avoid using the card's credit limit, and also to avoid attracting the bank's attention. A website known to be susceptible to carding is known as a cardable website.

#### 4.1.3 Click Fraud

Click fraud is a type of internet crime that occurs in pay per click online advertising when a person, automated script, or computer program imitates a legitimate user of a web browser clicking on an ad, for the purpose of generating a charge per click without having actual interest in the target of the ad's link. Click fraud is the subject of

some controversy and increasing litigation due to the advertising networks being a key beneficiary of the fraud.

#### 4.1.4 Cybercrime

Computer crime, cybercrime, e-crime, hi-tech crime or electronic crime generally refers to criminal activity where a computer or network is the source, tool, target, or place of a crime. These categories are not exclusive and many activities can be characterized as falling in one or more category. Additionally, although the terms computer crime or cybercrime are more properly restricted to describing criminal activity in which the computer or network is a necessary part of the crime, these terms are also sometimes used to include traditional crimes, such as fraud, theft, blackmail, forgery, and embezzlement, in which computers or networks are used to facilitate the illicit activity.

#### 4.1.5 Keystroke Logging

Keystroke logging (often called keylogging) is a diagnostic tool used in software development that captures the user's keystrokes. It can be useful to determine sources of error in computer systems and is sometimes used to measure employee productivity on certain clerical tasks. Such systems are also highly useful for law enforcement and espionage—for instance, providing a means to obtain passwords or encryption keys and thus bypassing other security measures. However, keyloggers are widely available on the Internet and can be used by private parties to spy on the computer usage of others.

#### 4.1.6 Malwar

Malware is software designed to infiltrate or damage a computer system without the owner's informed consent. It is a portmanteau of the words "malicious" and "software". The expression is a general term used by computer professionals to mean a variety of forms of hostile, intrusive, or annoying software or program code.

#### 4.1.7 Man-In-The-Middle-Attacks

In cryptography, a man-in-the-middle attack (MITM) is an attack in which an attacker is able to read, insert and modify at will, messages between two parties without either party knowing that the link between them has been compromised. The attacker must be able to observe and intercept messages going between the two victims. The MITM attack can work against public-key cryptography and is also particularly applicable to the original Diffie-Hellman key exchange protocol, when used without authentication.

##### **How Oracle Adaptive Access Manager protects against MITM attacks:**

Oracle Adaptive Access Manager incrementally secure credentials or sensitive data, even on a compromised computer and/or Internet connection. The Adaptive Strong Authenticator Virtual Authentication devices do not require the end user to enter the data nor send the sensitive data in raw form. This eliminates the opportunity for Trojans, keyloggers, screen scrapers, and man-in-the-middle attacks to steal the data. Data is secured as it is entered on a user's machine and as it is transmitted over the wire.

Adaptive Strong Authenticator uses the following encryption methods to prevent man-in-the-middle attacks and keyloggers from sniffing out a user's keystrokes:

- An encryption method that foils mouse click loggers by "jittering" our device image for each new session

- A method for randomizing the file size of our device image for each new session, to foil automated image-based dictionary attack
- Randomization of measurable properties (size, position, checksum, relative values etc.) in each session to protect against software-based automated OCR (image capture) attacks
- An OTP-like encryption method which ensures data corresponding behind the image (for example numeric data on a PinPad) is randomized every time it is transmitted to the server to secure data over the wire. This is referred to as "data encryption"
- A second encryption method which ensures the entire virtual authentication device image is recompiled, in unique fashion, on the server, for each session to protect against software-based automated OCR (image capture) based attacks. This is referred to as "checksum encryption"

For example, a one-time-password-like unique mapping is created and stored in the server prior to the Virtual Authentication Device (i.e. KeyPad, PinPad, etc.) rendering on the user's browser. When a user enters the credentials using the device, the credentials are decoded once it reaches the server. This pre-generated unique mapping is then used to decode the credentials.

Only Adaptive Strong Authenticator has a way to enter sensitive data over the Web, without hardware, device or downloads, in a manner that attackers cannot easily decipher, either as it is being entered on a user's machine, or as it is being transmitted over the wire. In addition, each virtual authentication device contains a security feature of the time stamp (freshness) to protect against images being re-used for fraud.

### 4.1.8 Pharming

Pharming (pronounced farming) is a cracker's attack aiming to redirect a website's traffic to another, bogus website. Pharming can be conducted either by changing the hosts file on a victim's computer or by exploitation of a vulnerability in DNS server software. DNS servers are computers responsible for resolving Internet names into their real addresses - they are the "signposts" of the Internet. Compromised DNS servers are sometimes referred to as "poisoned". The term pharming is a word play on farming and phishing. The term phishing refers to social engineering attacks to obtain access credentials such as user names and passwords. In recent years both pharming and phishing have been used to steal identity information. Pharming has become of major concern to businesses hosting ecommerce and online banking websites. Sophisticated measures known as anti-pharming are required to protect against this serious threat. Antivirus software and spyware removal software cannot protect against pharming.

### 4.1.9 Phishing

In computing, phishing is a criminal activity using social engineering techniques. Phishers attempt to fraudulently acquire sensitive information, such as usernames, passwords and credit card details, by masquerading as a trustworthy entity in an electronic communication. eBay and Pay Pal are two of the most targeted companies, and online banks are also common targets. Phishing is typically carried out by email or instant messaging, and often directs users to give details at a website, although phone contact has been used as well. Attempts to deal with the growing number of reported phishing incidents include legislation, user training, and technical measures.

### 4.1.10 Session Hijacking

The term Session Hijacking refers to the exploitation of a valid computer session - sometimes also called a session key - to gain unauthorized access to information or services in a computer system. In particular, it is used to refer to the theft of a magic cookie used to authenticate a user to a remote server. It has particular relevance to web developers, as the HTTP cookies used to maintain a session on many web sites can be easily stolen by an attacker using an intermediary computer or with access to the saved cookies on the victim's computer.

### 4.1.11 Skimming

Skimming is the theft of credit card information used in an otherwise legitimate transaction. It is typically an "inside job" by a dishonest employee of a legitimate merchant, and can be as simple as photocopying of receipts. More imaginative routes are possible; an episode of *The Sopranos* showed how a compromised magnetic stripe reader could store account information for later use. Common scenarios for skimming are restaurants or bars where the skimmer has possession of the victim's credit card out of their immediate view. The skimmer will typically use a small keypad to unobtrusively transcribe the 3 or 4 digit Card Security Code which is not present on the magnetic strip. Many instances of skimming have been reported where the perpetrator has put a device over the card slot of a public cash machine (Automated teller machine), which reads the magnetic strip as the user unknowingly passes their card through it. These devices are often used in conjunction with a pinhole camera to read the user's PIN at the same time.

### 4.1.12 Social Engineering

Social engineering is a collection of techniques used to manipulate people into performing actions or divulging confidential information. While similar to a confidence trick or simple fraud, the term typically applies to trickery for information gathering or computer system access and in most cases the attacker never comes face-to-face with the victim.

### 4.1.13 Spyware

Spyware is computer software that is installed surreptitiously on a personal computer to intercept or take partial control over the user's interaction with the computer, without the user's informed consent.

### 4.1.14 Trojan/Trojan Horse

In the context of computer software, a Trojan horse is a program that installs malicious software while under the guise of doing something else. Though not limited in their payload, Trojan horses are more notorious for installing backdoor programs which allow unauthorized non permissible remote access to the victim's machine by unwanted parties - normally with malicious intentions. Unlike a computer virus, a Trojan horse does not propagate by inserting its code into other computer files. The term is derived from the classical myth of the Trojan Horse. Like the mythical Trojan Horse, the malicious code is hidden in a computer program or other computer file which may appear to be useful, interesting, or at the very least harmless to an unsuspecting user. When this computer program or file is executed by the unsuspecting user, the malicious code is also executed resulting in the set up or installation of the malicious Trojan horse program. (See Social engineering.)



#### 4.1.15 Virus

A computer virus is a computer program that can copy itself and infect a computer without permission or knowledge of the user. The original may modify the copies or the copies may modify themselves, as occurs in a metamorphic virus. A virus can only spread from one computer to another when its host is taken to the uninfected computer, for instance by a user sending it over a network or carrying it on a removable medium such as a floppy disk, CD, USB drive or by the Internet. Additionally, viruses can spread to other computers by infecting files on a network file system or a file system that is accessed by another computer. Viruses are sometimes confused with computer worms and Trojan horses. A worm can spread itself to other computers without needing to be transferred as part of a host, and a Trojan horse is a file that appears harmless until executed.

#### 4.1.16 Wire Fraud

Wire transfer networks such as the international SWIFT interbank fund transfer system are tempting as targets as a transfer, once made, is difficult or impossible to reverse. As these networks are used by banks to settle accounts with each other, rapid or overnight wire transfer of large amounts of money are commonplace; while banks have put checks and balances in place, there is the risk that insiders may attempt to use fraudulent or forged documents which claim to request a bank depositor's money be wired to another bank, often an offshore account in some distant foreign country.

#### 4.1.17 Worm

A computer worm is a self-replicating computer program. It uses a network to send copies of itself to other nodes (computer terminals on the network) and it may do so without any user intervention. Unlike a virus, it does not need to attach itself to an existing program. Worms always harm the network (if only by consuming bandwidth), whereas viruses always infect or corrupt files on a targeted computer.



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# Database Schema Description

This document describes the Oracle Adaptive Access Manager tables.

## 5.1 Database/Application Objects

### 5.1.1 List of All Classes

- [VActionLog](#) (V\_ACTION\_LOGS)
- [VActionLogSession](#) (V\_ACTION\_LOG\_SESS)
- [VAdminUser](#) (V\_ADMIN\_USER)
- [VAdminUserGroup](#) (V\_ADMIN\_USERGROUP)
- [VAdminUserGroupHist](#) (V\_ADMIN\_USER\_GROUP\_HIST)
- [VAdminUserGroupMap](#) (V\_ADMIN\_USERGROUP\_MAP)
- [VAdminUserGroupMapHist](#) (V\_ADMIN\_USERGROUP\_MAP\_HIST)
- [VAdminUserHist](#) (V\_ADMIN\_USER\_HIST)
- [VAdminUserProfile](#) (V\_ADMIN\_USERPROFILE)
- [VAdminUserProfileHist](#) (V\_ADMIN\_USER\_PROFILE\_HIST)
- [VAlert](#) (VCRYPT\_ALERT)
- [VAlertTemplate](#) (VCRYPT\_ALERT\_TEMPLATES)
- [VAlertTemplateHist](#) (VCRYPT\_ALERT\_TEMPLATES\_HIST)
- [VBharosaConfig](#) (V\_B\_CONFIG)
- [VBharosaConfigHist](#) (V\_B\_CONFIG\_HIST)
- [VBharosaConfigRB](#) (V\_B\_CONFIG\_RB)
- [VBharosaEnum](#) (V\_B\_ENUM)
- [VBharosaEnumElement](#) (V\_B\_ENUM\_ELMNT)
- [VBharosaEnumElementAttribute](#) (V\_B\_ENUM\_ELMNT\_ATTR)
- [VBharosaEnumElementAttributeHist](#) (V\_B\_ENUM\_ELMNT\_ATTR\_HIST)
- [VBharosaEnumElementHist](#) (V\_B\_ENUM\_ELMNT\_HIST)

- [VBharosaEnumHist](#) (V\_B\_ENUM\_HIST)
- [VBharosaLocale](#) (V\_B\_LOCALE)
- [VBharosaLocaleHist](#) (V\_B\_LOCALE\_HIST)
- [VCSRCase](#) (V\_CASE)
- [VCSRCaseHist](#) (V\_CASE\_HIST)
- [VCacheStatus](#) (VCRYPT\_CACHE\_STATUS)
- [VCaseActionLogSessionMap](#) (V\_ACTION\_LOG\_SESS\_MAP)
- [VCaseMap](#) (V\_CASE\_MAP)
- [VCaseMapHist](#) (V\_CASE\_MAP\_HIST)
- [VCity](#) (VCRYPT\_CITY)
- [VCityHist](#) (V\_CITY\_HIST)
- [VCountry](#) (VCRYPT\_COUNTRY)
- [VCountryHist](#) (V\_COUNTRY\_HIST)
- [VCryptAccount](#) (VCRYPT\_ACCOUNTS)
- [VCryptAccountHist](#) (VCRYPT\_ACCOUNTS\_HIST)
- [VCryptAnswerHint](#) (V\_ANS\_HINT)
- [VCryptAnswerHintHist](#) (V\_ANS\_HINT\_HIST)
- [VCryptAuthAttempt](#) (VCRYPT\_AUTH\_ATTEMPTS)
- [VCryptAuthSession](#) (VCRYPT\_AUTH\_SESSIONS)
- [VCryptAuthSessionGroup](#) (VCRYPT\_AUTH\_SESSION\_GROUPS)
- [VCryptDBPatch](#) (VCRYPT\_DB\_PATCHES)
- [VCryptFPMap](#) (V\_FP\_MAP)
- [VCryptFPNameValue](#) (V\_FP\_NV)
- [VCryptFingerPrint](#) (V\_FPRINTS)
- [VCryptGlobalAnswerHint](#) (V\_GLOBAL\_ANS\_HINT)
- [VCryptGlobalAnswerHintHist](#) (V\_GLOBAL\_ANS\_HINT\_HIST)
- [VCryptPinReset](#) (VCRYPT\_PIN\_RESETS)
- [VCryptPinRetrieval](#) (VCRYPT\_PIN\_RETRIEVALS)
- [VCryptQuestionAnswerHintMap](#) (V\_Q\_ANS\_HINT\_MAP)
- [VCryptQuestionAnswerHintMapHist](#) (V\_Q\_ANS\_HINT\_MAP\_HIST)
- [VCryptQuestionGlobalValidation](#) (V\_Q\_GLOBAL\_VALID)
- [VCryptQuestionGlobalValidationHist](#) (V\_Q\_GLOBAL\_VALID\_HIST)
- [VCryptQuestionValidationMap](#) (V\_Q\_VALIDATION\_MAP)
- [VCryptQuestionValidationMapHist](#) (V\_Q\_VALIDATION\_MAP\_HIST)
- [VCryptScoreAttributes](#) (V\_SCORE\_ATTR)
- [VCryptScoreAttributesHist](#) (V\_SCORE\_ATTR\_HIST)
- [VCryptScoringPolicy](#) (V\_SCORING\_POLICY)

- [VCryptScoringPolicyHist](#) (V\_SCORING\_POLICY\_HIST)
- [VCryptSystemMessage](#) (VCRYPT\_SYS\_MESSAGES)
- [VCryptTrackerNode](#) (VCRYPT\_TRACKER\_NODE)
- [VCryptTrackerNodeHistory](#) (VCRYPT\_TRACKER\_NODE\_HISTORY)
- [VCryptTrackerUserNodeLog](#) (VCRYPT\_TRACKER\_USERNODE\_LOGS)
- [VCryptUser](#) (VCRYPT\_USERS)
- [VCryptUserGroup](#) (VCRYPT\_USER\_GROUPS)
- [VCryptUserGroupRoleMap](#) (VCRYPT\_USERGROUP\_ROLE\_MAPS)
- [VCryptUserHist](#) (VCRYPT\_USERS\_HIST)
- [VCryptUserLog](#) (VCRYPT\_USER\_LOGS)
- [VCryptUserQA](#) (V\_USER\_QA)
- [VCryptUserQAHist](#) (V\_USER\_QA\_HIST)
- [VCryptUserQuestion](#) (V\_USER\_QUESTIONS)
- [VCryptUserQuestionHist](#) (V\_USER\_QUESTIONS\_HIST)
- [VCryptUserRole](#) (VCRYPT\_USER\_ROLES)
- [VCryptValidation](#) (V\_VALIDATION)
- [VCryptValidationHist](#) (V\_VALIDATION\_HIST)
- [VDateValueElement](#) (VCRYPT\_DATE\_VALUE\_ELEMENT)
- [VDynamicAction](#) (VR\_DYN\_ACTION)
- [VDynamicActionExecLog](#) (VT\_DYN\_ACT\_EXEC\_LOG)
- [VDynamicActionHist](#) (VR\_DYN\_ACTION\_HIST)
- [VDynamicActionInstance](#) (VR\_DYN\_ACTION\_INST)
- [VDynamicActionInstanceHist](#) (VR\_DYN\_ACTION\_INST\_HIST)
- [VDynamicActionParam](#) (VR\_DYN\_ACT\_PAR)
- [VDynamicActionParamHist](#) (VR\_DYN\_ACT\_PAR\_HIST)
- [VDynamicActionParamValue](#) (VR\_DYN\_ACT\_PAR\_VAL)
- [VDynamicActionParamValueHist](#) (VR\_DYN\_ACT\_PAR\_VAL\_HIST)
- [VGlobalLookup](#) (V\_G\_LOOKUP)
- [VGlobalLookupHist](#) (V\_G\_LOOKUP\_HIST)
- [VIPCluster](#) (VT\_IP\_CLUSTER)
- [VIPClusterGroup](#) (VT\_IP\_CLUSTER\_GROUP)
- [VIPClusterGroupMap](#) (VT\_IP\_CLUSTER\_GROUPMAP)
- [VIPLocationMap](#) (VCRYPT\_IP\_LOCATION\_MAP)
- [VIPLocationMapHist](#) (V\_IP\_LOC\_MAP\_HIST)
- [VIPLocationMapSplit](#) (V\_IP\_LOC\_MAP\_SPLIT)
- [VIPLocationMapSplitHist](#) (V\_IP\_LOC\_MAP\_SPLIT\_HIST)
- [VISP](#) (VCRYPT\_ISP)

- [VISPHist](#) (V\_ISP\_HIST)
- [VIntValueElement](#) (VCRYPT\_INT\_VALUE\_ELEMENT)
- [VJavaBinaryClass](#) (VR\_JAVA\_BIN)
- [VJavaBinaryClassHist](#) (VR\_JAVA\_BIN\_HIST)
- [VLocationLookup](#) (V\_LOC\_LOOKUP)
- [VLocationUpdateLogs](#) (V\_UPD\_LOGS)
- [VLocationUpdateSession](#) (V\_LOC\_UPD\_SESS)
- [VLongValueElement](#) (VCRYPT\_LONG\_VALUE\_ELEMENT)
- [VMaxBlock](#) (VR\_MAX\_BLOCKS)
- [VMaxBlockHist](#) (VR\_MAX\_BLOCKS\_HIST)
- [VMaxBlockLogs](#) (VR\_MAX\_BLOCKS\_LOGS)
- [VModelLog](#) (VR\_MODEL\_LOGS)
- [VMonitorData](#) (V\_MONITOR\_DATA)
- [VPattern](#) (V\_PATTERN)
- [VPatternEntity](#) (V\_PATTERN\_ENTITY)
- [VPatternEntityHist](#) (V\_PATTERN\_ENTITY\_HIST)
- [VPatternEntityOperation](#) (V\_PAT\_ENT\_OPER)
- [VPatternEntityOperationHist](#) (V\_PAT\_ENT\_OPER\_HIST)
- [VPatternHist](#) (V\_PATTERN\_HIST)
- [VPatternParam](#) (V\_PATTERN\_PARAM)
- [VPatternParamHist](#) (V\_PATTERN\_PARAM\_HIST)
- [VPolicy](#) (VR\_POLICY)
- [VPolicyHist](#) (VR\_POLICY\_HIST)
- [VPolicyLog](#) (VR\_POLICY\_LOGS)
- [VPolicySet](#) (VR\_POLICY\_SET)
- [VPolicySetHist](#) (VR\_POLICY\_SET\_HIST)
- [VPolicySetLog](#) (VR\_POLICYSET\_LOGS)
- [VPolicySetPkg](#) (V\_POLICY\_SET\_PKG)
- [VProfile](#) (VCRYPT\_PROFILE)
- [VProfileHist](#) (VCRYPT\_PROFILE\_HIST)
- [VProfileListMap](#) (VCRYPT\_PROFILE\_LIST\_MAP)
- [VProfileListMapHist](#) (VCRYPT\_PROFILE\_LIST\_MAP\_HIST)
- [VProfileRuleMap](#) (VCRYPT\_PROFILE\_RULE\_MAP)
- [VProfileRuleMapHist](#) (VCRYPT\_PROFILE\_RULE\_MAP\_HIST)
- [VQuestionCategory](#) (V\_Q\_CATEGORY)
- [VQuestionCategoryHist](#) (V\_Q\_CATEGORY\_HIST)
- [VRAConfig](#) (VRA\_CONFIG)

- [VRAConfigHist](#) (VRA\_CONFIG\_HIST)
- [VRAConfigProperty](#) (VRA\_CONFIG\_PROP)
- [VRAConfigPropertyHist](#) (VRA\_CONFIG\_PROP\_HIST)
- [VRADeviceMap](#) (VRA\_DEVICE\_MAP)
- [VRAReports](#) (VRA\_REPORTS)
- [VRARunLogs](#) (VRA\_RUN\_LOGS)
- [VRARunSession](#) (VRA\_RUN\_SESS)
- [VRARunSessionHist](#) (VRA\_RUN\_SESS\_HIST)
- [VRASchedule](#) (VRA\_SCHEDULE)
- [VRAScheduleHist](#) (VRA\_SCHEDULE\_HIST)
- [VRASessionSet](#) (VRA\_SESS\_SET)
- [VRASessionSetHist](#) (VRA\_SESS\_SET\_HIST)
- [VReportQuery](#) (V\_REP\_QUERY)
- [VReportQueryHist](#) (V\_REP\_QUERY\_HIST)
- [VReportSaved](#) (V\_REP\_SAVED)
- [VReportSavedHist](#) (V\_REP\_SAVED\_HIST)
- [VReportSchedule](#) (V\_REP\_SCHED)
- [VReportScheduleHist](#) (V\_REP\_SCHED\_HIST)
- [VRule](#) (VCRYPT\_RULE)
- [VRuleCondition](#) (VR\_RULE\_CONDN)
- [VRuleConditionHist](#) (VR\_RULE\_CONDN\_HIST)
- [VRuleConditionMap](#) (VR\_RULE\_CONDN\_MAP)
- [VRuleConditionMapHist](#) (VR\_RULE\_CONDN\_MAP\_HIST)
- [VRuleConditionScope](#) (VR\_RULE\_CONDN\_SCOPE)
- [VRuleConditionScopeHist](#) (VR\_RULE\_CONDN\_SCOPE\_HIST)
- [VRuleException](#) (VR\_EXCEPTION)
- [VRuleExceptionHist](#) (VR\_EXCEPTION\_HIST)
- [VRuleHist](#) (VCRYPT\_RULE\_HIST)
- [VRuleLog](#) (VR\_RULE\_LOGS)
- [VRuleOverRide](#) (VR\_OVERRIDE)
- [VRuleOverRideHist](#) (VR\_OVERRIDE\_HIST)
- [VRuleOverRideLog](#) (VR\_OVERRIDE\_LOGS)
- [VRuleParam](#) (VCRYPT\_RULE\_PARAMS)
- [VRuleParamCustom](#) (VR\_RULE\_PARAM\_CUSTOM)
- [VRuleParamCustomHist](#) (VR\_RULE\_PARAM\_CUSTOM\_HIST)
- [VRuleParamHist](#) (VCRYPT\_RULE\_PARAMS\_HIST)
- [VRuleParamValue](#) (VCRYPT\_RULE\_PARAM\_VALUES)

- [VRuleParamValueHist](#) (VCRYPT\_RULE\_PARAM\_VALUES\_HIST)
- [VRuleSetColumn](#) (VR\_RULESET\_COL)
- [VRuleSetColumnHist](#) (VR\_RULESET\_COL\_HIST)
- [VRuleSetRow](#) (VR\_RULESET\_ROW)
- [VRuleSetRowHist](#) (VR\_RULESET\_ROW\_HIST)
- [VRuleVersion](#) (VR\_VERSION)
- [VRuleVersionHist](#) (VR\_VERSION\_HIST)
- [VRuleVersionMap](#) (VR\_VERSION\_MAP)
- [VRuleVersionTree](#) (VR\_VERSION\_TREE)
- [VRunStatus](#) (V\_RUN\_STATUS)
- [VRunStatusHist](#) (V\_RUN\_STATUS\_HIST)
- [VScoreAction](#) (VR\_SCORE\_ACTION)
- [VScoreActionHist](#) (VR\_SCORE\_ACTION\_HIST)
- [VState](#) (VCRYPT\_STATE)
- [VStateHist](#) (V\_STATE\_HIST)
- [VStringValueElement](#) (VCRYPT\_STRING\_VALUE\_ELEMENT)
- [VSystemLogs](#) (V\_SYS\_LOGS)
- [VTBaseIPProfile](#) (VT\_BASE\_IP\_PROFILE)
- [VTCityProfile](#) (VT\_CITY\_PROFILE)
- [VTCountryProfile](#) (VT\_COUNTRY\_PROFILE)
- [VTDataDef](#) (VT\_DATA\_DEF)
- [VTDataDefElement](#) (VT\_DATA\_DEF\_ELEM)
- [VTDataDefElementHist](#) (VT\_DATA\_DEF\_ELEM\_HIST)
- [VTDataDefElementTranslation](#) (VT\_ELEM\_DEF\_TRANS)
- [VTDataDefElementTranslationHist](#) (VT\_ELEM\_DEF\_TRANS\_HIST)
- [VTDataDefHist](#) (VT\_DATA\_DEF\_HIST)
- [VTDataDefMap](#) (VT\_DATA\_DEF\_MAP)
- [VTDataDefMapHist](#) (VT\_DATA\_DEF\_MAP\_HIST)
- [VTDataDefTranslation](#) (VT\_DATA\_DEF\_TRANS)
- [VTDataDefTranslationHist](#) (VT\_DATA\_DEF\_TRANS\_HIST)
- [VTDeviceProfile](#) (VT\_DEVICE\_PROFILE)
- [VTEntityDef](#) (VT\_ENTITY\_DEF)
- [VTEntityDefEntityDefMap](#) (VT\_ENT\_DEFS\_MAP)
- [VTEntityDefEntityDefMapHist](#) (VT\_ENT\_DEFS\_MAP\_HIST)
- [VTEntityDefHist](#) (VT\_ENTITY\_DEF\_HIST)
- [VTEntityOne](#) (VT\_ENTITY\_ONE)
- [VTEntityOneMap](#) (VT\_USER\_ENTITY1\_MAP)



- [VTEntityOneProfile](#) (VT\_ENTITY\_ONE\_PROFILE)
- [VTEntityTrxMap](#) (VT\_ENT\_TRX\_MAP)
- [VTIPProfile](#) (VT\_IP\_PROFILE)
- [VTInvalidUser](#) (VT\_INVALID\_USERS)
- [VTSessionActionMap](#) (VT\_SESSION\_ACTION\_MAP)
- [VTSessionFPMap](#) (VT\_SESS\_FP\_MAP)
- [VTStateProfile](#) (VT\_STATE\_PROFILE)
- [VTTranslationSourceElement](#) (VT\_TRANS\_SRC\_ELEM)
- [VTTranslationSourceElementHist](#) (VT\_TRANS\_SRC\_ELEM\_HIST)
- [VTTrxDData](#) (VT\_TRX\_DATA)
- [VTTrxDef](#) (VT\_TRX\_DEF)
- [VTTrxDefEntityDefMap](#) (VT\_TRX\_ENT\_DEFS\_MAP)
- [VTTrxDefEntityDefMapHist](#) (VT\_TRX\_ENT\_DEFS\_MAP\_HIST)
- [VTTrxDefHist](#) (VT\_TRX\_DEF\_HIST)
- [VTTrxInputDef](#) (VT\_TRX\_INPUT\_DEF)
- [VTTrxInputDefHist](#) (VT\_TRX\_INPUT\_DEF\_HIST)
- [VTUser](#) (VT\_USER)
- [VTUserDeviceMap](#) (VT\_USER\_DEVICE\_MAP)
- [VTUserGroup](#) (VT\_USER\_GROUPS)
- [VTUserProfile](#) (VT\_USER\_PROFILE)
- [VTUserSession](#) (VT\_USER\_SESS)
- [VTWFDays](#) (VT\_WF\_DAYS)
- [VTWFHours](#) (VT\_WF\_HOURS)
- [VTWFMonths](#) (VT\_WF\_MONTHS)
- [VTWFYears](#) (VT\_WF\_YEARS)
- [VTransactionLog](#) (VT\_TRX\_LOGS)
- [VValueList](#) (VCRYPT\_VALUE\_LIST)
- [VValueListHist](#) (VCRYPT\_VALUE\_LIST\_HIST)

## 5.1.2 Tables and Index in category 1

Class Name	Table Name	Table TS	Index TS	Table Intrans	Index Intrans
VCryptAccount	VCRYPT_ACCOUNTS	BRSATBS1	BRSAINDX1	2	2
VCryptAccountHist	VCRYPT_ACCOUNTS_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptUserGroup	VCRYPT_USER_GROUPS	BRSATBS1	BRSAINDX1	2	2
VCryptUserRole	VCRYPT_USER_ROLES	BRSATBS1	BRSAINDX1	2	2
VCryptUserGroupRoleMap	VCRYPT_USERGROUP_ROLE_MAPS	BRSATBS1	BRSAINDX1	2	2

Class Name	Table Name	Table TS	Index TS	Table Intrans	Index Intrans
VCryptUserHist	VCRYPT_USERS_HIST	BRSATBS1	BRSAINDX1	2	2
VQuestionCategory	V_Q_CATEGORY	BRSATBS1	BRSAINDX1	2	2
VQuestionCategoryHist	V_Q_CATEGORY_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptUserQuestion	V_USER_QUESTIONS	BRSATBS1	BRSAINDX1	2	2
VCryptUserQuestionHist	V_USER_QUESTIONS_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptQuestionGlobalValidation	V_Q_GLOBAL_VALID	BRSATBS1	BRSAINDX1	2	2
VCryptQuestionGlobalValidationHist	V_Q_GLOBAL_VALID_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptQuestionValidationMap	V_Q_VALIDATION_MAP	BRSATBS1	BRSAINDX1	2	2
VCryptQuestionValidationMapHist	V_Q_VALIDATION_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptValidation	V_VALIDATION	BRSATBS1	BRSAINDX1	2	2
VCryptValidationHist	V_VALIDATION_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptGlobalAnswerHint	V_GLOBAL_ANS_HINT	BRSATBS1	BRSAINDX1	2	2
VCryptGlobalAnswerHintHist	V_GLOBAL_ANS_HINT_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptQuestionAnswerHintMap	V_Q_ANS_HINT_MAP	BRSATBS1	BRSAINDX1	2	2
VCryptQuestionAnswerHintMapHist	V_Q_ANS_HINT_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptAnswerHint	V_ANS_HINT	BRSATBS1	BRSAINDX1	2	2
VCryptAnswerHintHist	V_ANS_HINT_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptUserQA	V_USER_QA	BRSATBS1	BRSAINDX1	2	2
VCryptUserQAHist	V_USER_QA_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptScoringPolicy	V_SCORING_POLICY	BRSATBS1	BRSAINDX1	2	2
VCryptScoringPolicyHist	V_SCORING_POLICY_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptScoreAttributes	V_SCORE_ATTR	BRSATBS1	BRSAINDX1	2	2
VCryptScoreAttributesHist	V_SCORE_ATTR_HIST	BRSATBS1	BRSAINDX1	2	2
VMonitorData	V_MONITOR_DATA	BRSATBS1	BRSAINDX1	2	2
VBharosaConfig	V_B_CONFIG	BRSATBS1	BRSAINDX1	2	2
VBharosaConfigHist	V_B_CONFIG_HIST	BRSATBS1	BRSAINDX1	2	2
VBharosaEnum	V_B_ENUM	BRSATBS1	BRSAINDX1	2	2
VBharosaEnumHist	V_B_ENUM_HIST	BRSATBS1	BRSAINDX1	2	2
VBharosaEnumElement	V_B_ENUM_ELMNT	BRSATBS1	BRSAINDX1	2	2
VBharosaEnumElementHist	V_B_ENUM_ELMNT_HIST	BRSATBS1	BRSAINDX1	2	2
VBharosaEnumElementAttribute	V_B_ENUM_ELMNT_ATTR	BRSATBS1	BRSAINDX1	2	2
VBharosaEnumElementAttributeHist	V_B_ENUM_ELMNT_ATTR_HIST	BRSATBS1	BRSAINDX1	2	2
VBharosaLocale	V_B_LOCALE	BRSATBS1	BRSAINDX1	2	2
VBharosaLocaleHist	V_B_LOCALE_HIST	BRSATBS1	BRSAINDX1	2	2
VBharosaConfigRB	V_B_CONFIG_RB	BRSATBS1	BRSAINDX1	2	2
VPattern	V_PATTERN	BRSATBS1	BRSAINDX1	2	2
VPatternHist	V_PATTERN_HIST	BRSATBS1	BRSAINDX1	2	2
VPatternEntity	V_PATTERN_ENTITY	BRSATBS1	BRSAINDX1	2	2
VPatternEntityHist	V_PATTERN_ENTITY_HIST	BRSATBS1	BRSAINDX1	2	2
VPatternParam	V_PATTERN_PARAM	BRSATBS1	BRSAINDX1	2	2
VPatternParamHist	V_PATTERN_PARAM_HIST	BRSATBS1	BRSAINDX1	2	2
VPatternEntityOperation	V_PAT_ENT_OPER	BRSATBS1	BRSAINDX1	2	2

Class Name	Table Name	Table TS	Index TS	Table Initrans	Index Initrans
VPatternEntityOperationHist	V_PAT_ENT_OPER_HIST	BRSATBS1	BRSAINDX1	2	2
VCryptFingerPrint	V_FPRINTS	BRSATBS1	BRSAINDX1	2	2
VCryptFPNameValue	V_FP_NV	BRSATBS1	BRSAINDX1	2	2
VCryptFPMap	V_FP_MAP	BRSATBS1	BRSAINDX1	2	2
VCryptUserLog	VCRYPT_USER_LOGS	BRSATBS1	BRSAINDX1	2	2
VCryptPinReset	VCRYPT_PIN_RESETS	BRSATBS1	BRSAINDX1	2	2
VCryptPinRetrieval	VCRYPT_PIN_RETRIEVALS	BRSATBS1	BRSAINDX1	2	2
VCryptAuthSessionGroup	VCRYPT_AUTH_SESSION_GROUPS	BRSATBS1	BRSAINDX1	2	2
VCryptAuthSession	VCRYPT_AUTH_SESSIONS	BRSATBS1	BRSAINDX1	2	2
VCryptAuthAttempt	VCRYPT_AUTH_ATTEMPTS	BRSATBS1	BRSAINDX1	2	2
VCryptSystemMessage	VCRYPT_SYS_MESSAGES	BRSATBS1	BRSAINDX1	2	2
VSystemLogs	V_SYS_LOGS	BRSATBS1	BRSAINDX1	2	2
VCryptDBPatch	VCRYPT_DB_PATCHES	BRSATBS1	BRSAINDX1	2	2
VActionLogSession	V_ACTION_LOG_SESS	BRSATBS1	BRSAINDX1	2	2
VActionLog	V_ACTION_LOGS	BRSATBS1	BRSAINDX1	2	2
VTInvalidUser	VT_INVALID_USERS	BRSATBS1	BRSAINDX1	2	2
VTSessionActionMap	VT_SESSION_ACTION_MAP	BRSATBS1	BRSAINDX1	2	2
VTUserGroup	VT_USER_GROUPS	BRSATBS1	BRSAINDX1	2	2
VTWFYears	VT_WF_YEARS	BRSATBS1	BRSAINDX1	16	16
VTWFMonths	VT_WF_MONTHS	BRSATBS1	BRSAINDX1	16	16
VTWFDays	VT_WF_DAYS	BRSATBS1	BRSAINDX1	16	16
VTWFHours	VT_WF_HOURS	BRSATBS1	BRSAINDX1	16	16
VTTrxDef	VT_TRX_DEF	BRSATBS1	BRSAINDX1	2	2
VTTrxDefHist	VT_TRX_DEF_HIST	BRSATBS1	BRSAINDX1	2	2
VTTrxInputDef	VT_TRX_INPUT_DEF	BRSATBS1	BRSAINDX1	2	2
VTTrxInputDefHist	VT_TRX_INPUT_DEF_HIST	BRSATBS1	BRSAINDX1	2	2
VTEntityDef	VT_ENTITY_DEF	BRSATBS1	BRSAINDX1	2	2
VTEntityDefHist	VT_ENTITY_DEF_HIST	BRSATBS1	BRSAINDX1	2	2
VTTrxDefEntityDefMap	VT_TRX_ENT_DEFS_MAP	BRSATBS1	BRSAINDX1	2	2
VTTrxDefEntityDefMapHist	VT_TRX_ENT_DEFS_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VTEntityDefEntityDefMap	VT_ENT_DEFS_MAP	BRSATBS1	BRSAINDX1	2	2
VTEntityDefEntityDefMapHist	VT_ENT_DEFS_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VTDataDef	VT_DATA_DEF	BRSATBS1	BRSAINDX1	2	2
VTDataDefHist	VT_DATA_DEF_HIST	BRSATBS1	BRSAINDX1	2	2
VTDataDefElement	VT_DATA_DEF_ELEM	BRSATBS1	BRSAINDX1	2	2
VTDataDefElementHist	VT_DATA_DEF_ELEM_HIST	BRSATBS1	BRSAINDX1	2	2
VTDataDefMap	VT_DATA_DEF_MAP	BRSATBS1	BRSAINDX1	2	2
VTDataDefMapHist	VT_DATA_DEF_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VTDataDefTranslation	VT_DATA_DEF_TRANS	BRSATBS1	BRSAINDX1	2	2
VTDataDefTranslationHist	VT_DATA_DEF_TRANS_HIST	BRSATBS1	BRSAINDX1	2	2
VTDataDefElementTranslation	VT_ELEM_DEF_TRANS	BRSATBS1	BRSAINDX1	2	2
VTDataDefElementTranslationHist	VT_ELEM_DEF_TRANS_HIST	BRSATBS1	BRSAINDX1	2	2

Class Name	Table Name	Table TS	Index TS	Table Initrans	Index Initrans
VTTranslationSourceElement	VT_TRANS_SRC_ELEM	BRSATBS1	BRSAINDX1	2	2
VTTranslationSourceElementHist	VT_TRANS_SRC_ELEM_HIST	BRSATBS1	BRSAINDX1	2	2
VCountry	VCRYPT_COUNTRY	BRSATBS1	BRSAINDX1	2	2
VCountryHist	V_COUNTRY_HIST	BRSATBS1	BRSAINDX1	2	2
VState	VCRYPT_STATE	BRSATBS1	BRSAINDX1	2	2
VStateHist	V_STATE_HIST	BRSATBS1	BRSAINDX1	2	2
VCity	VCRYPT_CITY	BRSATBS1	BRSAINDX1	2	2
VCityHist	V_CITY_HIST	BRSATBS1	BRSAINDX1	2	2
VISP	VCRYPT_ISP	BRSATBS1	BRSAINDX1	2	2
VISPHist	V_ISP_HIST	BRSATBS1	BRSAINDX1	2	2
VLocationLookup	V_LOC_LOOKUP	BRSATBS1	BRSAINDX1	2	2
VIPLocationMap	VCRYPT_IP_LOCATION_MAP	BRSATBS1	BRSAINDX1	2	2
VIPLocationMapHist	V_IP_LOC_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VIPLocationMapSplit	V_IP_LOC_MAP_SPLIT	BRSATBS1	BRSAINDX1	2	2
VIPLocationMapSplitHist	V_IP_LOC_MAP_SPLIT_HIST	BRSATBS1	BRSAINDX1	2	2
VLocationUpdateSession	V_LOC_UPD_SESS	BRSATBS1	BRSAINDX1	2	2
VLocationUpdateLogs	V_UPD_LOGS	BRSATBS1	BRSAINDX1	2	2
VIPCluster	VT_IP_CLUSTER	BRSATBS1	BRSAINDX1	2	2
VIPClusterGroup	VT_IP_CLUSTER_GROUP	BRSATBS1	BRSAINDX1	2	2
VIPClusterGroupMap	VT_IP_CLUSTER_GROUPMAP	BRSATBS1	BRSAINDX1	2	2
VRuleVersion	VR_VERSION	BRSATBS1	BRSAINDX1	2	2
VRuleVersionHist	VR_VERSION_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleVersionTree	VR_VERSION_TREE	BRSATBS1	BRSAINDX1	2	2
VRuleVersionMap	VR_VERSION_MAP	BRSATBS1	BRSAINDX1	2	2
VRule	VCRYPT_RULE	BRSATBS1	BRSAINDX1	2	2
VRuleHist	VCRYPT_RULE_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleCondition	VR_RULE_CONDN	BRSATBS1	BRSAINDX1	2	2
VRuleConditionHist	VR_RULE_CONDN_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleConditionScope	VR_RULE_CONDN_SCOPE	BRSATBS1	BRSAINDX1	2	2
VRuleConditionScopeHist	VR_RULE_CONDN_SCOPE_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleConditionMap	VR_RULE_CONDN_MAP	BRSATBS1	BRSAINDX1	2	2
VRuleConditionMapHist	VR_RULE_CONDN_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleParam	VCRYPT_RULE_PARAMS	BRSATBS1	BRSAINDX1	2	2
VRuleParamHist	VCRYPT_RULE_PARAMS_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleParamCustom	VR_RULE_PARAM_CUSTOM	BRSATBS1	BRSAINDX1	2	2
VRuleParamCustomHist	VR_RULE_PARAM_CUSTOM_HIST	BRSATBS1	BRSAINDX1	2	2
VProfile	VCRYPT_PROFILE	BRSATBS1	BRSAINDX1	2	2
VProfileHist	VCRYPT_PROFILE_HIST	BRSATBS1	BRSAINDX1	2	2
VProfileRuleMap	VCRYPT_PROFILE_RULE_MAP	BRSATBS1	BRSAINDX1	2	2
VProfileRuleMapHist	VCRYPT_PROFILE_RULE_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VProfileListMap	VCRYPT_PROFILE_LIST_MAP	BRSATBS1	BRSAINDX1	2	2
VProfileListMapHist	VCRYPT_PROFILE_LIST_MAP_HIST	BRSATBS1	BRSAINDX1	2	2

Class Name	Table Name	Table TS	Index TS	Table Intrans	Index Intrans
VRuleParamValue	VCRYPT_RULE_PARAM_VALUES	BRSATBS1	BRSAINDX1	2	2
VRuleParamValueHist	VCRYPT_RULE_PARAM_VALUES_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleOverRide	VR_OVERRIDE	BRSATBS1	BRSAINDX1	2	2
VRuleOverRideHist	VR_OVERRIDE_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleOverRideLog	VR_OVERRIDE_LOGS	BRSATBS1	BRSAINDX1	2	2
VRuleException	VR_EXCEPTION	BRSATBS1	BRSAINDX1	2	2
VRuleExceptionHist	VR_EXCEPTION_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleSetRow	VR_RULESET_ROW	BRSATBS1	BRSAINDX1	2	2
VRuleSetRowHist	VR_RULESET_ROW_HIST	BRSATBS1	BRSAINDX1	2	2
VRuleSetColumn	VR_RULESET_COL	BRSATBS1	BRSAINDX1	2	2
VRuleSetColumnHist	VR_RULESET_COL_HIST	BRSATBS1	BRSAINDX1	2	2
VScoreAction	VR_SCORE_ACTION	BRSATBS1	BRSAINDX1	2	2
VScoreActionHist	VR_SCORE_ACTION_HIST	BRSATBS1	BRSAINDX1	2	2
VMaxBlock	VR_MAX_BLOCKS	BRSATBS1	BRSAINDX1	2	2
VMaxBlockHist	VR_MAX_BLOCKS_HIST	BRSATBS1	BRSAINDX1	2	2
VMaxBlockLogs	VR_MAX_BLOCKS_LOGS	BRSATBS1	BRSAINDX1	2	2
VPolicySetPkg	V_POLICY_SET_PKG	BRSATBS1	BRSAINDX1	2	2
VPolicySet	VR_POLICY_SET	BRSATBS1	BRSAINDX1	2	2
VPolicySetHist	VR_POLICY_SET_HIST	BRSATBS1	BRSAINDX1	2	2
VPolicy	VR_POLICY	BRSATBS1	BRSAINDX1	2	2
VPolicyHist	VR_POLICY_HIST	BRSATBS1	BRSAINDX1	2	2
VDynamicAction	VR_DYN_ACTION	BRSATBS1	BRSAINDX1	2	2
VDynamicActionHist	VR_DYN_ACTION_HIST	BRSATBS1	BRSAINDX1	2	2
VDynamicActionParam	VR_DYN_ACT_PAR	BRSATBS1	BRSAINDX1	2	2
VDynamicActionParamHist	VR_DYN_ACT_PAR_HIST	BRSATBS1	BRSAINDX1	2	2
VDynamicActionInstance	VR_DYN_ACTION_INST	BRSATBS1	BRSAINDX1	2	2
VDynamicActionInstanceHist	VR_DYN_ACTION_INST_HIST	BRSATBS1	BRSAINDX1	2	2
VDynamicActionParamValue	VR_DYN_ACT_PAR_VAL	BRSATBS1	BRSAINDX1	2	2
VDynamicActionParamValueHist	VR_DYN_ACT_PAR_VAL_HIST	BRSATBS1	BRSAINDX1	2	2
VDynamicActionExecLog	VT_DYN_ACT_EXEC_LOG	BRSATBS1	BRSAINDX1	2	2
VAlertTemplate	VCRYPT_ALERT_TEMPLATES	BRSATBS1	BRSAINDX1	2	2
VAlertTemplateHist	VCRYPT_ALERT_TEMPLATES_HIST	BRSATBS1	BRSAINDX1	2	2
VRunStatus	V_RUN_STATUS	BRSATBS1	BRSAINDX1	2	2
VRunStatusHist	V_RUN_STATUS_HIST	BRSATBS1	BRSAINDX1	2	2
VCacheStatus	VCRYPT_CACHE_STATUS	BRSATBS1	BRSAINDX1	2	2
VGlobalLookup	V_G_LOOKUP	BRSATBS1	BRSAINDX1	2	2
VGlobalLookupHist	V_G_LOOKUP_HIST	BRSATBS1	BRSAINDX1	2	2
VReportQuery	V_REP_QUERY	BRSATBS1	BRSAINDX1	2	2
VReportQueryHist	V_REP_QUERY_HIST	BRSATBS1	BRSAINDX1	2	2
VReportSchedule	V_REP_SCHED	BRSATBS1	BRSAINDX1	2	2
VReportScheduleHist	V_REP_SCHED_HIST	BRSATBS1	BRSAINDX1	2	2
VReportSaved	V_REP_SAVED	BRSATBS1	BRSAINDX1	2	2

Class Name	Table Name	Table TS	Index TS	Table Initrans	Index Initrans
VReportSavedHist	V_REP_SAVED_HIST	BRSATBS1	BRSAINDX1	2	2
VJavaBinaryClass	VR_JAVA_BIN	BRSATBS1	BRSAINDX1	2	2
VJavaBinaryClassHist	VR_JAVA_BIN_HIST	BRSATBS1	BRSAINDX1	2	2
VAlert	VCRYPT_ALERT	BRSATBS1	BRSAINDX1	16	16
VCSRCase	V_CASE	BRSATBS1	BRSAINDX1	2	2
VCSRCaseHist	V_CASE_HIST	BRSATBS1	BRSAINDX1	2	2
VCaseActionLogSessionMap	V_ACTION_LOG_SESS_MAP	BRSATBS1	BRSAINDX1	2	2
VCaseMap	V_CASE_MAP	BRSATBS1	BRSAINDX1	2	2
VCaseMapHist	V_CASE_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VAdminUser	V_ADMIN_USER	BRSATBS1	BRSAINDX1	2	2
VAdminUserHist	V_ADMIN_USER_HIST	BRSATBS1	BRSAINDX1	2	2
VAdminUserGroup	V_ADMIN_USERGROUP	BRSATBS1	BRSAINDX1	2	2
VAdminUserGroupHist	V_ADMIN_USER_GROUP_HIST	BRSATBS1	BRSAINDX1	2	2
VAdminUserGroupMap	V_ADMIN_USERGROUP_MAP	BRSATBS1	BRSAINDX1	2	2
VAdminUserGroupMapHist	V_ADMIN_USERGROUP_MAP_HIST	BRSATBS1	BRSAINDX1	2	2
VAdminUserProfile	V_ADMIN_USERPROFILE	BRSATBS1	BRSAINDX1	2	2
VAdminUserProfileHist	V_ADMIN_USER_PROFILE_HIST	BRSATBS1	BRSAINDX1	2	2
VRAConfig	VRA_CONFIG	BRSATBS1	BRSAINDX1	2	2
VRAConfigHist	VRA_CONFIG_HIST	BRSATBS1	BRSAINDX1	2	2
VRAConfigProperty	VRA_CONFIG_PROP	BRSATBS1	BRSAINDX1	2	2
VRAConfigPropertyHist	VRA_CONFIG_PROP_HIST	BRSATBS1	BRSAINDX1	2	2
VRARunLogs	VRA_RUN_LOGS	BRSATBS1	BRSAINDX1	2	2
VRASessionSet	VRA_SESS_SET	BRSATBS1	BRSAINDX1	2	2
VRASessionSetHist	VRA_SESS_SET_HIST	BRSATBS1	BRSAINDX1	2	2
VRARunSession	VRA_RUN_SESS	BRSATBS1	BRSAINDX1	2	2
VRARunSessionHist	VRA_RUN_SESS_HIST	BRSATBS1	BRSAINDX1	2	2
VRAReports	VRA_REPORTS	BRSATBS1	BRSAINDX1	2	2
VRASchedule	VRA_SCHEDULE	BRSATBS1	BRSAINDX1	2	2
VRAScheduleHist	VRA_SCHEDULE_HIST	BRSATBS1	BRSAINDX1	2	2
VRADeviceMap	VRA_DEVICE_MAP	BRSATBS1	BRSAINDX1	2	2

### 5.1.3 Tables and Index in category 2

Class Name	Table Name	Table TS	Index TS	Table Initrans	Index Initrans
VCryptTrackerNode	VCRYPT_TRACKER_NODE	BRSATBS2	BRSAINDX2	16	16
VCryptTrackerNodeHistory	VCRYPT_TRACKER_NODE_HISTORY	BRSATBS2	BRSAINDX2	16	16

### 5.1.4 Tables and Index in category 3

Class Name	Table Name	Table TS	Index TS	Table Initranss	Index Initranss
VTUserSession	VT_USER_SESS	BRSATBS3	BRSAINDX3	16	16
VCryptTrackerUserNodeLog	VCRYPT_TRACKER_USERNODE_LOGS	BRSATBS3	BRSAINDX3	16	16
VTSessionFPMap	VT_SESS_FP_MAP	BRSATBS3	BRSAINDX3	16	16
VTUserDeviceMap	VTUserDeviceMap	BRSATBS3	BRSAINDX3	16	16
VTEntityOneProfile	VT_ENTITY_ONE_PROFILE	BRSATBS3	BRSAINDX3	16	16
VTEntityOneMap	VT_USER_ENTITY1_MAP	BRSATBS3	BRSAINDX3	16	16
VTEntityTrxMap	VT_ENT_TRX_MAP	BRSATBS3	BRSAINDX3	16	16
VTUserProfile	VT_USER_PROFILE	BRSATBS3	BRSAINDX3	16	16
VTDeviceProfile	VT_DEVICE_PROFILE	BRSATBS3	BRSAINDX3	16	16
VTIPProfile	VT_IP_PROFILE	BRSATBS3	BRSAINDX3	16	16
VTBaseIPProfile	VT_BASE_IP_PROFILE	BRSATBS3	BRSAINDX3	16	16
VTCountryProfile	VT_COUNTRY_PROFILE	BRSATBS3	BRSAINDX3	16	16
VTStateProfile	VT_STATE_PROFILE	BRSATBS3	BRSAINDX3	16	16
VTCityProfile	VT_CITY_PROFILE	BRSATBS3	BRSAINDX3	16	16
VTTrxData	VT_TRX_DATA	BRSATBS3	BRSAINDX3	16	16

### 5.1.5 Tables and Index in category 4

Class Name	Table Name	Table TS	Index TS	Table Initranss	Index Initranss
VTransactionLog	VT_TRX_LOGS	BRSATBS4	BRSAINDX4	16	16
VPolicySetLog	VR_POLICYSET_LOGS	BRSATBS4	BRSAINDX4	16	16
VPolicyLog	VR_POLICY_LOGS	BRSATBS4	BRSAINDX4	16	16
VModelLog	VR_MODEL_LOGS	BRSATBS4	BRSAINDX4	16	16
VRuleLog	VR_RULE_LOGS	BRSATBS4	BRSAINDX4	16	16

## 5.2 Details of each class

### 5.2.1 VCryptAccount

**Description:** These are the vcrypt accounts.

**Database table name :** VCRYPT\_ACCOUNTS

**Primary Keys :** acctId (ACCT\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
acctId	ACCT_ID (PK)	BIGINT	Long	Id for this account	16	-
acctName	ACCT_NAME	TEXT	String	Name of this account	4000	-
acctStatus	ACCT_STATUS	INT	int	Status of this account.	2	STATUS_ACTIVE STATUS_INACTIVE STATUS_DELETED

Name	DB name	DB type	Java type	Description	Length	Enum values
acctType	ACCT_TYPE	INT	int	Type of this account.	-	-
groupId	GROUP_ID	BIGINT	Long	Group Id to which account belongs to	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this account was created	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
acctContact	ACCT_CONTACT	TEXT	String	Contact information for this account.	4000	-
notes	NOTES	TEXT	String	Notes for this account	4000	-

### 5.2.2 VCryptAccountHist

Description: These are the vcrypt accounts shadow table.

Database table name : VCRYPT\_ACCOUNTS\_HIST

Primary Keys : logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	BIGINT	Date	Active from time.	-
toTime	TO_TIME	BIGINT	Date	Active from time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
acctId	ACCT_ID	BIGINT	Long	Id for this account	16
acctName	ACCT_NAME	TEXT	String	Name of this account	4000
acctStatus	ACCT_STATUS	INT	int	Status of this account.	2
acctType	ACCT_TYPE	INT	int	Type of this account.	-
groupId	GROUP_ID	BIGINT	Long	Group Id to which account belongs to	16
acctContact	ACCT_CONTACT	TEXT	String	Contact information for this account.	4000
notes	NOTES	TEXT	String	Notes for this account	4000

### 5.2.3 VCryptUserGroup

Description: This contains the user group details.

Database table name : VCRYPT\_USER\_GROUPS

Primary Keys : userGroupId (GROUP\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
userGroupId	GROUP_ID (PK)	BIGINT	Long	Id for the UserGroup	16	-
groupName	GROUP_NAME	TEXT	String	Name of the group	4000	-



Name	DB name	DB type	Java type	Description	Length	Enum values
description	DESCRIPTION	TEXT	String	Description for this group.	4000	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time.	-	-
groupType	USERGROUP_TYPE_CODE	INT	int	Type of the User group	-	-
status	USERGROUP_STATUS_CODE	INT	int	Status of the User group	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
notes	NOTES	TEXT	String	Note	4000	-

### 5.2.4 VCryptUserRole

Description: This contains the user role details.

Database table name : VCRYPT\_USER\_ROLES

Primary Keys : roleId (ROLE\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
roleId	ROLE_ID (PK)	BIGINT	Long	Id for the UserRole	16	-
roleName	ROLE_NAME	TEXT	String	Name of the role	4000	-
description	DESCRIPTION	TEXT	String	Description for this role.	4000	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time.	-	-
roleType	ROLE_TYPE_CODE	INT	int	Type of the User role	-	-
status	USERROLE_STATUS_CODE	INT	int	Status of the role	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
notes	NOTES	TEXT	String	Note	4000	-

### 5.2.5 VCryptUserGroupRoleMap

Description: This contains mapping of roles to user groups.

Database table name : VCRYPT\_USERGROUP\_ROLE\_MAPS

Primary Keys : mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID (PK)	BIGINT	Long	Id for the map	16

Name	DB name	DB type	Java type	Description	Length
groupId	GROUP_ID	BIGINT	Long	Group Id.	16
roleId	ROLE_ID	BIGINT	Long	Role Id.	16

## 5.2.6 VCryptUser

Description: This contains the user details.

Database table name : VCRYPT\_USERS

Primary Keys : userId (USER\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum value
userId	USER_ID (PK)	BIGINT	Long	Id for the User	16	-
externalUserId	EXT_USER_ID	VARCHAR	String	User id used by the external system	255	-
loginId	LOGIN_ID	VARCHAR	String	Login id of the User	255	-
groupId	GROUP_ID	BIGINT	Long	Group Id.	16	-
acctId	ACCT_ID	BIGINT	Long	Account Id to which this user belongs to	16	-
userName	USER_NAME	VARCHAR	String	Name of the User	255	-
userEmail	USER_EMAIL	VARCHAR	String	Email address of the User.	255	-
password	PASSWORD	VARCHAR	String	Password for the User	255	-
pin	PIN	VARCHAR	String	Password for the User	255	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
statusUpdateTime	STATUS_UPDATE_TIME	DATETIME	Date	Date/Time when the status was updated.	-	-
userType	USER_TYPE_CODE	INT	int	Type of the User	2	USER_USER
authMode	AUTH_MODE_CODE	INT	int	Mode of authorization	2	-
authType	AUTH_TYPE_CODE	INT	int	Type of authorization	2	AUTH_TYPE_NORMAL AUTH_TYPE_VCRYPT AUTH_TYPE_PERSONALIZED_VCRYPT

Name	DB name	DB type	Java type	Description	Length	Enum value
status	USER_STATUS_CODE	INT	int	Status of the User	2	STATUS_PENDING_ACTIVATION STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
isPinEnabled	IS_PIN_ENABLED	CHAR	boolean	Whether PIN is enabled for this user	-	-
isADA	IS_ADA	CHAR	boolean	Is ADA	-	-
isLocked	IS_LOCKED	CHAR	boolean	Is this user locked.	-	-
lockedTime	LOCKED_TIME	DATETIME	Date	Date/Time when this user was locked.	-	-
passwordStatus	PASSWORD_STATUS	INT	int	Status of the password	2	-
passwordUpdateTime	PASSWORD_UPDATE_TIME	DATETIME	Date	Date/Time when the password was last updated.	-	-
passwordHistory	PASSWORD_HISTORY	TEXT	String	List of password which was used by this user.	4000	-
pinStatus	PIN_STATUS	INT	int	Status of the pin	2	-
pinUpdateTime	PIN_UPDATE_TIME	DATETIME	Date	Date/Time when the pin was last updated.	-	-
pinHistory	PIN_HISTORY	TEXT	String	List of pin which was used by this user.	4000	-
imagePath	IMAGE_PATH	VARCHAR	String	Path to the image file	255	-
personalNote	PERSONAL_NOTE	TEXT	String	Personalized note	4000	-
imageStatus	IMAGE_STATUS	INT	int	Status of the image	4	-
phraseStatus	PHRASE_STATUS	INT	int	Status of the phrase	4	-
questionStatus	QUESTION_STATUS	INT	int	Status of the question	4	-
currentQAId	CURRENT_QA_ID	BIGINT	Long	The Id of the current question given to the user	-	-
defaultLocaleId	DEFAULT_LOCALE_ID	BIGINT	Long	Default locale for the user	16	-
phraseLocaleId	PHRASE_LOCALE_ID	BIGINT	Long	Locale for the phrase	16	-

Name	DB name	DB type	Java type	Description	Length	Enum value
notes	NOTES	TEXT	String	Note	4000	-

## 5.2.7 VCryptUserHist

Description: This contains the user details.

Database table name : VCRYPT\_USERS\_HIST

Primary Keys : logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
userId	USER_ID	BIGINT	Long	Id for the User	16
externalUserId	EXT_USER_ID	VARCHAR	String	User id used by the external system	255
loginId	LOGIN_ID	VARCHAR	String	Login id of the User	255
groupId	GROUP_ID	BIGINT	Long	Group Id.	16
acctId	ACCT_ID	BIGINT	Long	Account Id to which this user belongs to	16
userName	USER_NAME	VARCHAR	String	Name of the User	255
userEmail	USER_EMAIL	VARCHAR	String	Email address of the User.	255
password	PASSWORD	VARCHAR	String	Password for the User	255
pin	PIN	VARCHAR	String	Password for the User	255
statusUpdateTime	STATUS_UPDATE_TIME	DATETIME	Date	Date/Time when the status was updated.	-
userType	USER_TYPE_CODE	INT	int	Type of the User	2
authMode	AUTH_MODE_CODE	INT	int	Mode of authorization	2
authType	AUTH_TYPE_CODE	INT	int	Type of authorization	2
status	USER_STATUS_CODE	INT	int	Status of the User	2
isPinEnabled	IS_PIN_ENABLED	CHAR	boolean	Whether PIN is enabled for this user	-
isADA	IS_ADA	CHAR	boolean	Is ADA	-
isLocked	IS_LOCKED	CHAR	boolean	Is this user locked.	-
lockedTime	LOCKED_TIME	DATETIME	Date	Date/Time when this user was locked.	-
passwordStatus	PASSWORD_STATUS	INT	int	Status of the password	2
passwordUpdateTime	PASSWORD_UPDATE_TIME	DATETIME	Date	Date/Time when the password was last updated.	-
passwordHistory	PASSWORD_HISTORY	TEXT	String	List of password which was used by this user.	4000

Name	DB name	DB type	Java type	Description	Length
pinStatus	PIN_STATUS	INT	int	Status of the pin	2
pinUpdateTime	PIN_UPDATE_TIME	DATETIME	Date	Date/Time when the pin was last updated.	-
pinHistory	PIN_HISTORY	TEXT	String	List of pin which was used by this user.	4000
imagePath	IMAGE_PATH	VARCHAR	String	Path to the image file	255
personalNote	PERSONAL_NOTE	TEXT	String	Personalized note	4000
imageStatus	IMAGE_STATUS	INT	int	Status of the image	4
phraseStatus	PHRASE_STATUS	INT	int	Status of the phrase	4
questionStatus	QUESTION_STATUS	INT	int	Status of the question	4
currentQAId	CURRENT_QA_ID	BIGINT	Long	The Id of the current question given to the user	-
defaultLocaleId	DEFAULT_LOCALE_ID	BIGINT	Long	Default locale for the user	16
phraseLocaleId	PHRASE_LOCALE_ID	BIGINT	Long	Locale for the phrase	16
notes	NOTES	TEXT	String	Note	4000

## 5.2.8 VQuestionCategory

Description: Question category

Database table name : V\_Q\_CATEGORY

Primary Keys : categoryId (CATEGORY\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
categoryId	CATEGORY_ID (PK)	BIGINT	Long	Id for the category	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionNumber	VERSION_NUM	INT	int	Version Number	-	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
name	CATEGORY_NAME	TEXT	String	Name of the category	4000	-
nameRBKey	NAME_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description	4000	-
categoryType	CATEGORY_TYPE	INT	int	The type for this category.	6	-
categoryStatus	STATUS	INT	int	The status for this category.	6	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
notes	NOTES	TEXT	String	Note against this question	4000	-

## 5.2.9 VQuestionCategoryHist

Description: User Question shadow table

Database table name : V\_Q\_CATEGORY\_HIST

Primary Keys : logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
categoryId	CATEGORY_ID	BIGINT	Long	Id for the category	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
name	CATEGORY_NAME	TEXT	String	Name of the category	4000
nameRBKey	NAME_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description	4000
categoryType	CATEGORY_TYPE	INT	int	The type for this category.	6
categoryStatus	STATUS	INT	int	The status for this category.	6
notes	NOTES	TEXT	String	Note against this question	4000

### 5.2.10 VCryptUserQuestion

Description: User Question

Database table name : V\_USER\_QUESTIONS

Primary Keys : questionId (QUESTION\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
questionId	QUESTION_ID (PK)	BIGINT	Long	Id for the question	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionNumber	VERSION_NUM	INT	int	Version Number	-	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
questionType	QUESTION_TYPE	INT	int	The type for this question.	2	TYPE_SYSTEM TYPE_USER
questionStatus	QUESTION_STATUS	INT	int	The status for this question.	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
categoryId	QUESTION_CATEGORY	BIGINT	Long	Category of the question	16	-
localeId	LOCALE_ID	BIGINT	Long	Locale for this question	16	-
question	QUESTION	TEXT	String	Question	4000	-

Name	DB name	DB type	Java type	Description	Length	Enum values
help	HELP	TEXT	String	Help for the validation	4000	-
errorText	ERROR_TEXT	TEXT	String	Error text for the validation	4000	-
notes	NOTES	TEXT	String	Note against this question	4000	-

### 5.2.11 VCryptUserQuestionHist

Description: User Question shadow table

Database table name : V\_USER\_QUESTIONS\_HIST

Primary Keys : logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
questionId	QUESTION_ID	BIGINT	Long	Id for the question	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
questionType	QUESTION_TYPE	INT	int	The type for this question.	2
questionStatus	QUESTION_STATUS	INT	int	The status for this question.	2
question	QUESTION	TEXT	String	Question	4000
categoryId	QUESTION_CATEGORY	BIGINT	Long	Category of the question	16
localeId	LOCALE_ID	BIGINT	Long	Locale for this question	16
help	HELP	TEXT	String	Help for the validation	4000
errorText	ERROR_TEXT	TEXT	String	Error text for the validation	4000
notes	NOTES	TEXT	String	Note against this question	4000

### 5.2.12 VCryptQuestionGlobalValidation

Description: Global question validation

Database table name : V\_Q\_GLOBAL\_VALID

Primary Keys : mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
mapId	MAP_ID (PK)	BIGINT	Long	Id for the map	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionNumber	VERSION_NUM	INT	int	Version Number	-	-
validationId	VALIDATION_ID	BIGINT	Long	Id for the validation	16	-

Name	DB name	DB type	Java type	Description	Length	Enum values
status	STATUS	INT	int	The status for this validation.	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-

### 5.2.13 VCryptQuestionGlobalValidationHist

Description: Question validation map history

Database table name : V\_Q\_GLOBAL\_VALID\_HIST

Primary Keys : logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for the map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
validationId	VALIDATION_ID	BIGINT	Long	Id for the validation	16
status	STATUS	INT	int	The status for this validation.	2

### 5.2.14 VCryptQuestionValidationMap

Description: Question validation map

Database table name : V\_Q\_VALIDATION\_MAP

Primary Keys : mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID (PK)	BIGINT	Long	Id for the map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
questionId	QUESTION_ID	BIGINT	Long	Id for the question	16
validationId	VALIDATION_ID	BIGINT	Long	Id for the validation	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-



## 5.2.15 VCryptQuestionValidationMapHist

Description: Question validation map history

Database table name : V\_Q\_VALIDATION\_MAP\_HIST

Primary Keys : logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for the map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
questionId	QUESTION_ID	BIGINT	Long	Id for the question	16
validationId	VALIDATION_ID	BIGINT	Long	Id for the validation	16

## 5.2.16 VCryptValidation

Description: Validation

Database table name : V\_VALIDATION

Primary Keys : validationId (VALIDATION\_ID)

Name	DB name	DB type	Java type	Description	Length
validationId	VALIDATION_ID (PK)	BIGINT	Long	Id for the validation	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
name	NAME	TEXT	String	Name	4000
nameRBKey	NAME_RBKEY	TEXT	String	Resource bundle key for the name	4000
validationScope	VALID_SCOPE	INT	int	What is the scope of the this validation. Whether it works on individual questions or on all the questions. E.g. to support validations like, no 2 answers can be the same.	4
help	HELP	TEXT	String	Help for the validation	4000
errorText	ERROR_TEXT	TEXT	String	Error text for the validation	4000
validationScheme	VALIDATION_SCHEME	INT	int	Validation scheme	-

Name	DB name	DB type	Java type	Description	Length
validationScript	VALIDATION_SCRIPT	TEXT	String	Validation script. This is interpreted based on the validation scheme	4000
javaClass	JAVA_CLASS	TEXT	String	Java class path	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.17 VCryptValidationHist

Description: Validation map history

Database table name : V\_VALIDATION\_HIST

Primary Keys : logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
validationId	VALIDATION_ID	BIGINT	Long	Id for the validation	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
name	NAME	TEXT	String	Name	4000
nameRBKey	NAME_RBKEY	TEXT	String	Resource bundle key for the name	4000
validationScope	VALID_SCOPE	INT	int	What is the scope of the this validation. Whether it works on individual questions or on all the questions. E.g. to support validations like, no 2 answers can be the same.	4
help	HELP	TEXT	String	Help for the validation	4000
errorText	ERROR_TEXT	TEXT	String	Error text for the validation	4000
validationScheme	VALIDATION_SCHEME	INT	int	Validation scheme	-
validationScript	VALIDATION_SCRIPT	TEXT	String	Validation script. This is interpreted based on the validation scheme	4000
javaClass	JAVA_CLASS	TEXT	String	Java class path	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000

Name	DB name	DB type	Java type	Description	Length
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.18 VCryptGlobalAnswerHint

**Description:** Global answer hint

**Database table name :** *V\_GLOBAL\_ANS\_HINT*

**Primary Keys :** mapId (*MAP\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
mapId	MAP_ID ( <i>PK</i> )	BIGINT	Long	Id for the map	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionNumber	VERSION_NUM	INT	int	Version Number	-	-
answerHintId	ANS_HINT_ID	BIGINT	Long	Id for the answer hint	16	-
status	STATUS	INT	int	The status for this validation.	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this hint.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-

### 5.2.19 VCryptGlobalAnswerHintHist

**Description:** Global answer hint. Shadow table

**Database table name :** *V\_GLOBAL\_ANS\_HINT\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for the map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
answerHintId	ANS_HINT_ID	BIGINT	Long	Id for the answer hint	16
status	STATUS	INT	int	The status for this validation.	2

### 5.2.20 VCryptQuestionAnswerHintMap

**Description:** Question answer hint map

**Database table name :***V\_Q\_ANS\_HINT\_MAP*

**Primary Keys :** mapId (*MAP\_ID*)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID ( <i>PK</i> )	BIGINT	Long	Id for the map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
questionId	QUESTION_ID	BIGINT	Long	Id for the question	16
answerHintId	ANS_HINT_ID	BIGINT	Long	Id for the answer hint	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-

### 5.2.21 VCryptQuestionAnswerHintMapHist

**Description:** Question answer hint map history

**Database table name :***V\_Q\_ANS\_HINT\_MAP\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for the map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
questionId	QUESTION_ID	BIGINT	Long	Id for the question	16
answerHintId	ANS_HINT_ID	BIGINT	Long	Id for the answer hint	16

### 5.2.22 VCryptAnswerHint

**Description:** Answer Hint

**Database table name :***V\_ANS\_HINT*

**Primary Keys :** answerHintId (*ANS\_HINT\_ID*)

Name	DB name	DB type	Java type	Descriptions	Length
answerHintId	ANS_HINT_ID ( <i>PK</i> )	BIGINT	Long	Id for the answer hint	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
name	NAME	TEXT	String	Name	4000

Name	DB name	DB type	Java type	Descriptions	Length
nameRBKey	NAME_RBKEY	TEXT	String	Resource bundle key for the name	4000
answerHintScheme	ANS_HINT_SCHEME	INT	int	Answer Hint scheme	-
answerHintScript	ANS_HINT_SCRIPT	TEXT	String	Answer Hint script. This is interpreted based on the answer hint scheme	4000
javaClass	JAVA_CLASS	TEXT	String	Java class path	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.23 VCryptAnswerHintHist

**Description:** Answer Hint map history

**Database table name :** *V\_ANS\_HINT\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
answerHintId	ANS_HINT_ID	BIGINT	Long	Id for the answer hint	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
name	NAME	TEXT	String	Name	4000
nameRBKey	NAME_RBKEY	TEXT	String	Resource bundle key for the name	4000
answerHintScheme	ANS_HINT_SCHEME	INT	int	Answer Hint scheme	-
answerHintScript	ANS_HINT_SCRIPT	TEXT	String	Answer Hint script. This is interpreted based on the answer hint scheme	4000
javaClass	JAVA_CLASS	TEXT	String	Java class path	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
notes	NOTES	TEXT	String	Notes	4000

## 5.2.24 VCryptUserQA

**Description:** User Question/Answer

**Database table name:** *V\_USER\_QA*

**Primary Keys:** qaId (*QA\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
qaId	QA_ID ( <i>PK</i> )	BIGINT	Long	Id for the question/answer	16	-
userId	USER_ID	BIGINT	Long	Id of the user.	16	-
questionId	QUESTION_ID	BIGINT	Long	Id for the question	16	-
qaStatus	QA_STATUS	INT	int	The status for this question/answer.	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
answer	ANSWER	TEXT	String	Answer to the question	4000	-
answerHint	ANSWER_HINT	TEXT	String	Hint for the answer	4000	-

## 5.2.25 VCryptUserQAHist

**Description:** User Question/Answer shadow table

**Database table name :** *V\_USER\_QA\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
qaId	QA_ID	BIGINT	Long	Id for the question/answer	16
userId	USER_ID	BIGINT	Long	Id of the user.	16
questionId	QUESTION_ID	BIGINT	Long	Id for the question	16
qaStatus	QA_STATUS	INT	int	The status for this question/answer.	2
answer	ANSWER	TEXT	String	Answer to the question	4000
answerHint	ANSWER_HINT	TEXT	String	Hint for the answer	4000

## 5.2.26 VCryptScoringPolicy

**Description:** Scoring Policy

**Database table name :** *V\_SCORING\_POLICY*

**Primary Keys :** policyId (*POLICY\_ID*)

Name	DB name	DB type	Java type	Description	Length
policyId	POLICY_ID ( <i>PK</i> )	BIGINT	Long	Id for the policy	16
policyType	POLICY_TYPE	INT	int	Policy type	-
runtimeType	RUNTIME_TYPE	INT	int	Type of runtime	6
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
minFinalScore	MIN_FINAL_SCORE	INT	int	Minimum final score to return success	-
notes	NOTES	TEXT	String	Note	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-

### 5.2.27 VCryptScoringPolicyHist

**Description:** Scoring Policy shadow table

**Database table name :** *V\_SCORING\_POLICY\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
policyId	POLICY_ID	BIGINT	Long	Id for the policy	16
policyType	POLICY_TYPE	INT	int	Policy type	-
runtimeType	RUNTIME_TYPE	INT	int	Type of runtime	6
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
minFinalScore	MIN_FINAL_SCORE	INT	int	Minimum final score to return success	-
notes	NOTES	TEXT	String	Note	4000

### 5.2.28 VCryptScoreAttributes

**Description:** Score attributes

**Database table name :** *V\_SCORE\_ATTR*

**Primary Keys :** attrId (*ATTR\_ID*)

Name	DB name	DB type	Java type	Description	Length
attrId	ATTR_ID ( <i>PK</i> )	BIGINT	Long	Id for the attribute	16

Name	DB name	DB type	Java type	Description	Length
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
policyId	POLICY_ID	BIGINT	Long	Id for the policy to which this belongs to	16
attrType	ATTR_TYPE	INT	int	Attribute type	-
score	SCORE	INT	int	Default score for this policy	-
weight	WEIGHT	INT	int	Weight for this profile	-
notes	NOTES	TEXT	String	Note	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-

### 5.2.29 VCryptScoreAttributesHist

**Description:** Score Attributes for shadow table

**Database table name :** *V\_SCORE\_ATTR\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
attrId	ATTR_ID	BIGINT	Long	Id for the attribute	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
policyId	POLICY_ID	BIGINT	Long	Id for the policy to which this belongs to	16
attrType	ATTR_TYPE	INT	int	Attribute type	-
score	SCORE	INT	int	Default score for this policy	-
weight	WEIGHT	INT	int	Weight for this profile	-
notes	NOTES	TEXT	String	Note	4000

### 5.2.30 VMonitorData

**Description:** This contains the monitor data.

**Database table name :** *V\_MONITOR\_DATA*

**Primary Keys :** logId (*LOG\_ID*)



Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Id for finger print	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time of this finger print.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-
monitorType	MONITOR_TYPE	INT	int	Monitor type	5
fingerPrintId	FPRINT_ID	BIGINT	Long	Id for the finger print	16
dataValue	DATA_VALUE	TEXT	String	Data value for the finger print	4000
count	MONITOR_COUNT	INT	int	Monitor count	-
beginTime	BEGIN_TIME	DATETIME	Date	Date/Time for begin time.	-
endTime	END_TIME	DATETIME	Date	End time.	-
runningTime	RUNNING_TIME	BIGINT	long	Running time	20
elapsedTime	ELAPSED_TIME	BIGINT	long	Elapsed time in micro seconds	20
minTime	MIN_TIME	BIGINT	long	Minimum time taken for processing in micro seconds	20
maxTime	MAX_TIME	BIGINT	long	Maximum time taken for processing in micro seconds	20
hour	AGGR_HOUR	DATETIME	Date	Hour for this aggregate	-
day	AGGR_DAY	DATETIME	Date	Day for this aggregate	-
week	AGGR_WEEK	DATETIME	Date	Week for this aggregate	-
month	AGGR_MONTH	DATETIME	Date	Week for this aggregate	-
quarter	AGGR_QUARTER	DATETIME	Date	Week for this aggregate	-
year	AGGR_YEAR	DATETIME	Date	Year for this aggregate	-
serverId	SERVER_ID	TEXT	String	Server Id	4000

### 5.2.31 VBharosaConfig

**Description:** Bharosa Config

**Database table name :** V\_B\_CONFIG

**Primary Keys :** configId (*CONFIG\_ID*)

Name	DB name	DB type	Java type	Description	Length
configId	CONFIG_ID ( <i>PK</i> )	BIGINT	Long	Id for the config	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	CONFIG_NAME	TEXT	String	Name of the attribute	4000
value	CONFIG_VALUE	TEXT	String	Value of the attribute	4000
configType	CONFIG_TYPE	INT	int	The type of this config.	5
isEncrypted	IS_SECURE	CHAR	boolean	Is this property encrypted	-
description	DESCRIPTION	TEXT	String	Description	4000
notes	NOTES	TEXT	String	Notes	4000

## 5.2.32 VBharosaConfigHist

**Description:** Bharosa Config shadow

**Database table name :** *V\_B\_CONFIG\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
configId	CONFIG_ID	BIGINT	Long	Id for the config	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	CONFIG_NAME	TEXT	String	Name of the attribute	4000
value	CONFIG_VALUE	TEXT	String	Value of the attribute	4000
configType	CONFIG_TYPE	INT	int	The type of this config.	5
isEncrypted	IS_SECURE	CHAR	boolean	Is this property encrypted	-
description	DESCRIPTION	TEXT	String	Description	4000
notes	NOTES	TEXT	String	Notes	4000

## 5.2.33 VBharosaEnum

**Description:** User Defined Enums

**Database table name :** *V\_B\_ENUM*

**Primary Keys :** enumId (*ENUM\_ID*)

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Create Date/Time.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Update Date/Time.	-
enumId	ENUM_ID ( <i>PK</i> )	BIGINT	Long	Id for the enum	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name of the User Def Enum.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
propertyName	PROP_NAME	TEXT	String	Property name for this enum	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.34 VBharosaEnumHist

**Description:** Bharosa Config shadow

**Database table name :** *V\_B\_ENUM\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Descriptions	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
enumId	ENUM_ID	BIGINT	Long	Id for the enum	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name of the User Def Enum.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
propertyName	PROP_NAME	TEXT	String	Property name for this enum	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.35 VBharosaEnumElement

**Description:** Element in User Defined Enums

**Database table name :** *V\_B\_ENUM\_ELMNT*

**Primary Keys :** elementId (*ELEMENT\_ID*)

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Create Date/Time.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Update Date/Time.	-
elementId	ELEMENT_ID ( <i>PK</i> )	BIGINT	Long	Id for the enum	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
enumId	ENUM_ID	BIGINT	Long	Id for the Enum	16
name	LABEL	TEXT	String	Name of the Element.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
propertyName	PROP_NAME	TEXT	String	Property name for this enum	4000
numericValue	NUM_VALUE	INT	int	Numeric value of the element	-

Name	DB name	DB type	Java type	Description	Length
stringValue	STR_VALUE	TEXT	String	String value of the element	4000
isEnabled	IS_ENABLED	CHAR	boolean	Is this element enabled	-
notes	NOTES	TEXT	String	Notes	4000

### 5.2.36 VBharosaEnumElementHist

**Description:** Shadow object for BharosaEnumElement

**Database table name :** *V\_B\_ENUM\_ELMNT\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
elementId	ELEMENT_ID	BIGINT	Long	Id for the enum	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
enumId	ENUM_ID	BIGINT	Long	Id for the Enum	16
name	LABEL	TEXT	String	Name of the Element.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
propertyName	PROP_NAME	TEXT	String	Property name for this enum	4000
numericValue	NUM_VALUE	INT	int	Numeric value of the element	-
stringValue	STR_VALUE	TEXT	String	String value of the element	4000
isEnabled	IS_ENABLED	CHAR	boolean	Is this element enabled	-
notes	NOTES	TEXT	String	Notes	4000

### 5.2.37 VBharosaEnumElementAttribute

**Description:** Element attribute in User Defined Enums

**Database table name :** *V\_B\_ENUM\_ELMNT\_ATTR*

**Primary Keys :** attributeId (*ATTR\_ID*)

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Create Date/Time.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Update Date/Time.	-
attributeId	ATTR_ID ( <i>PK</i> )	BIGINT	Long	Id for the enum	16

Name	DB name	DB type	Java type	Description	Length
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
elementId	ELEMENT_ID	BIGINT	Long	Id for the Enum	16
attributeName	ATTR_NAME	TEXT	String	Name of the attribute.	4000
attributeValue	ATTR_VALUE	TEXT	String	Value of the attribute	4000
propertyName	PROP_NAME	TEXT	String	Property name for this attribute	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.38 VBharosaEnumElementAttributeHist

**Description:** Enum Element attribute shadow

**Database table name :** *V\_B\_ENUM\_ELMNT\_ATTR\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
attributeId	ATTR_ID	BIGINT	Long	Id for the enum	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
elementId	ELEMENT_ID	BIGINT	Long	Id for the Enum	16
attributeName	ATTR_NAME	TEXT	String	Name of the attribute.	4000
attributeValue	ATTR_VALUE	TEXT	String	Value of the attribute	4000
propertyName	PROP_NAME	TEXT	String	Property name for this attribute	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.39 VBharosaLocale

**Description:** Bharosa Locale

**Database table name :** *V\_B\_LOCALE*

**Primary Keys :** localeId (*LOCALE\_ID*)

Name	DB name	DB type	Java type	Description	Length
localeId	LOCALE_ID ( <i>PK</i> )	BIGINT	Long	Id for the Locale	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
createTime	CREATE_TIME	DATETIME	Date	Create Date/Time for this object.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-

Name	DB name	DB type	Java type	Description	Length
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LOCALE_NAME	TEXT	String	Name of the Locale	4000
nameRBKey	NAME_RBKEY	TEXT	String	Resource bundle key for the name	4000
language	LANGUAGE	TEXT	String	Language of the Locale	4000
country	COUNTRY	TEXT	String	Country of the Locale	4000
variant	VARIANT	TEXT	String	Variant of the Locale	4000
localeKey	LOCALE_KEY	TEXT	String	This is the concatenation of all the elements	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.40 VBharosaLocaleHist

**Description:** Bharosa Locale shadow

**Database table name :** *V\_B\_LOCALE\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
localeId	LOCALE_ID	BIGINT	Long	Id for the locale	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LOCALE_NAME	TEXT	String	Name of the Locale	4000
nameRBKey	NAME_RBKEY	TEXT	String	Resource bundle key for the name	4000
language	LANGUAGE	TEXT	String	Language of the Locale	4000
country	COUNTRY	TEXT	String	Country of the Locale	4000
variant	VARIANT	TEXT	String	Variant of the Locale	4000
localeKey	LOCALE_KEY	TEXT	String	This is the concatenation of all the elements	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.41 VBharosaConfigRB

**Description:** Bharosa Config with resource bundle

**Database table name :** *V\_B\_CONFIG\_RB*

**Primary Keys :** configId (*CONFIG\_ID*)

Name	DB name	DB type	Java type	Description	Length
configId	CONFIG_ID ( <i>PK</i> )	BIGINT	Long	Id for the config	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
name	CONFIG_NAME	TEXT	String	Name of the attribute	4000
value	CONFIG_VALUE	TEXT	String	Value of the attribute	4000
localeId	LOCALE_ID	BIGINT	Long	Locale for this property	16

## 5.2.42 VPattern

**Description:** This represents a pattern

**Database table name :** *V\_PATTERN*

**Primary Keys :** patternId (*PATTERN\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Create Date/Time for this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
patternId	PATTERN_ID ( <i>PK</i> )	BIGINT	Long	Id for the pattern	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name of the pattern.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the pattern	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
trxDefId	TRX_DEF_ID	BIGINT	Long	Id for the Transaction type id	16	-
evalRuntime	EVAL_RUNTIME	INT	int	Defines when the pattern will be evaluated. E.g real-time, batch-mode, asyn-mode, etc	6	-
status	STATUS	INT	int	The status for this pattern.	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
notes	NOTES	TEXT	String	Notes	4000	-

### 5.2.43 VPatternHist

**Description:** VPattern shadow class

**Database table name :** *V\_PATTERN\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
patternId	PATTERN_ID	BIGINT	Long	Id for the pattern	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name of the pattern.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the pattern	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
trxDefId	TRX_DEF_ID	BIGINT	Long	Id for the Transaction type	16
evalRuntime	EVAL_RUNTIME	INT	int	Defines when the pattern will be evaluated. E.g real-time, batch-mode, asyn-mode, etc	6
status	STATUS	INT	int	The status for this pattern.	2
notes	NOTES	TEXT	String	Notes	4000

### 5.2.44 VPatternEntity

**Description:** These are the entities which are associated with the Pattern.

**Database table name :** *V\_PATTERN\_ENTITY*

**Primary Keys :** patternEntityId (*PAT\_ENT\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Create Date/Time for this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
patternEntityId	PAT_ENT_ID ( <i>PK</i> )	BIGINT	Long	Id for this pattern and entity map	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-



Name	DB name	DB type	Java type	Description	Length	Enum values
name	LABEL	TEXT	String	Name of the pattern and entity mapping	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the pattern and entity mapping	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
patternId	PATTERN_ID	BIGINT	Long	Id for the pattern this maps to.	16	-
trxEntityDefMapId	TRX_ENT_DEF_MAP_ID	BIGINT	Long	Id to the transaction entity definition map	16	-
status	STATUS	INT	int	The status for this mapping.	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
notes	NOTES	TEXT	String	Notes	4000	-

### 5.2.45 VPatternEntityHist

**Description:** VPatternEntity shadow class

**Database table name :** *V\_PATTERN\_ENTITY\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
patternEntityId	PAT_ENT_ID	BIGINT	Long	Id for this pattern and entity map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name of the pattern and entity mapping	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the pattern and entity mapping	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000

Name	DB name	DB type	Java type	Description	Length
patternId	PATTERN_ID	BIGINT	Long	Id for the pattern this maps to.	16
trxEntityDefMapId	TRX_ENT_DEF_MAP_ID	BIGINT	Long	Id to the transaction entity definition map	16
status	STATUS	INT	int	The status for this mapping.	2
notes	NOTES	TEXT	String	Notes	4000

### 5.2.46 VPatternParam

**Description:** This contains the information about the pattern params and the comparison or math operations that can be applied to the parameters when calculating membership to patterns

**Database table name :** *V\_PATTERN\_PARAM*

**Primary Keys :** paramId (*PARAM\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Create Date/Time for this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
paramId	PARAM_ID ( <i>PK</i> )	BIGINT	Long	Id for the param	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name of the pattern and entity mapping	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the pattern and entity mapping	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
patternId	PATTERN_ID	BIGINT	Long	Id for the pattern this maps to.	16	-
status	STATUS	INT	int	The status for this mapping.	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
orderNumber	ORDER_NUMBER	INT	int	Order number. This is used to create the grammer for prompts	-	-
compareOperator	COMPARE_OPER	INT	int	Comparison operator	-	-
paramKey	PARAM_KEY	TEXT	String	Key to the parameter	4000	-
paramType	PARAM_TYPE	INT	int	Type of the parameter	-	-

Name	DB name	DB type	Java type	Description	Length	Enum values
paramValue	PARAM_VALUE	TEXT	String	Param value	4000	-
beginRange	BEGIN_RANGE	INT	Integer	Begin value for the range	10	-
endRange	END_RANGE	INT	Integer	End value for the range	10	-
maxRange	MAX_RANGE	INT	Integer	Max value for the range	10	-
rangeIncrementStep	RANGE_INCR_STEP	INT	Integer	Increment step for range	10	-
notes	NOTES	TEXT	String	Notes	4000	-

### 5.2.47 VPatternParamHist

**Description:** VPatternParam shadow class

**Database table name :** V\_PATTERN\_PARAM\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
paramId	PARAM_ID	BIGINT	Long	Id for the param	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name of the pattern and entity mapping	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the pattern and entity mapping	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
patternId	PATTERN_ID	BIGINT	Long	Id for the pattern this maps to.	16
status	STATUS	INT	int	The status for this mapping.	2
orderNumber	ORDER_NUMBER	INT	int	Order number. This is used to create the grammar for prompts	-
compareOperator	COMPARE_OPER	INT	int	Comparison operator	-
paramKey	PARAM_KEY	TEXT	String	Key to the parameter	4000
paramType	PARAM_TYPE	INT	int	Type of the parameter	-
paramValue	PARAM_VALUE	TEXT	String	Param value	4000
beginRange	BEGIN_RANGE	INT	Integer	Begin value for the range	10

Name	DB name	DB type	Java type	Description	Length
endRange	END_RANGE	INT	Integer	End value for the range	10
maxRange	MAX_RANGE	INT	Integer	Max value for the range	10
rangeIncrementStep	RANGE_INCR_STEP	INT	Integer	Increment step for range	10
notes	NOTES	TEXT	String	Notes	4000

### 5.2.48 VPatternEntityOperation

**Description:** This table stores data about the operations that be applied to the entities (observables) in the pattern. This table essentially keeps data about the profiling that needs to be collected for the entity. So we can have one to many relationship between pattern\_entity table and this table

**Database table name :** *V\_PAT\_ENT\_OPER*

**Primary Keys :** operationId (*OPER\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Create Date/Time for this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
operationId	OPER_ID ( <i>PK</i> )	BIGINT	Long	Id for the operation	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name of the operation	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the operation	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
patternEntityId	PAT_ENT_ID	BIGINT	Long	Id for the pattern entity map.	16	-
operationType	OPER_TYPE	INT	int	Type of the operation.	5	-
status	STATUS	INT	int	The status for this mapping.	2	STATUS_ACTIVE STATUS_DISABLED STATUS_DELETED
notes	NOTES	TEXT	String	Notes	4000	-

### 5.2.49 VPatternEntityOperationHist

**Description:** VPatternEntityOperation shadow class

**Database table name :** *V\_PAT\_ENT\_OPER\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-

Name	DB name	DB type	Java type	Description	Length
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
operationId	OPER_ID	BIGINT	Long	Id for the operation	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name of the operation	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the operation	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
patternEntityId	PAT_ENT_ID	BIGINT	Long	Id for the pattern entity map.	16
operationType	OPER_TYPE	INT	int	Type of the operation.	5
status	STATUS	INT	int	The status for this mapping.	2
notes	NOTES	TEXT	String	Notes	4000

### 5.2.50 VCryptFingerPrint

**Description:** This contains the finger prints.

**Database table name :** *V\_FPRINTS*

**Primary Keys :** *fingerPrintId (FPRINT\_ID)*

Name	DB name	DB type	Java type	Description	Length
fingerPrintId	FPRINT_ID (PK)	BIGINT	Long	Id for finger print	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time of this finger print.	-
fingerPrintType	FPRINT_TYPE	INT	int	Type of finger printing	6
patternId	PATTERN_ID	BIGINT	Long	Id for the pattern this maps to.	16
hashValue	HASH_VALUE	TEXT	String	Hash value for the finger print	512
dataValue	DATA_VALUE	TEXT	String	Data value for the finger print	4000

### 5.2.51 VCryptFPNameValue

**Description:** Name value pairs in the finger print

**Database table name :** *V\_FP\_NV*

**Primary Keys :** *nameValueId (FP\_NV\_ID)*

Name	DB name	DB type	Java type	Description	Length
nameValueId	FP_NV_ID (PK)	BIGINT	Long	Id for name value	16
fingerPrintId	FPRINT_ID	BIGINT	Long	Id for the finger print	16

Name	DB name	DB type	Java type	Description	Length
name	ATTR_NAME	VARCHAR	String	Name of the attribute	64
value	ATTR_VALUE	TEXT	String	Value of the attribute	256

### 5.2.52 VCryptFPMap

**Description:** Map for finger print

**Database table name :** *V\_FP\_MAP*

**Primary Keys :** mapId (*MAP\_ID*)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID ( <i>PK</i> )	BIGINT	Long	Id for map	16
fingerPrintId	FPRINT_ID	BIGINT	Long	Id for the finger print	16
fingerPrintType	FPRINT_TYPE	INT	int	Type of finger printing	6
name	ATTR_NAME	VARCHAR	String	Name of the attribute	64
value	ATTR_VALUE	TEXT	String	value of the attribute	256

### 5.2.53 VCryptUserLog

**Description:** User Log

**Database table name :** *VCRYPT\_USER\_LOGS*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Id for the message	16	-
userId	USER_ID	BIGINT	Long	Id of the user if available.	16	-
authSessionId	SESSION_ID	BIGINT	Long	Id to group discrete operations for a session.	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-	-
logType	LOG_TYPE_CODE	INT	int	The type for this log.	2	TYPE_OTHER TYPE_CREATE TYPE_UPDATE TYPE_DELETE
message	MESSAGE	TEXT	String	Message for this log.	4000	-
messageDetail	MESSAGE_DETAIL	TEXT	String	Message detail	4000	-
notes	NOTES	TEXT	String	Note against this message	4000	-

### 5.2.54 VCryptPinReset

**Description:** Pin reset log

**Database table name :** *VCRYPT\_PIN\_RESETS*

**Primary Keys :** resetId (*RESET\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
resetId	RESET_ID ( <i>PK</i> )	BIGINT	Long	Id for the reset	16	-
userId	USER_ID	BIGINT	Long	Id of the user if available.	16	-
newPin	NEW_PIN	VARCHAR	String	New pin for the user	255	-
requestTime	REQUEST_TIME	DATETIME	Date	Date/Time of the request.	-	-
resetStatus	RESET_STATUS_CODE	INT	int	Status of the reset	2	STATUS_NONE STATUS_NOTIFIED STATUS_RETRIEVED STATUS_OBSOLETE STATUS_EXPIRED
magicKey	MAGIC_KEY	TEXT	String	Magic key sent to the client.	256	-
notes	NOTES	TEXT	String	Note	4000	-

### 5.2.55 VCryptPinRetrieval

**Description:** Pin retrieval

**Database table name :** *VCRYPT\_PIN\_RETRIEVALS*

**Primary Keys :** retrievalId (*RETRIEVE\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
retrievalId	RETRIEVE_ID ( <i>PK</i> )	BIGINT	Long	Id for the retrieval	16	-
resetId	RESET_ID	BIGINT	Long	Id for the User	16	-
retrieveTime	RETRIEVE_TIME	DATETIME	Date	Date/Time of the retrieval.	-	-
retrieveStatus	RETRIEVE_STATUS_CODE	INT	int	Status of this retrieval	2	STATUS_NONE STATUS_SUCCESS STATUS_REJECTED
rejectReason	REJECT_REASON_CODE	INT	int	Reason of rejection	2	REJECT_NONE REJECT_EXPIRED REJECT_DUPLICATE_REQUEST REJECT_INVALID_USER REJECT_INVALID_PASSWORD REJECT_INVALID_SECURITY_ANSWER
notes	NOTES	TEXT	String	Note	4000	-

### 5.2.56 VCryptAuthSessionGroup

**Description:** VCrypt Session

**Database table name :** *VCRYPT\_AUTH\_SESSION\_GROUPS*

**Primary Keys :** sessionGroupId (*SESSION\_GROUP\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
sessionGroupId	SESSION_GROUP_ID (PK)	BIGINT	Long	Id for the session group	16	-
sessionType	SESSION_TYPE	INT	int	Type of the authentication session. It could be for login, pin reset or on-demand in session authentication	-	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this session group.	-	-
authStatus	AUTH_STATUS	INT	int	Status of the this authentication session group.	3	AUTH_PENDING AUTH_SUCCESS AUTH_FAILED

### 5.2.57 VCryptAuthSession

**Description:** VCrypt Session

**Database table name :** VCRYPT\_AUTH\_SESSIONS

**Primary Keys :** sessionId (SESSION\_ID)

Name	DB name	DB type	Java type	Description	Length
sessionId	SESSION_ID (PK)	BIGINT	Long	Id for the session	16
sessionGroupId	SESSION_GROUP_ID	BIGINT	Long	Id of the session group.	16
userId	USER_ID	BIGINT	Long	Id of the user if available.	16
clientType	CLIENT_TYPE_CODE	INT	int	Type of the client used	2
clientVersion	CLIENT_VERSION	VARCHAR	String	Version of the client	64
authCount	AUTH_COUNT	INT	int	How many times the same session was used for authentication.	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this session.	-
requestData	REQUEST_DATA	TEXT	String	Data sent by the user.	4000
sessionData	SESSION_DATA	TEXT	String	Data sent to the user.	4000
host	HOST	TEXT	String	IP or hostname of the user	4000
fingerPrintId	FPRINT_ID	BIGINT	Long	Log id for the finger print	16
notes	NOTES	TEXT	String	Note against this message	4000

### 5.2.58 VCryptAuthAttempt

**Description:** VCrypt statistics

**Database table name :** VCRYPT\_AUTH\_ATTEMPTS

**Primary Keys :** attemptId (ATTEMPT\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
attemptId	ATTEMPT_ID (PK)	BIGINT	Long	Id for the message	16	-



Name	DB name	DB type	Java type	Description	Length	Enum values
userId	USER_ID	BIGINT	Long	Id of the user if available.	16	-
loginId	LOGIN_ID	VARCHAR	String	Login Id provided by the user.	255	-
authSessionId	SESSION_ID	BIGINT	Long	Id to group discrete operations for a session.	16	-
authAttemptCount	ATTEMPT_COUNT	INT	int	Count of authentication attempts for this authentication session.	-	-
authStatus	AUTH_STATUS	INT	int	Status of the this authentication.	3	AUTH_PENDING, AUTH_SUCCESS, AUTH_FAILED
authReason	AUTH_REASON	INT	int	Reason for the status code. This code is dependent on the status code of the authStatus.	-	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-	-
startTime	STARTTIME	DATETIME	Date	Start time.	-	-
timer1	TIMER1	BIGINT	long	First timer.	16	-
timer2	TIMER2	BIGINT	long	Second timer.	16	-
timer3	TIMER3	BIGINT	long	Third timer.	16	-
timer4	TIMER4	BIGINT	long	Fourth timer.	16	-
timer5	TIMER5	BIGINT	long	Fifth timer.	16	-
total	TOTAL	BIGINT	long	Total of all timers. This is a redundant column, but useful in queries	16	-
requestData	REQUEST_DATA	TEXT	String	Data sent by the user.	4000	-
requestResult	REQUEST_RESULT	TEXT	String	Data sent to the user.	4000	-
remoteIPAddr	REMOTE_IP_ADDR	BIGINT	String	The IP address from where the client connected	15	-
fingerPrintId	FPRINT_ID	BIGINT	Long	Log id for the finger print	16	-
notes	NOTES	TEXT	String	Note against this message	4000	-

## 5.2.59 VCryptSystemMessage

**Description:** SystemMessage

**Database table name :** VCRYPT\_SYS\_MESSAGES

**Primary Keys :** messageId (MESSAGE\_ID)

Name	DB name	DB type	Java type	Description	Length
messageId	MESSAGE_ID (PK)	BIGINT	Long	Message id	16

Name	DB name	DB type	Java type	Description	Length
userName	USER_NAME	TEXT	String	User Name	4000
systemMessage	SYSTEM_MESSAGE	TEXT	String	System message	4000
messageTime	MESSAGE_TIME	DATETIME	Date	Date/Time for this message.	-

### 5.2.60 VSystemLogs

**Description:** System log messages

**Database table name :** *V\_SYS\_LOGS*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Id for the log	16
adminLoginId	ADMIN_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-
logType	LOG_TYPE	INT	int	Log type	5
logSubType	LOG_SUB_TYPE	INT	int	Log sub type	5
logMessage	LOG_MESSAGE	TEXT	String	Log message	4000
logData	LOG_DATA	TEXT	String	Log data. This is a opaque object.	-
notes	NOTES	TEXT	String	Note against this rule	4000

### 5.2.61 VCryptDBPatch

**Description:** Class which has the list of db patches applied

**Database table name :** *VCRYPT\_DB\_PATCHES*

**Primary Keys :** patchId (*PATCH\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
patchId	PATCH_ID ( <i>PK</i> )	BIGINT	Long	Patch id	16	-
patchDescription	PATCH_DESC	TEXT	String	Description of the patch	4000	-
patchVersion	PATCH_VERSION	VARCHAR	String	Patch version	64	-
patchStatus	STATUS	INT	int	Patch status	2	PATCH_SUCCESS, PATCH_FAILURE, PATCH_PARTIAL
patchDate	PATCH_DATE	DATETIME	Date	Date/Time when the patch was applied.	-	-
notes	NOTES	TEXT	String	Note for this patch	4000	-

### 5.2.62 VActionLogSession

**Description:** Session for the action logs

**Database table name :** *V\_ACTION\_LOG\_SESS*

**Primary Keys :** *sessionId (SESSION\_ID)*

Name	DB name	DB type	Java type	Description	Length
sessionId	SESSION_ID ( <i>PK</i> )	BIGINT	Long	Id for this session	16
parentSessionId	PARENT_SESSION_ID	BIGINT	Long	Id for the parent session	16
sessionType	SESSION_TYPE	INT	int	Type of this session	3
adminLoginId	ADMIN_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
adminUserRole	ADMIN_USER_ROLE	VARCHAR	String	Role of the administrator.	64
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-
notes	NOTES	TEXT	String	Notes	4000

### 5.2.63 VActionLog

**Description:** Action logs

**Database table name :** *V\_ACTION\_LOGS*

**Primary Keys :** *logId (LOG\_ID)*

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Id for this log	16
sessionId	SESSION_ID	BIGINT	Long	Id for this session	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-
category	CATEGORY	INT	int	Category of the action	3
action	ACTION	INT	int	Action performed	3
accessType	ACCESS_TYPE	INT	int	Access type	3
data	DATA	TEXT	String	Data for this action	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.64 VTUserSession

**Description:** This contains the user session

**Database table name :** *VT\_USER\_SESS*

**Primary Keys :** *userSessionId (SESS\_ID)*

Name	DB name	DB type	Java type	Description	Length
userSessionId	SESS_ID ( <i>PK</i> )	BIGINT	Long	Id of the session	16
requestId	REQUEST_ID	TEXT	String	Id of the external user session	256

Name	DB name	DB type	Java type	Description	Length
extSessionId	EXT_SESSION_ID	TEXT	String	External session id	512
userId	USER_ID	BIGINT	Long	Id of the user.	16
channelType	CHANNEL_TYPE	INT	int	Type of the channel used for this session. Channel could online, CC phone challenge, IVR, etc	5
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
executeTime	EXEC_TIME	TIMESTAMP	Date	The time when this request was processed.	-
authClientType	AUTH_CLIENT_TYPE_CODE	INT	int	Type of the client used by the user for authentication	5
authStatus	AUTH_STATUS	INT	int	Status of the authentication.	3
postProcessStatus	POST_PROCESS_STATUS	INT	int	Status of the post processing	5
postProcessResult	POST_PROCESS_RESULT	INT	int	Status of the post processing	5

### 5.2.65 VCryptTrackerUserNodeLog

**Description:** This logs all the activities for the nodes.

**Database table name :** VCRYPT\_TRACKER\_USERNODE\_LOGS

**Primary Keys :** userNodeLogId (USER\_NODE\_LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
userNodeLogId	USER_NODE_LOG_ID (PK)	BIGINT	Long	Log id of the user for a given node	16
requestId	REQUEST_ID	TEXT	String	Id of the request. This is used to co-relate the post authentication request.	256
extSessionId	EXT_SESSION_ID	TEXT	String	External session id	512
clientDeviceId	CLIENT_DEVICE_ID	TEXT	String	Id of the device which is generated by the application.	256
remoteIPAddr	REMOTE_IP_ADDR	BIGINT	String	The IP address from where the client connected	15
baseIPAddr	BASE_IP_ADDR	BIGINT	String	This is the base IP address for quick search	15
nodeId	NODE_ID	BIGINT	Long	Id of the nodeId.	16
nodeHistoryId	TRACKER_NODE_HISTORY_ID	BIGINT	Long	Id of the Tracker Node History (if available).	16
userId	USER_ID	TEXT	String	User Id of the user if available.	256
loginId	USER_LOGIN_ID	TEXT	String	Login Id of the user if available.	256

Name	DB name	DB type	Java type	Description	Length
groupId	USER_GROUP_ID	TEXT	String	GroupId of the user if available.	256
subGroupId	USER_SUB_GROUP_ID	TEXT	String	Sub GroupId of the user if available.	256
authStatus	AUTH_STATUS	INT	int	Status of the authentication.	3
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
executeTime	EXEC_TIME	TIMESTAMP	Date	The time when this request was processed.	-
isRegistered	IS_REGISTERED	CHAR	boolean	Whether this node is registered.	-
digitalSigCookie	SENT_DIG_SIG_COOKIE	VARCHAR	String	Digital signature cookie that was sent by the UI	128
expectedDigitalSigCookie	EXPECTED_DIG_SIG_COOKIE	VARCHAR	String	Digital signature cookie that was expected by the server from the UI for this node	128
secureCookie	SENT_SECURE_COOKIE	VARCHAR	String	Secure cookie that was sent by the UI	128
expectedSecureCookie	EXPECTED_SECURE_COOKIE	VARCHAR	String	The secure cookie that was expected by the server from the UI for this node	128
authClientType	AUTH_CLIENT_TYPE_CODE	INT	int	Type of the client used by the user for authentication	2
authClientVersion	CLIENT_VERSION	VARCHAR	String	Version of the client used for authentication	24
digitalClientType	DIGITAL_CLIENT_TYPE_CODE	INT	int	Type of the client used by the digital cookie client	2
digitalClientVersion	DIGITAL_CLIENT_VERSION	VARCHAR	String	Version of the client used by the digital cookie client	24
secureClientType	SECURE_CLIENT_TYPE_CODE	INT	int	Type of the client used by the secure cookie client	2
secureClientVersion	SECURE_CLIENT_VERSION	VARCHAR	String	Version of the client used by the secure cookie client	24
digitalFingerPrintId	DIGITAL_FP_ID	BIGINT	Long	Finger print id of the digital cookie request	16
fingerPrintId	FPRINT_ID	BIGINT	Long	Log id for the finger print	16
loadDuration	LOAD_DURATION	INT	int	Time taken to load the page	8
deviceScore	DEVICE_SCORE	INT	int	Score for the device for this login	-
preAuthScore	PREAUTH_SCORE	INT	int	Pre Authentication score	-
postAuthScore	POST_SCORE	INT	int	Post Authentication score	-

Name	DB name	DB type	Java type	Description	Length
preAuthAction	PREAUTH_ACTION	TEXT	String	Pre Authentication action	256
postAuthAction	POST_ACTION	TEXT	String	Post Authentication action	256
cityScore	CITY_SCORE	INT	int	Score for the city for this login	-
stateScore	STATE_SCORE	INT	int	Score for the state for this login	-
countryScore	COUNTRY_SCORE	INT	int	Score for the country for this login	-
postProcessStatus	POST_PROCESS_STATUS	INT	int	Status of the post processing	5
postProcessResult	POST_PROCESS_RESULT	INT	int	Status of the post processing	5
loginFlag	LOGIN_FLAG	INT	int	Flagging this authentication	3
isDeviceDerived	IS_DEVICE_DERIVED	CHAR	boolean	Is the device identified using derived mechanism.	-
notes	NOTES	VARCHAR	String	Note against this node	255

### 5.2.66 VTSessionFPMap

**Description:** Session finger print mapping

**Database table name :**VT\_SESS\_FP\_MAP

**Primary Keys :** mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID (PK)	BIGINT	Long	Map id	16
userNodeLogId	USER_NODE_LOG_ID	BIGINT	Long	Id of the user node log.	16
requestId	REQUEST_ID	TEXT	String	Id of the request.	256
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
clientType	CLIENT_TYPE	INT	int	Client type	5
fingerPrintId	FP_ID	BIGINT	Long	Finger print id	16

### 5.2.67 VCryptTrackerNode

**Description:** This represents a node/computer

**Database table name :**VCRYPT\_TRACKER\_NODE

**Primary Keys :** nodeId (NODE\_ID)

Name	DB name	DB type	Java type	Description	Length
nodeId	NODE_ID (PK)	BIGINT	Long	Node id for this node	16
nodeVersion	NODE_VERSION	INT	int	This keeps track of how many times this node got updated.	16

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this node.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
relatedNodeId	RELATED_NODE_ID	BIGINT	Long	Related node.	16
relationType	RELATION_TYPE	INT	int	Type of the relation	5
digitalSigCookie	DIG_SIG_COOKIE	VARCHAR	String	Digital signature cookie	128
secureCookie	SECURE_COOKIE	VARCHAR	String	Secure cookie	128
remoteIPAddr	REMOTE_IP_ADDR	BIGINT	String	The IP address from where the client connected	15
remoteHost	REMOTE_HOST	TEXT	String	The host name from where the client connected	256
fingerPrintId	FPRINT_ID	BIGINT	Long	Log id for the finger print	16
digitalFingerPrintId	DIGITAL_FP_ID	BIGINT	Long	Finger print id of the digital cookie request	16
deviceStatus	STATUS	INT	int	Status of this device	3
deviceScore	DEVICE_SCORE	INT	int	Score for the device for this login	6
isDeviceDerived	IS_DEVICE_DERIVED	CHAR	boolean	Is the device identified using derived mechanism.	-
secureCookieState	IS_COOKIE_DISABLED	INT	int	Is the secure cookie disabled for this device or in learn mode.	1
flashCookieState	IS_FLASH_DISABLED	INT	int	Is the flash cookie disabled for this device or in learn mode.	1
notes	NOTES	VARCHAR	String	Note against this message	255
cache	CACHE	TEXT	String	Cache	4000

### 5.2.68 VCryptTrackerNodeHistory

**Description:** This keeps the history of the a node/computer

**Database table name :** VCRYPT\_TRACKER\_NODE\_HISTORY

**Primary Keys :** nodeHistoryId (NODE\_HISTORY\_ID)

Name	DB name	DB type	Java type	Description	Length
nodeHistoryId	NODE_HISTORY_ID (PK)	BIGINT	Long	Id for this row	16
nodeId	NODE_ID	BIGINT	Long	Id of the nodeId.	16
nodeVersion	NODE_VERSION	INT	int	This keeps track of how many times this node got updated.	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this node.	-
digitalSigCookie	DIG_SIG_COOKIE	VARCHAR	String	Digital signature cookie	128
secureCookie	SECURE_COOKIES	VARCHAR	String	Secure cookie	128

Name	DB name	DB type	Java type	Description	Length
remoteIPAddr	REMOTE_IP_ADDR	BIGINT	String	The IP address from where the client connected	15
remoteHost	REMOTE_HOST	TEXT	String	The host name from where the client connected	256
fingerPrintId	FPRINT_ID	BIGINT	Long	Log id for the finger print	16
digitalFingerPrintId	DIGITAL_FP_ID	BIGINT	Long	Finger print id of the digital cookie request	16
isSecureCookieConfirmed	IS_SECURE_CONFIRMED	CHAR	boolean	Whether the secure cookie is confirmed to be written	-
isFlashCookieConfirmed	IS_FLASH_CONFIRMED	CHAR	boolean	Whether the flash cookie is confirmed to be written	-
deviceScore	DEVICE_SCORE	INT	int	Score for the device for this login	-
isDeviceDerived	IS_DEVICE_DERIVED	CHAR	boolean	Is the device identified using derived mechanism.	-
notes	NOTES	VARCHAR	String	Note against this node	255

## 5.2.69 VTUser

**Description:** This maintains the list of the users using the tracker

**Database table name :**VT\_USER

**Primary Keys :** localUserId (LOCAL\_USER\_ID)

Name	DB name	DB type	Java type	Description	Length
localUserId	LOCAL_USER_ID (PK)	BIGINT	Long	Id of the user	16
extUserId	EXT_USER_ID	VARCHAR	String	External user id	255
loginId	LOGIN_ID	VARCHAR	String	Login id of the user	255
groupId	USERGROUP_ID	BIGINT	Long	Id of the group to which user belongs to.	16
isValid	IS_VALID	CHAR	boolean	The user is considered valid if the user had authenticated successfully atleast once.	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
firstLoginTime	FIRST_LOGIN_TIME	DATETIME	Date	First time login for this user.	-
notes	NOTES	VARCHAR	String	Notes for this user	255
cache	CACHE	TEXT	String	Cache	4000

## 5.2.70 VTInvalidUser

**Description:** This maintains the list of invalid users



**Database table name :** *VT\_INVALID\_USERS*

**Primary Keys :** *userId (USER\_ID)*

Name	DB name	DB type	Java type	Description	Length
userId	USER_ID ( <i>PK</i> )	BIGINT	Long	Id of the user	16
loginId	LOGIN_ID	VARCHAR	String	Login id of the user	255
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
loginCount	LOGIN_COUNT	INT	int	Total login count for this user	10
imagePath	IMAGE_PATH	TEXT	String	Image path	512

### 5.2.71 VTSessionActionMap

**Description:** This maintains the actions for each session

**Database table name :** *VT\_SESSION\_ACTION\_MAP*

**Primary Keys :** *mapId (MAP\_ID)*

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID ( <i>PK</i> )	BIGINT	Long	Map Id	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
requestId	REQUEST_ID	TEXT	String	Id of the request. This is used to co-relate the post authentication request.	256
trxId	TRX_ID	BIGINT	Long	Id for the transaction for this log	16
runtimeType	RUNTIME_TYPE	INT	int	Type of runtime	6
action	ACTION	TEXT	String	Actions for this runtime and session	256
originalAction	ORIGINAL_ACTION	TEXT	String	This was the original action, which got overridden finally	256
overrideReason	OVERRIDE_REASON	INT	int	Override reason	-
actionList	ACTION_LIST	TEXT	String	List of action.	256
score	SCORE	INT	int	Score for this runtime and runtime. The same score will appear for all the rows for this transaction	-
isFinalAction	IS_FINAL_ACTION	CHAR	boolean	Is this final action	-

### 5.2.72 VTUserGroup

**Description:** This contains the user group details.

**Database table name :** *VT\_USER\_GROUPS*

**Primary Keys :** *localUserGroupId (LOCAL\_GROUP\_ID)*

Name	DB name	DB type	Java type	Description	Length	Enum values
localUserGroupId	LOCAL_GROUP_ID (PK)	BIGINT	Long	Id for the UserGroup	16	-
extUserGroupId	EXT_USERGROUP_ID	VARCHAR	String	External User group id	255	-
description	DESCRIPTION	TEXT	String	Description for this group.	2000	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
userListId	USER_LIST_ID	BIGINT	Long	Id of the userList	16	-
status	USERGROUP_STATUS_CODE	INT	int	Status of the User group	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Note	4000	-

### 5.2.73 VTUserDeviceMap

**Description:** This maintains the list of devices the user is using

**Database table name :** VT\_USER\_DEVICE\_MAP

**Primary Keys :** mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID (PK)	BIGINT	Long	Map id	16
userId	USER_ID	BIGINT	Long	Id of the user.	16
nodeId	NODE_ID	BIGINT	Long	Id of the nodeId.	16
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
lastUsedTime	LAST_USED_TIME	DATETIME	Date	Last used time for this device.	-
lastAuthStatus	LAST_AUTH_STATUS	INT	int	Last authentication status for the user using this device.	3
isSecure	IS_SECURE	CHAR	boolean	Is this node secure for this user.	-
totalCount	TOTAL_COUNT	INT	int	Total authentication count for this user/device	10
successCount	SUCCESS_COUNT	INT	int	Total success count for this user/device	10
failedCount	FAILED_COUNT	INT	int	Total failed count for this user/device	10
cache	CACHE	TEXT	String	Cache	4000

Name	DB name	DB type	Java type	Description	Length
secureCookieState	IS_COOKIE_DISABLED	INT	int	Is the secure cookie disabled for this device or in learn mode.	1
flashCookieState	IS_FLASH_DISABLED	INT	int	Is the flash cookie disabled for this device or in learn mode.	1
fingerPrintId	FPRINT_ID	BIGINT	Long	Finger print of secure cookie	16
digitalFingerPrintId	DIGITAL_FP_ID	BIGINT	Long	Finger print id of the digital cookie request	16

### 5.2.74 VEntityOne

**Description:** EntityOne details

**Database table name :**VT\_ENTITY\_ONE

**Primary Keys :** entityId (ENTITY\_ID)

Name	DB name	DB type	Java type	Description	Length
entityId	ENTITY_ID (PK)	BIGINT	Long	Id of the entity	16
extEntityId	EXT_ENTITY_ID	VARCHAR	String	External entity id	255
entityName	ENTITYNAME	TEXT	String	Name of the entity	4000
entityKey	ENTITY_KEY	TEXT	String	Key for the entity	4000
entityType	ENTITY_TYPE	INT	int	Type of the entity	6
entityDefId	ENTITY_DEF_ID	BIGINT	Long	Id for the entity type	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
expiryTime	EXPIRY_TIME	DATETIME	Date	Expiry Date value.	-
renewTime	RENEW_TIME	DATETIME	Date	Renew Date value.	-
notes	NOTES	VARCHAR	String	Notes for this user	255
cache	CACHE	TEXT	String	Cache	4000

### 5.2.75 VEntityOneProfile

**Description:** This maintains the entity profile

**Database table name :**VT\_ENTITY\_ONE\_PROFILE

**Primary Keys :** profileId (PROFILE\_ID)

Name	DB name	DB type	Java type	Description	Length
profileId	PROFILE_ID (PK)	BIGINT	Long	Id of the profile	16
entityId	ENTITY_ID	BIGINT	Long	Id of the entity.	16
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-

Name	DB name	DB type	Java type	Description	Length
profileTypeId	PROFILE_TYPE_ID	BIGINT	Long	-	16
dataDefId	DATA_DEF_ID	BIGINT	Long	Data def id	16
rowOrder	ROW_ORDER	INT	int	Row order	6
dataType	DATA_TYPE	INT	int	Type of data	6
data	DATA	TEXT	String	Data	512
data1	DATA1	TEXT	String	Data one	256
data2	DATA2	TEXT	String	Data two	256
data3	DATA3	TEXT	String	Data three	256
data4	DATA4	TEXT	String	Data four	256
data5	DATA5	TEXT	String	Data five	256
data6	DATA6	TEXT	String	Data six	256
data7	DATA7	TEXT	String	Data seven	256
data8	DATA8	TEXT	String	Data eight	256
data9	DATA9	TEXT	String	Data nine	256
data10	DATA10	TEXT	String	Data ten	256
numData0	NUM_DATA0	BIGINT	Long	Numeric data 0	16
numData1	NUM_DATA1	BIGINT	Long	Numeric data 1	16
numData2	NUM_DATA2	BIGINT	Long	Numeric data 2	16
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this profile expires	-
totalCount	TOTAL_COUNT	INT	int	Count for this profile	10

### 5.2.76 VTEntityOneMap

**Description:** This maintains the list of entities associated with the user

**Database table name :**VT\_USER\_ENTITY1\_MAP

**Primary Keys :** mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID (PK)	BIGINT	Long	Map id	16
entityId	ENTITY_ID	BIGINT	Long	Id of the entity.	16
objectId	MAP_OBJ_ID	BIGINT	Long	Id of the mapped object.	16
objectType	OBJECT_TYPE	INT	int	Type of the object.	6
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
status	STATUS	INT	int	Status of the transaction (where applicable)	5
defMapId	DEF_MAP_ID	BIGINT	Long	Id to the definition map	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
expiryTime	EXPIRY_TIME	DATETIME	Date	Expiry Date value.	-

Name	DB name	DB type	Java type	Description	Length
renewTime	RENEW_TIME	DATETIME	Date	Renew Date value.	-

### 5.2.77 VTEntityTrxMap

**Description:** This maintains the list of entities associated with the transaction

**Database table name :**VT\_ENT\_TRX\_MAP

**Primary Keys :** mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID (PK)	BIGINT	Long	Map id	16
trxId	TRX_ID	BIGINT	Long	Id of the transaction.	16
objectId	MAP_OBJ_ID	BIGINT	Long	Id of the mapped object.	16
defMapId	DEF_MAP_ID	BIGINT	Long	Id to the definition map	16
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
status	STATUS	INT	int	Status of the transaction (where applicable)	5
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-

### 5.2.78 VTUserProfile

**Description:** This maintains the user profile

**Database table name :**VT\_USER\_PROFILE

**Primary Keys :** profileId (PROFILE\_ID)

Name	DB name	DB type	Java type	Description	Length
profileId	PROFILE_ID (PK)	BIGINT	Long	Id of the profile	16
userId	USER_ID	BIGINT	Long	Id of the user.	16
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
status	STATUS	INT	int	Status of the transaction (where applicable)	5
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
profileTypeId	PROFILE_TYPE_ID	BIGINT	Long	-	16
dataType	DATA_TYPE	INT	int	Type of data	6
data	DATA	TEXT	String	Data	512
data1	DATA1	TEXT	String	Data one	256
data2	DATA2	TEXT	String	Data two	256
data3	DATA3	TEXT	String	Data three	256

Name	DB name	DB type	Java type	Description	Length
data4	DATA4	TEXT	String	Data four	256
data5	DATA5	TEXT	String	Data five	256
data6	DATA6	TEXT	String	Data six	256
data7	DATA7	TEXT	String	Data seven	256
data8	DATA8	TEXT	String	Data eight	256
data9	DATA9	TEXT	String	Data nine	256
data10	DATA10	TEXT	String	Data ten	256
numData0	NUM_DATA0	BIGINT	Long	Numeric data 0	16
numData1	NUM_DATA1	BIGINT	Long	Numeric data 1	16
numData2	NUM_DATA2	BIGINT	Long	Numeric data 2	16
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this profile expires	-
totalCount	TOTAL_COUNT	INT	int	Count for this profile	10

### 5.2.79 VTDeviceProfile

**Description:** This maintains the device profile

**Database table name :**VT\_DEVICE\_PROFILE

**Primary Keys :** profileId (*PROFILE\_ID*)

Name	DB name	DB type	Java type	Description	Length
profileId	PROFILE_ID ( <i>PK</i> )	BIGINT	Long	Id of the profile	16
deviceId	NODE_ID	BIGINT	Long	Id of the nodeId.	16
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
status	STATUS	INT	int	Status of the transaction (where applicable)	5
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
profileTypeId	PROFILE_TYPE_ID	BIGINT	Long	-	16
dataType	DATA_TYPE	INT	int	Type of data	6
data	DATA	TEXT	String	Data	512
data1	DATA1	TEXT	String	Data one	256
data2	DATA2	TEXT	String	Data two	256
data3	DATA3	TEXT	String	Data three	256
data4	DATA4	TEXT	String	Data four	256
data5	DATA5	TEXT	String	Data five	256
data6	DATA6	TEXT	String	Data six	256
data7	DATA7	TEXT	String	Data seven	256
data8	DATA8	TEXT	String	Data eight	256
data9	DATA9	TEXT	String	Data nine	256

Name	DB name	DB type	Java type	Description	Length
data10	DATA10	TEXT	String	Data ten	256
numData0	NUM_DATA0	BIGINT	Long	Numeric data 0	16
numData1	NUM_DATA1	BIGINT	Long	Numeric data 1	16
numData2	NUM_DATA2	BIGINT	Long	Numeric data 2	16
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this profile expires	-
totalCount	TOTAL_COUNT	INT	int	Count for this profile	10

## 5.2.80 VTIPProfile

**Description:** This maintains the location profile

**Database table name :** *VT\_IP\_PROFILE*

**Primary Keys :** profileId (*PROFILE\_ID*)

Name	DB name	DB type	Java type	Description	Length
profileId	PROFILE_ID ( <i>PK</i> )	BIGINT	Long	Id of the profile	16
ipAddr	REMOTE_IP_ADDR	BIGINT	String	The IP address from where the client connected	15
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
profileTypeId	PROFILE_TYPE_ID	BIGINT	Long	-	16
dataType	DATA_TYPE	INT	int	Type of data	6
data	DATA	TEXT	String	Data	512
data1	DATA1	TEXT	String	Data one	256
data2	DATA2	TEXT	String	Data two	256
data3	DATA3	TEXT	String	Data three	256
data4	DATA4	TEXT	String	Data four	256
data5	DATA5	TEXT	String	Data five	256
data6	DATA6	TEXT	String	Data six	256
data7	DATA7	TEXT	String	Data seven	256
data8	DATA8	TEXT	String	Data eight	256
data9	DATA9	TEXT	String	Data nine	256
data10	DATA10	TEXT	String	Data ten	256
numData0	NUM_DATA0	BIGINT	Long	Numeric data 0	16
numData1	NUM_DATA1	BIGINT	Long	Numeric data 1	16
numData2	NUM_DATA2	BIGINT	Long	Numeric data 2	16
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this profile expires	-
totalCount	TOTAL_COUNT	INT	int	Count for this profile	10

### 5.2.81 VTBaseIPProfile

**Description:** This maintains the location profile

**Database table name :**VT\_BASE\_IP\_PROFILE

**Primary Keys :** profileId (PROFILE\_ID)

Name	DB name	DB type	Java type	Description	Length
profileId	PROFILE_ID (PK)	BIGINT	Long	Id of the profile	16
baseIPAddr	REMOTE_IP_ADDR	BIGINT	String	The IP address from where the client connected	15
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
profileTypeId	PROFILE_TYPE_ID	BIGINT	Long	-	16
dataType	DATA_TYPE	INT	int	Type of data	6
data	DATA	TEXT	String	Data	512
data1	DATA1	TEXT	String	Data one	256
data2	DATA2	TEXT	String	Data two	256
data3	DATA3	TEXT	String	Data three	256
data4	DATA4	TEXT	String	Data four	256
data5	DATA5	TEXT	String	Data five	256
data6	DATA6	TEXT	String	Data six	256
data7	DATA7	TEXT	String	Data seven	256
data8	DATA8	TEXT	String	Data eight	256
data9	DATA9	TEXT	String	Data nine	256
data10	DATA10	TEXT	String	Data ten	256
numData0	NUM_DATA0	BIGINT	Long	Numeric data 0	16
numData1	NUM_DATA1	BIGINT	Long	Numeric data 1	16
numData2	NUM_DATA2	BIGINT	Long	Numeric data 2	16
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this profile expires	-
totalCount	TOTAL_COUNT	INT	int	Count for this profile	10

### 5.2.82 VTCountryProfile

**Description:** This maintains the country profile

**Database table name :**VT\_COUNTRY\_PROFILE

**Primary Keys :** profileId (PROFILE\_ID)

Name	DB name	DB type	Java type	Description	Length
profileId	PROFILE_ID (PK)	BIGINT	Long	Id of the profile	16



Name	DB name	DB type	Java type	Description	Length
countryId	COUNTRY_ID	BIGINT	Long	Id for the country to which this state belongs to.	16
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
profileTypeId	PROFILE_TYPE_ID	BIGINT	Long	-	16
dataType	DATA_TYPE	INT	int	Type of data	6
data	DATA	TEXT	String	Data	512
data1	DATA1	TEXT	String	Data one	256
data2	DATA2	TEXT	String	Data two	256
data3	DATA3	TEXT	String	Data three	256
data4	DATA4	TEXT	String	Data four	256
data5	DATA5	TEXT	String	Data five	256
data6	DATA6	TEXT	String	Data six	256
data7	DATA7	TEXT	String	Data seven	256
data8	DATA8	TEXT	String	Data eight	256
data9	DATA9	TEXT	String	Data nine	256
data10	DATA10	TEXT	String	Data ten	256
numData0	NUM_DATA0	BIGINT	Long	Numeric data 0	16
numData1	NUM_DATA1	BIGINT	Long	Numeric data 1	16
numData2	NUM_DATA2	BIGINT	Long	Numeric data 2	16
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this profile expires	-
totalCount	TOTAL_COUNT	INT	int	Count for this profile	10

### 5.2.83 VTStateProfile

**Description:** This maintains the state profile

**Database table name :**VT\_STATE\_PROFILE

**Primary Keys :** profileId (*PROFILE\_ID*)

Name	DB name	DB type	Java type	Description	Length
profileId	PROFILE_ID ( <i>PK</i> )	BIGINT	Long	Id of the profile	16
stateId	STATE_ID	BIGINT	Long	Id for the state to which this state belongs to.	16
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-

Name	DB name	DB type	Java type	Description	Length
profileTypeId	PROFILE_TYPE_ID	BIGINT	Long	-	16
dataType	DATA_TYPE	INT	int	Type of data	6
data	DATA	TEXT	String	Data	512
data1	DATA1	TEXT	String	Data one	256
data2	DATA2	TEXT	String	Data two	256
data3	DATA3	TEXT	String	Data three	256
data4	DATA4	TEXT	String	Data four	256
data5	DATA5	TEXT	String	Data five	256
data6	DATA6	TEXT	String	Data six	256
data7	DATA7	TEXT	String	Data seven	256
data8	DATA8	TEXT	String	Data eight	256
data9	DATA9	TEXT	String	Data nine	256
data10	DATA10	TEXT	String	Data ten	256
numData0	NUM_DATA0	BIGINT	Long	Numeric data 0	16
numData1	NUM_DATA1	BIGINT	Long	Numeric data 1	16
numData2	NUM_DATA2	BIGINT	Long	Numeric data 2	16
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this profile expires	-
totalCount	TOTAL_COUNT	INT	int	Count for this profile	10

## 5.2.84 VTCityProfile

**Description:** This maintains the city profile

**Database table name :**VT\_CITY\_PROFILE

**Primary Keys :** profileId (*PROFILE\_ID*)

Name	DB name	DB type	Java type	Description	Length
profileId	PROFILE_ID ( <i>PK</i> )	BIGINT	Long	Id of the profile	16
cityId	CITY_ID	BIGINT	Long	Id for the city to which this state belongs to.	16
requestId	REQUEST_ID	TEXT	String	Id of the request which last updated this row	256
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
profileTypeId	PROFILE_TYPE_ID	BIGINT	Long	-	16
dataType	DATA_TYPE	INT	int	Type of data	6
data	DATA	TEXT	String	Data	512
data1	DATA1	TEXT	String	Data one	256
data2	DATA2	TEXT	String	Data two	256
data3	DATA3	TEXT	String	Data three	256
data4	DATA4	TEXT	String	Data four	256

Name	DB name	DB type	Java type	Description	Length
data5	DATA5	TEXT	String	Data five	256
data6	DATA6	TEXT	String	Data six	256
data7	DATA7	TEXT	String	Data seven	256
data8	DATA8	TEXT	String	Data eight	256
data9	DATA9	TEXT	String	Data nine	256
data10	DATA10	TEXT	String	Data ten	256
numData0	NUM_DATA0	BIGINT	Long	Numeric data 0	16
numData1	NUM_DATA1	BIGINT	Long	Numeric data 1	16
numData2	NUM_DATA2	BIGINT	Long	Numeric data 2	16
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this profile expires	-
totalCount	TOTAL_COUNT	INT	int	Count for this profile	10

### 5.2.85 VTWFYears

**Description:** This has the years to capture

**Database table name :**VT\_WF\_YEARS

**Primary Keys :** wfld (WF\_ID)

Name	DB name	DB type	Java type	Description	Length
wfld	WF_ID (PK)	BIGINT	Long	wf id	16
objectId	OBJECT_ID	BIGINT	Long	Id of the user.	16
entityDefld	ENTITY_DEF_ID	BIGINT	Long	Id for the entity type	16
fingerPrintId	FPRINT_ID	BIGINT	Long	Log id for the finger print	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
year1	YEAR_1	INT	int	Year one	6
year2	YEAR_2	INT	int	Year two	6
year3	YEAR_3	INT	int	Year three	6
year4	YEAR_4	INT	int	Year four	6
year5	YEAR_5	INT	int	Year five	6
year6	YEAR_6	INT	int	Year six	6
year7	YEAR_7	INT	int	Year seven	6
year8	YEAR_8	INT	int	Year eight	6

### 5.2.86 VTWFMonths

**Description:** This has the months to capture

**Database table name :**VT\_WF\_MONTHS

**Primary Keys :** wfld (WF\_ID)

Name	DB name	DB type	Java type	Description	Length
wfld	WF_ID ( <i>PK</i> )	BIGINT	Long	wf id	16
objectId	OBJECT_ID	BIGINT	Long	Id of the user.	16
entityDefId	ENTITY_DEF_ID	BIGINT	Long	Id for the entity type	16
fingerPrintId	FPRINT_ID	BIGINT	Long	Log id for the finger print	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
month1	MONTH_1	INT	int	Month one	6
month2	MONTH_2	INT	int	Month two	6
month3	MONTH_3	INT	int	Month three	6
month4	MONTH_4	INT	int	Month four	6
month5	MONTH_5	INT	int	Month five	6
month6	MONTH_6	INT	int	Month six	6
month7	MONTH_7	INT	int	Month seven	6
month8	MONTH_8	INT	int	Month eight	6
month9	MONTH_9	INT	int	Month nine	6
month10	MONTH_10	INT	int	Month ten	6
month11	MONTH_11	INT	int	Month eleven	6
month12	MONTH_12	INT	int	Month twelve	6
month13	MONTH_13	INT	int	Month thirteen	6

### 5.2.87 VTWFDays

**Description:** This has the days to capture

**Database table name :**VT\_WF\_DAYS

**Primary Keys :** wfld (*WF\_ID*)

Name	DB name	DB type	Java type	Description	Length
wfld	WF_ID ( <i>PK</i> )	BIGINT	Long	wf id	16
objectId	OBJECT_ID	BIGINT	Long	Id of the user.	16
entityDefId	ENTITY_DEF_ID	BIGINT	Long	Id for the entity type	16
fingerPrintId	FPRINT_ID	BIGINT	Long	Log id for the finger print	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
day1	DAY_1	INT	int	Day one	6
day2	DAY_2	INT	int	Day two	6
day3	DAY_3	INT	int	Day three	6
day4	DAY_4	INT	int	Day four	6
day5	DAY_5	INT	int	Day five	6

Name	DB name	DB type	Java type	Description	Length
day6	DAY_6	INT	int	Day six	6
day7	DAY_7	INT	int	Day seven	6
day8	DAY_8	INT	int	Day eight	6
day9	DAY_9	INT	int	Day nine	6
day10	DAY_10	INT	int	Day ten	6
day11	DAY_11	INT	int	Day eleven	6
day12	DAY_12	INT	int	Day twelve	6
day13	DAY_13	INT	int	Day thirteen	6
day14	DAY_14	INT	int	Day fourteen	6
day15	DAY_15	INT	int	Day fifteen	6
day16	DAY_16	INT	int	Day sixteen	6
day17	DAY_17	INT	int	Day seventeen	6
day18	DAY_18	INT	int	Day eighteen	6
day19	DAY_19	INT	int	Day nineteen	6
day20	DAY_20	INT	int	Day twenty	6
day21	DAY_21	INT	int	Day twenty one	6
day22	DAY_22	INT	int	Day twenty two	6
day23	DAY_23	INT	int	Day twenty three	6
day24	DAY_24	INT	int	Day twenty four	6
day25	DAY_25	INT	int	Day twenty five	6
day26	DAY_26	INT	int	Day twenty six	6
day27	DAY_27	INT	int	Day twenty seven	6
day28	DAY_28	INT	int	Day twenty eight	6
day29	DAY_29	INT	int	Day twenty nine	6
day30	DAY_30	INT	int	Day thirty	6
day31	DAY_31	INT	int	Day thirty	6
day32	DAY_32	INT	int	Day thirty	6

## 5.2.88 VTWFHours

**Description:** This has the hours to capture

**Database table name :**VT\_WF\_HOURS

**Primary Keys :** wfld (WF\_ID)

Name	DB name	DB type	Java type	Description	Length
wfld	WF_ID (PK)	BIGINT	Long	wf id	16
objectId	OBJECT_ID	BIGINT	Long	Id of the user.	16
entityDefld	ENTITY_DEF_ID	BIGINT	Long	Id for the entity type	16
fingerPrintId	FPRINT_ID	BIGINT	Long	Log id for the finger print	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-

Name	DB name	DB type	Java type	Description	Length
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
hour1	HOUR_1	INT	int	Hour one	6
hour2	HOUR_2	INT	int	Hour two	6
hour3	HOUR_3	INT	int	Hour three	6
hour4	HOUR_4	INT	int	Hour four	6
hour5	HOUR_5	INT	int	Hour five	6
hour6	HOUR_6	INT	int	Hour six	6
hour7	HOUR_7	INT	int	Hour seven	6
hour8	HOUR_8	INT	int	Hour eight	6
hour9	HOUR_9	INT	int	Hour nine	6
hour10	HOUR_10	INT	int	Hour ten	6
hour11	HOUR_11	INT	int	Hour eleven	6
hour12	HOUR_12	INT	int	Hour twelve	6
hour13	HOUR_13	INT	int	Hour thirteen	6
hour14	HOUR_14	INT	int	Hour fourteen	6
hour15	HOUR_15	INT	int	Hour fifteen	6
hour16	HOUR_16	INT	int	Hour sixteen	6
hour17	HOUR_17	INT	int	Hour seventeen	6
hour18	HOUR_18	INT	int	Hour eighteen	6
hour19	HOUR_19	INT	int	Hour nineteen	6
hour20	HOUR_20	INT	int	Hour twenty	6
hour21	HOUR_21	INT	int	Hour twenty one	6
hour22	HOUR_22	INT	int	Hour twenty two	6
hour23	HOUR_23	INT	int	Hour twenty three	6
hour24	HOUR_24	INT	int	Hour twenty four	6
hour25	HOUR_25	INT	int	Hour twenty five	6

### 5.2.89 VTransactionLog

**Description:** This is the transaction log

**Database table name :**VT\_TRX\_LOGS

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log id	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time of this transaction.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
userId	USER_ID	BIGINT	Long	Id of the user.	16
requestId	REQUEST_ID	TEXT	String	Id of the login session.	256

Name	DB name	DB type	Java type	Description	Length
extTransactionId	EXT_TRX_ID	VARCHAR	String	External transaction id	255
trxDefId	TRX_DEF_ID	BIGINT	Long	Transaction def id	16
transactionType	TRX_TYPE	INT	int	Transaction type	3
status	STATUS	INT	int	Status of the transaction (where applicable)	5
score	SCORE	INT	Integer	Score for this transaction	-
ruleAction	RULE_ACTION	TEXT	String	Action	256
trxFlag	TRX_FLAG	INT	int	Flagging this transaction	3
postProcessStatus	POST_PROCESS_STATUS	INT	int	Status of the post processing	5
postProcessResult	POST_PROCESS_RESULT	INT	int	Status of the post processing	5
transactionData	TRX_DATA	TEXT	String	Transaction data as name value pair.	4000
data1	DATA1	TEXT	String	Data one	256
data2	DATA2	TEXT	String	Data two	256
data3	DATA3	TEXT	String	Data three	256
data4	DATA4	TEXT	String	Data four	256
data5	DATA5	TEXT	String	Data five	256
data6	DATA6	TEXT	String	Data six	256
data7	DATA7	TEXT	String	Data seven	256
data8	DATA8	TEXT	String	Data eight	256
data9	DATA9	TEXT	String	Data nine	256
data10	DATA10	TEXT	String	Data ten	256

## 5.2.90 VTTrxDData

**Description:** This contains the data associated with the transaction

**Database table name :**VT\_TRX\_DATA

**Primary Keys :** trxDataId (TRX\_DATA\_ID)

Name	DB name	DB type	Java type	Description	Length
trxDataId	TRX_DATA_ID (PK)	BIGINT	Long	Transaction data id	16
trxId	TRX_ID	BIGINT	Long	Id of the transaction.	16
dataDefId	DATA_DEF_ID	BIGINT	Long	Data def id	16
rowOrder	ROW_ORDER	INT	int	Row order	6
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
data1	DATA1	TEXT	String	Data one	4000
data2	DATA2	TEXT	String	Data two	4000
data3	DATA3	TEXT	String	Data three	4000

Name	DB name	DB type	Java type	Description	Length
data4	DATA4	TEXT	String	Data four	4000
data5	DATA5	TEXT	String	Data five	4000
data6	DATA6	TEXT	String	Data six	4000
data7	DATA7	TEXT	String	Data seven	4000
data8	DATA8	TEXT	String	Data eight	4000
data9	DATA9	TEXT	String	Data nine	4000
data10	DATA10	TEXT	String	Data ten	4000
numData0	NUM_DATA0	BIGINT	Long	Numeric data 0	16
numData1	NUM_DATA1	BIGINT	Long	Numeric data 1	16
numData2	NUM_DATA2	BIGINT	Long	Numeric data 2	16

### 5.2.91 VTTrxDef

**Description:** Definition of transaction meta data

**Database table name :**VT\_TRX\_DEF

**Primary Keys :** trxDefId (TRX\_DEF\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
trxDefId	TRX_DEF_ID (PK)	BIGINT	Long	Id for transaction definition	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name for transaction.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the object	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
trxDefKey	TRX_DEF_KEY	TEXT	String	Key name to be used for the transaction e.g bill_pay, etc. This has to be passed in the handleTransactionLog API call. The context map should have an attribute key called transactionType	4000	-
status	STATUS	INT	int	Status	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Note for this object	4000	-



## 5.2.92 VTrxDefHist

**Description:** This is the object history for VTrxDefHist

**Database table name :**VT\_TRX\_DEF\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
trxDefId	TRX_DEF_ID	BIGINT	Long	Id for transaction definition	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for transaction.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
trxDefKey	TRX_DEF_KEY	TEXT	String	Key name to be used for the transaction e.g bill_pay, etc. This has to be passed in the handleTransactionLog API call. The context map should have an attribute key called transactionType	4000
status	STATUS	INT	int	Status	2
notes	NOTES	TEXT	String	Note for this object	4000

## 5.2.93 VTrxInputDef

**Description:** Definition of transaction input meta data

**Database table name :**VT\_TRX\_INPUT\_DEF

**Primary Keys :** trxDefId (TRX\_DEF\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
trxDefId	TRX_DEF_ID (PK)	BIGINT	Long	Id for transaction definition	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-

Name	DB name	DB type	Java type	Description	Length	Enum values
name	LABEL	TEXT	String	Name for transaction.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the object	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
trxDefKey	TRX_DEF_KEY	TEXT	String	Key name to be used for the transaction e.g bill_pay, etc. This has to be passed in the handleTransactionLog API call. The context map should have an attribute key called transactionType	4000	-
status	STATUS	INT	int	Status	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Note for this object	4000	-

### 5.2.94 VTTrxInputDefHist

**Description:** This is the object history for VTTrxInputDefHist

**Database table name :**VT\_TRX\_INPUT\_DEF\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
trxDefId	TRX_DEF_ID	BIGINT	Long	Id for transaction definition	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for transaction.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000

Name	DB name	DB type	Java type	Description	Length
trxDefKey	TRX_DEF_KEY	TEXT	String	Key name to be used for the transaction e.g bill_pay, etc. This has to be passed in the handleTransactionLog API call. The context map should have an attribute key called transactionType	4000
status	STATUS	INT	int	Status	2
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.95 VEntityDef

**Description:** Definition of Entity meta data

**Database table name :**VT\_ENTITY\_DEF

**Primary Keys :** entityDefId (ENTITY\_DEF\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
entityDefId	ENTITY_DEF_ID (PK)	BIGINT	Long	Id for entity definition	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name for entity.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the object	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
entityDefKey	ENTITY_DEF_KEY	TEXT	String	Key of the entity. E.g. address, merchant, etc	256	-
status	STATUS	INT	int	Status	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
keyGenScheme	KEY_GEN_SCHEME	INT	int	Key generation scheme	-	-
keyGenParams	KEY_GEN_PARAMS	TEXT	String	Static params to be passed to the java class for key generation	4000	-
nameGenScheme	NAME_GEN_SCHEME	INT	int	Name generation scheme	-	-
nameGenParams	NAME_GEN_PARAMS	TEXT	String	Static params to be passed to the java class for name generation	4000	-

Name	DB name	DB type	Java type	Description	Length	Enum values
notes	NOTES	TEXT	String	Note for this object	4000	-

### 5.2.96 VTEntityDefHist

**Description:** This is the object history for VTEntityDefHist

**Database table name :**VT\_ENTITY\_DEF\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
entityDefId	ENTITY_DEF_ID	BIGINT	Long	Id for entity definition	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for entity.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
entityDefKey	ENTITY_DEF_KEY	TEXT	String	Key of the entity. E.g. address, merchant, etc	256
status	STATUS	INT	int	Status	2
keyGenScheme	KEY_GEN_SCHEME	INT	int	Key generation scheme	-
keyGenParams	KEY_GEN_PARAMS	TEXT	String	Static params to be passed to the java class for key generation	4000
nameGenScheme	NAME_GEN_SCHEME	INT	int	Name generation scheme	-
nameGenParams	NAME_GEN_PARAMS	TEXT	String	Static params to be passed to the java class for name generation	4000
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.97 VTTrxDefEntityDefMap

**Description:** Association between entity and transaction

**Database table name :**VT\_TRX\_ENT\_DEFS\_MAP

**Primary Keys :** mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
mapId	MAP_ID (PK)	BIGINT	Long	Id for map	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name for the map.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the object	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
trxDefId	TRX_DEF_ID	BIGINT	Long	Parent data def id	16	-
entityDefId	ENTITY_DEF_ID	BIGINT	Long	Parent data def id	16	-
relationType	RELATION_TYPE	TEXT	String	Type of the relation	4000	-
displayOrder	DISP_ORDER	INT	int	Display order	6	-
status	STATUS	INT	int	Status	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Note for this object	4000	-

## 5.2.98 VTTrxDefEntityDefMapHist

**Description:** History for VTTrxDefEntityDefMap

**Database table name :**VT\_TRX\_ENT\_DEFS\_MAP\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for the map.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
trxDefId	TRX_DEF_ID	BIGINT	Long	Parent data def id	16

Name	DB name	DB type	Java type	Description	Length
entityDefId	ENTITY_DEF_ID	BIGINT	Long	Parent data def id	16
relationType	RELATION_TYPE	TEXT	String	Type of the relation	4000
displayOrder	DISP_ORDER	INT	int	Display order	6
status	STATUS	INT	int	Status	2
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.99 VEntityDefEntityDefMap

**Description:** Association between entity and transaction

**Database table name :**VT\_ENT\_DEFS\_MAP

**Primary Keys :** mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
mapId	MAP_ID (PK)	BIGINT	Long	Id for map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for the map.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
entityDefId1	ENTITY_DEF_ID_1	BIGINT	Long	Parent entity def id of object 1	16
entityDefId2	ENTITY_DEF_ID_2	BIGINT	Long	Parent entity def id of object 2	16
relationType	RELATION_TYPE	TEXT	String	Type of the relation	4000
displayOrder	DISP_ORDER	INT	int	Display order	6
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.100 VEntityDefEntityDefMapHist

**Description:** History for VEntityDefEntityDefMap

**Database table name :**VT\_ENT\_DEFS\_MAP\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256

Name	DB name	DB type	Java type	Description	Length
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for the map.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
entityDefId1	ENTITY_DEF_ID_1	BIGINT	Long	Parent entity def id of object 1	16
entityDefId2	ENTITY_DEF_ID_2	BIGINT	Long	Parent entity def id of object 2	16
relationType	RELATION_TYPE	TEXT	String	Type of the relation	4000
displayOrder	DISP_ORDER	INT	int	Display order	6
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.101 VTDataDef

**Description:** Definition of Data meta

**Database table name :**VT\_DATA\_DEF

**Primary Keys :** dataDefId (DATA\_DEF\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
dataDefId	DATA_DEF_ID (PK)	BIGINT	Long	Id for data definition	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name for data def.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the object	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
dataDefKey	DATA_DEF_KEY	TEXT	String	Key of the data. E.g. street_name, zip_code, etc	256	-
status	STATUS	INT	int	Status	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED

Name	DB name	DB type	Java type	Description	Length	Enum values
dataDefType	DATA_DEF_TYPE	INT	int	Type of data def. Whether it is dynamic or static	5	-
isRequired	IS_REQUIRED	CHAR	boolean	Is this data required by default.	-	-
isAutoCreated	IS_AUTO_CREATED	CHAR	boolean	Whether this auto created.	-	-
notes	NOTES	TEXT	String	Note for this object	4000	-

### 5.2.102 VTDataDefHist

**Description:** This is the object history for VTDataDef

**Database table name :**VT\_DATA\_DEF\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
dataDefId	DATA_DEF_ID	BIGINT	Long	Id for data definition	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for data def.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
dataDefKey	DATA_DEF_KEY	TEXT	String	Key of the data. E.g. street_name, zip_code, etc	256
status	STATUS	INT	int	Status	2
dataDefType	DATA_DEF_TYPE	INT	int	Type of data def. Whether it is dynamic or static	5
isRequired	IS_REQUIRED	CHAR	boolean	Is this data required by default.	-
isAutoCreated	IS_AUTO_CREATED	CHAR	boolean	Whether this auto created.	-
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.103 VTDataDefElement

**Description:** Definition of elements in Data meta

**Database table name :**VT\_DATA\_DEF\_ELEM



**Primary Keys : dataDefElementId (DATA\_DEF\_ELEM\_ID)**

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
dataDefElementId	DATA_DEF_ELEM_ID (PK)	BIGINT	Long	Id for data definition element	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
defKey	DEF_KEY	TEXT	String	Key to identify this data	256	-
name	LABEL	TEXT	String	Name for column.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the object	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
dataDefId	DATA_DEF_ID	BIGINT	Long	Parent data def id	16	-
dataRow	DATA_ROW	INT	int	Row for this data element	-	-
dataColumn	DATA_COL	INT	int	Column for this data element	-	-
isEncrypted	IS_ENCRYPTED	CHAR	boolean	Is this data element encrypted	-	-
dataType	DATA_TYPE	INT	int	Type of the data	-	-
dataFormat	DATA_FORMAT	TEXT	String	Format of the data	4000	-
status	STATUS	INT	int	Status	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
isRequired	IS_REQUIRED	CHAR	boolean	Is this data required by default.	-	-
nameGenScheme	NAME_GEN_SCHEME	INT	int	Name generation scheme	-	-
nameGenParams	NAME_GEN_PARAMS	TEXT	String	Static params to be passed to the java class for name generation	4000	-
isAutoCreated	IS_AUTO_CREATED	CHAR	boolean	Whether this auto created.	-	-
notes	NOTES	TEXT	String	Note for this object	4000	-

**5.2.104 VTDataDefElementHist****Description:** History for VTDataDefElement**Database table name :**VT\_DATA\_DEF\_ELEM\_HIST**Primary Keys :**logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
dataDefElementId	DATA_DEF_ELEM_ID	BIGINT	Long	Id for data definition element	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
defKey	DEF_KEY	TEXT	String	Key to identify this data	256
name	LABEL	TEXT	String	Name for column.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
dataDefId	DATA_DEF_ID	BIGINT	Long	Parent data def id	16
dataRow	DATA_ROW	INT	int	Row for this data element	-
dataColumn	DATA_COL	INT	int	Column for this data element	-
isEncrypted	IS_ENCRYPTED	CHAR	boolean	Is this data element encrypted	-
dataType	DATA_TYPE	INT	int	Type of the data	-
dataFormat	DATA_FORMAT	TEXT	String	Format of the data	4000
status	STATUS	INT	int	Status	2
isRequired	IS_REQUIRED	CHAR	boolean	Is this data required by default.	-
nameGenScheme	NAME_GEN_SCHEME	INT	int	Name generation scheme	-
nameGenParams	NAME_GEN_PARAMS	TEXT	String	Static params to be passed to the java class for name generation	4000
isAutoCreated	IS_AUTO_CREATED	CHAR	boolean	Whether this auto created.	-
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.105 VTDataDefMap

**Description:** Map between Objects and Data Def

**Database table name :**VT\_DATA\_DEF\_MAP

**Primary Keys :** mapId (*MAP\_ID*)

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-

Name	DB name	DB type	Java type	Description	Length
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
mapId	MAP_ID (PK)	BIGINT	Long	Id for map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for the map.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
dataDefId	DATA_DEF_ID	BIGINT	Long	Parent data def id	16
parentObjectType	PARENT_OBJ_TYPE	INT	int	Type of source object	5
parentObjectId	PARENT_OBJECT_ID	BIGINT	Long	Parent to which datadef belongs to	-
relationType	RELATION_TYPE	TEXT	String	Type of the relation	4000
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.106 VTDataDefMapHist

**Description:** History for VTDataDefMap

**Database table name :**VT\_DATA\_DEF\_MAP\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for the map.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
dataDefId	DATA_DEF_ID	BIGINT	Long	Parent data def id	16
parentObjectType	PARENT_OBJ_TYPE	INT	int	Type of source object	5
parentObjectId	PARENT_OBJECT_ID	BIGINT	Long	Parent to which datadef belongs to	-
relationType	RELATION_TYPE	TEXT	String	Type of the relation	4000

Name	DB name	DB type	Java type	Description	Length
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.107 VTDataDefTranslation

**Description:** Translation from one element to another, e.g. input transaction to normalized transaction data. Or transaction to entity

**Database table name :**VT\_DATA\_DEF\_TRANS

**Primary Keys :** translationId (ELEM\_MAP\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
translationId	ELEM_MAP_ID (PK)	BIGINT	Long	Id for data definition element	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name for this data map.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the object	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
translationScheme	TRANS_SCHEME	INT	int	Scheme for translation	-	-
translationParams	TRANS_PARAMS	TEXT	String	Static params to be passed to the java class for translation	4000	-
srcObjectType	SRC_OBJ_TYPE	INT	int	Type of source object	5	-
srcObjectId	SRC_OBJ_ID	BIGINT	Long	Source object id	16	-
destObjectType	DEST_OBJ_TYPE	INT	int	Type of destination object	5	-
destObjectId	DEST_OBJ_ID	BIGINT	Long	Destination object id	16	-
relationType	RELATION_TYPE	TEXT	String	Type of the relation	4000	-
status	STATUS	INT	int	Status	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Note for this object	4000	-

### 5.2.108 VTDataDefTranslationHist

**Description:** History for VTDataDefTranslation

**Database table name :**VT\_DATA\_DEF\_TRANS\_HIST

**Primary Keys : logId (LOG\_ID)**

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
translationId	ELEM_MAP_ID	BIGINT	Long	Id for data definition element	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for this data map.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
translationScheme	TRANS_SCHEME	INT	int	Scheme for translation	-
translationParams	TRANS_PARAMS	TEXT	String	Static params to be passed to the java class for translation	4000
srcObjectType	SRC_OBJ_TYPE	INT	int	Type of source object	5
srcObjectId	SRC_OBJ_ID	BIGINT	Long	Source object id	16
destObjectType	DEST_OBJ_TYPE	INT	int	Type of destination object	5
destObjectId	DEST_OBJ_ID	BIGINT	Long	Destination object id	16
relationType	RELATION_TYPE	TEXT	String	Type of the relation	4000
status	STATUS	INT	int	Status	2
notes	NOTES	TEXT	String	Note for this object	4000

**5.2.109 VTDataDefElementTranslation**

**Description:** Translation from one element to another, e.g. input transaction to normalized transaction data. Or transaction to entity

**Database table name :**VT\_ELEM\_DEF\_TRANS

**Primary Keys :** destMapId (DEST\_MAP\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
destMapId	DEST_MAP_ID (PK)	BIGINT	Long	Id for data definition element	16	-

Name	DB name	DB type	Java type	Description	Length	Enum values
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name for this data map.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the object	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
translationScheme	TRANS_SCHEME	INT	int	Scheme for translation	-	-
translationParams	TRANS_PARAMS	TEXT	String	Static params to be passed to the java class for translation	4000	-
translationId	TRANS_ID	BIGINT	Long	Translation id	16	-
destElementDefId	DEST_ELEMENT_ID	BIGINT	Long	Destination data element id	16	-
status	STATUS	INT	int	Status	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Note for this object	4000	-

### 5.2.110 VTDataDefElementTranslationHist

**Description:** History for VTDataDefElement

**Database table name :** VT\_ELEM\_DEF\_TRANS\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
destMapId	DEST_MAP_ID	BIGINT	Long	Id for data definition element	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for this data map.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000

Name	DB name	DB type	Java type	Description	Length
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
translationScheme	TRANS_SCHEME	INT	int	Scheme for translation	-
translationParams	TRANS_PARAMS	TEXT	String	Static params to be passed to the java class for translation	4000
translationId	TRANS_ID	BIGINT	Long	Translation id	16
destElementDefId	DEST_ELEMENT_ID	BIGINT	Long	Destination data element id	16
status	STATUS	INT	int	Status	2
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.111 VTTranslationSourceElement

**Description:** Source columns for the translation

**Database table name :** VT\_TRANS\_SRC\_ELEM

**Primary Keys :** srcElementId (SRC\_ELEM\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
srcElementId	SRC_ELEM_ID (PK)	BIGINT	Long	Id for data definition element	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
name	LABEL	TEXT	String	Name for this data map.	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000	-
description	DESCRIPTION	TEXT	String	Description of the object	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
translationScheme	TRANS_SCHEME	INT	int	Scheme for translation	-	-
translationParams	TRANS_PARAMS	TEXT	String	Static params to be passed to the java class for translation	4000	-
destMapId	DEST_MAP_ID	BIGINT	Long	Destination map id	16	-
srcElementDefId	SRC_ELEMENT_ID	BIGINT	Long	Source data element id	16	-
sortOrder	SORT_ORDER	INT	int	Row for this data element	-	-

Name	DB name	DB type	Java type	Description	Length	Enum values
status	STATUS	INT	int	Status	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Note for this object	4000	-

### 5.2.112 VTTranslationSourceElementHist

**Description:** History for VTTranslationSourceElement

**Database table name :**VT\_TRANS\_SRC\_ELEM\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
srcElementId	SRC_ELEM_ID	BIGINT	Long	Id for data definition element	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name for this data map.	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Resource bundle key for the name	4000
description	DESCRIPTION	TEXT	String	Description of the object	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
translationScheme	TRANS_SCHEME	INT	int	Scheme for translation	-
translationParams	TRANS_PARAMS	TEXT	String	Static params to be passed to the java class for translation	4000
destMapId	DEST_MAP_ID	BIGINT	Long	Destination map id	16
srcElementDefId	SRC_ELEMENT_ID	BIGINT	Long	Source data element id	16
sortOrder	SORT_ORDER	INT	int	Row for this data element	-
status	STATUS	INT	int	Status	2
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.113 VCountry

**Description:** Country object

**Database table name :**VCRYPT\_COUNTRY

**Primary Keys :** countryId (COUNTRY\_ID)



Name	DB name	DB type	Java type	Description	Length
countryId	COUNTRY_ID (PK)	BIGINT	Long	Id for this country	16
countryCode	COUNTRY_CODE	VARCHAR	String	Code of the country	64
countryName	COUNTRY_NAME	TEXT	String	Name of the country	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
continent	CONTINENT	VARCHAR	String	Continent to which this country belongs to	64
notes	NOTES	TEXT	String	Notes for this country	4000

### 5.2.114 VCountryHist

**Description:** Country object

**Database table name :** V\_COUNTRY\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
countryId	COUNTRY_ID	BIGINT	Long	Id for this country	16
countryCode	COUNTRY_CODE	VARCHAR	String	Code of the country	64
countryName	COUNTRY_NAME	TEXT	String	Name of the country	4000
continent	CONTINENT	VARCHAR	String	Continent to which this country belongs to	64
notes	NOTES	TEXT	String	Notes for this country	4000

### 5.2.115 VState

**Description:** This is the state or region of the country

**Database table name :** VCRYPT\_STATE

**Primary Keys :** stateId (STATE\_ID)

Name	DB name	DB type	Java type	Description	Length
stateId	STATE_ID (PK)	BIGINT	Long	Id for this state	16
countryId	COUNTRY_ID	BIGINT	Long	Id for the country to which this state belongs to.	16
stateCode	STATE_CODE	VARCHAR	String	Code for the state or region	64
stateName	STATE_NAME	TEXT	String	Name of the state	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-

Name	DB name	DB type	Java type	Description	Length
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
notes	NOTES	TEXT	String	Notes for this state	4000

### 5.2.116 VStateHist

**Description:** This is the state or region of the country

**Database table name :** V\_STATE\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
stateId	STATE_ID	BIGINT	Long	Id for this state	16
countryId	COUNTRY_ID	BIGINT	Long	Id for the country to which this state belongs to.	16
stateCode	STATE_CODE	VARCHAR	String	Code for the state or region	64
stateName	STATE_NAME	TEXT	String	Name of the state	4000
notes	NOTES	TEXT	String	Notes for this state	4000

### 5.2.117 VCity

**Description:** This is the city object

**Database table name :** VCRYPT\_CITY

**Primary Keys :** cityId (CITY\_ID)

Name	DB name	DB type	Java type	Description	Length
cityId	CITY_ID (PK)	BIGINT	Long	Id for this city	16
stateId	STATE_ID	BIGINT	Long	Id for the state to which this city belongs to.	16
cityCode	CITY_CODE	VARCHAR	String	Code for the city	64
cityName	CITY_NAME	TEXT	String	Name of the city	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
latitude	LATITUDE	VARCHAR	String	Latitude	20
longitude	LONGITUDE	VARCHAR	String	Longitude	20
timezone	TIMEZONE	VARCHAR	String	Time Zone	20
notes	NOTES	TEXT	String	Notes for this city	4000

### 5.2.118 VCityHist

**Description:** This is the city object

**Database table name :** *V\_CITY\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
cityId	CITY_ID	BIGINT	Long	Id for this city	16
stateId	STATE_ID	BIGINT	Long	Id for the state to which this city belongs to.	16
cityCode	CITY_CODE	VARCHAR	String	Code for the city	64
cityName	CITY_NAME	TEXT	String	Name of the city	4000
latitude	LATITUDE	VARCHAR	String	Latitude	20
longitude	LONGITUDE	VARCHAR	String	Longitude	20
timezone	TIMEZONE	VARCHAR	String	Time Zone	20
notes	NOTES	TEXT	String	Notes for this city	4000

### 5.2.119 VISP

**Description:** ISP listing

**Database table name :** *VCRYPT\_ISP*

**Primary Keys :** ispId (*ISP\_ID*)

Name	DB name	DB type	Java type	Description	Length
ispId	ISP_ID ( <i>PK</i> )	BIGINT	Long	Id for this ISP	16
ispName	ISP_NAME	TEXT	String	Name of the ISP	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-

### 5.2.120 VISPHist

**Description:** ISP listing

**Database table name :** *V\_ISP\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-

Name	DB name	DB type	Java type	Description	Length
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
ispId	ISP_ID	BIGINT	Long	Id for this ISP	16
ispName	ISP_NAME	TEXT	String	Name of the ISP	4000

### 5.2.121 VLocationLookup

**Description:** Location lookup tables for constants

**Database table name :** *V\_LOC\_LOOKUP*

**Primary Keys :** lookupId (*LOOKUP\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
lookupId	LOOKUP_ID ( <i>PK</i> )	BIGINT	Long	Lookup ID	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionNumber	VERSION_NUM	INT	int	Version Number	-	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time.	-	-
lookupType	LOOKUP_TYPE	INT	int	Type of lookup. E.g. for profiles, etc	-	-
name	NAME	TEXT	String	Name of the lookup	4000	-
description	DESCRIPTION	TEXT	String	Description	4000	-
status	STATUS	INT	int	Status of the lookup	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED

### 5.2.122 VIPLocationMap

**Description:** Mapping of the IP range to city, state and country

**Database table name :** *VCRYPT\_IP\_LOCATION\_MAP*

**Primary Keys :** ipRangeId (*IP\_RANGE\_ID*)

Name	DB name	DB type	Java type	Description	Length
ipRangeId	IP_RANGE_ID ( <i>PK</i> )	BIGINT	Long	Id for this range	16
fromIPAddr	FROM_IP_ADDR	BIGINT	String	The from IP address	15
toIPAddr	TO_IP_ADDR	BIGINT	String	The to IP address	15
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-

Name	DB name	DB type	Java type	Description	Length
countryId	COUNTRY_ID	BIGINT	Long	Id for the country to which this state belongs to.	16
stateId	STATE_ID	BIGINT	Long	Id for the state to which this IP range belongs to.	16
cityId	CITY_ID	BIGINT	Long	Id for the city to which this IP range belongs to.	16
metroId	METRO_ID	BIGINT	Long	Id of the metro for this IP	-
ispId	ISP_ID	BIGINT	Long	Id for the ISP to which this IP range belongs to.	16
ipRoutingType	ROUTING_TYPE	INT	Integer	IP routing type	3
connectionType	CONNECTION_TYPE	INT	Integer	Connection type	-
connectionSpeed	CONNECTION_SPEED	INT	Integer	Connection speed	-
topLevelDomain	TOP_LEVEL_DOMAIN	VARCHAR	String	Top level domain	25
secondLevelDomain	SEC_LEVEL_DOMAIN	VARCHAR	String	Second level domain	128
asn	ASN	VARCHAR	String	ASN	25
carrier	CARRIER	VARCHAR	String	Carrier	128
zipCode	ZIP_CODE	VARCHAR	String	Zip code	24
dma	DMA	INT	Integer	U.S. Designated Market Area, AC Nielsen	6
msa	MSA	INT	Integer	Metropolitan Statistical Area	6
pmsa	PMSA	INT	Integer	Primary Metropolitan Statistical Area	6
regionId	REGION_ID	BIGINT	Long	Id the region	16
phoneAreaCode	PHONE_AREA	VARCHAR	String	Phone area code	10
isSplit	IS_SPLIT	CHAR	boolean	Is the IP split. If so, in some queries, we might have to do additional checks.	-
countryCF	COUNTRY_CF	INT	Integer	Confidence factor of the country	4
stateCF	STATE_CF	INT	Integer	Confidence factor of the state	4
cityCF	CITY_CF	INT	Integer	Confidence factor of the city	4
notes	NOTES	VARCHAR	String	Notes for this IP range	255

### 5.2.123 VIPLocationMapHist

**Description:** Mapping of the IP range to city, state and country. Shadow table

**Database table name :** V\_IP\_LOC\_MAP\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-

Name	DB name	DB type	Java type	Description	Length
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
ipRangeId	IP_RANGE_ID	BIGINT	Long	Id for this range	16
fromIPAddr	FROM_IP_ADDR	BIGINT	String	The from IP address	15
toIPAddr	TO_IP_ADDR	BIGINT	String	The to IP address	15
countryId	COUNTRY_ID	BIGINT	Long	Id for the country to which this state belongs to.	16
stateId	STATE_ID	BIGINT	Long	Id for the state to which this IP range belongs to.	16
cityId	CITY_ID	BIGINT	Long	Id for the city to which this IP range belongs to.	16
metroId	METRO_ID	BIGINT	Long	Id of the metro for this IP	-
ispId	ISP_ID	BIGINT	Long	Id for the ISP to which this IP range belongs to.	16
ipRoutingType	ROUTING_TYPE	INT	Integer	IP routing type	3
connectionType	CONNECTION_TYPE	INT	Integer	Connection type	-
connectionSpeed	CONNECTION_SPEED	INT	Integer	Connection speed	-
topLevelDomain	TOP_LEVEL_DOMAIN	VARCHAR	String	Top level domain	25
secondLevelDomain	SEC_LEVEL_DOMAIN	VARCHAR	String	Second level domain	128
asn	ASN	VARCHAR	String	ASN	25
carrier	CARRIER	VARCHAR	String	Carrier	128
zipCode	ZIP_CODE	VARCHAR	String	Zip code	24
dma	DMA	INT	Integer	U.S. Designated Market Area, AC Nielsen	6
msa	MSA	INT	Integer	Metropolitan Statistical Area	6
pmsa	PMSA	INT	Integer	Primary Metropolitan Statistical Area	6
regionId	REGION_ID	BIGINT	Long	Id the region	16
phoneAreaCode	PHONE_AREA	VARCHAR	String	Phone area code	10
isKnownProxy	IS_PROXY	CHAR	boolean	Whether this is a known proxy	-
isSplit	IS_SPLIT	CHAR	boolean	Is the IP split. If so, in some queries, we might have to do additional checks.	-
countryCF	COUNTRY_CF	INT	Integer	Confidence factor of the country	4
stateCF	STATE_CF	INT	Integer	Confidence factor of the state	4
cityCF	CITY_CF	INT	Integer	Confidence factor of the city	4
notes	NOTES	VARCHAR	String	Notes for this IP range	255

### 5.2.124 VIPLocationMapSplit

**Description:** Mapping of the split Class C IP ranges

**Database table name :** *V\_IP\_LOC\_MAP\_SPLIT*

**Primary Keys :** ipRangeId (*IP\_RANGE\_ID*)

Name	DB name	DB type	Java type	Description	Length
ipRangeId	IP_RANGE_ID ( <i>PK</i> )	BIGINT	Long	Id for this range	16
baseIPAddr	BASE_IP_ADDR	BIGINT	String	The from IP address	15
fromIPAddr	FROM_IP_ADDR	BIGINT	String	The from IP address	15
toIPAddr	TO_IP_ADDR	BIGINT	String	The to IP address	15
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
secondLevelDomain	SEC_LEVEL_DOMAIN	VARCHAR	String	Second level domain	128
notes	NOTES	VARCHAR	String	Notes for this IP range	255

### 5.2.125 VIPLocationMapSplitHist

**Description:** Mapping of the split Class C IP ranges. Shadow table

**Database table name :** *V\_IP\_LOC\_MAP\_SPLIT\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
ipRangeId	IP_RANGE_ID	BIGINT	Long	Id for this range	16
baseIPAddr	BASE_IP_ADDR	BIGINT	String	The from IP address	15
fromIPAddr	FROM_IP_ADDR	BIGINT	String	The from IP address	15
toIPAddr	TO_IP_ADDR	BIGINT	String	The to IP address	15
secondLevelDomain	SEC_LEVEL_DOMAIN	VARCHAR	String	Second level domain	128
notes	NOTES	VARCHAR	String	Notes for this IP range	255

### 5.2.126 VLocationUpdateSession

**Description:** Location update session

**Database table name :** *V\_LOC\_UPD\_SESS*

**Primary Keys :** updateSessionId (*SESS\_ID*)

Name	DB name	DB type	Java type	Description	Length
updateSessionId	SESS_ID ( <i>PK</i> )	BIGINT	Long	Id for this update session	16

Name	DB name	DB type	Java type	Description	Length
versionNumber	VERSION_NUM	INT	int	Version Number	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
name	LABEL	TEXT	String	Name	4000
updateType	UPDATE_TYPE	INT	int	Type of the update. e.g. Location load or anonymizer	5
updateStatus	UPDATE_STATUS	INT	int	Status of the update	5
beginTime	BEGIN_TIME	DATETIME	Date	Date/Time for session begin time.	-
endTime	END_TIME	DATETIME	Date	End time.	-
notes	NOTES	TEXT	String	Notes	4000

### 5.2.127 VLocationUpdateLogs

**Description:** Location Update Logs

**Database table name :** *V\_UPD\_LOGS*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Id for the run log	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
updateSessionId	UPD_SESS_ID	BIGINT	Long	Id for the update session	16
name	LOG_NAME	TEXT	String	Name for the log	4000
value	LOG_VALUE	TEXT	String	Value of the log	4000
logType	LOG_TYPE	INT	int	The type of the log.	5
notes	NOTES	TEXT	String	Notes	4000

### 5.2.128 VIPCluster

**Description:** This class defines an IP cluster. IP cluster is a range of IP addresses grouped as a cluster.

**Database table name :** *VT\_IP\_CLUSTER*

**Primary Keys :** clusterId (*CLUSTER\_ID*)

Name	DB name	DB type	Java type	Description	Length
clusterId	CLUSTER_ID ( <i>PK</i> )	BIGINT	Long	Id for this row	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
label	LABEL	TEXT	String	Label for the cluster. This should be unique among all the IP clusters.	4000



Name	DB name	DB type	Java type	Description	Length
fromIPAddr	FROM_IP_ADDR	BIGINT	String	The from IP address	15
toIPAddr	TO_IP_ADDR	BIGINT	String	The to IP address	15
description	DESCRIPTION	TEXT	String	Description for this group.	4000
notes	NOTES	TEXT	String	Note against this node	4000

### 5.2.129 VIPClusterGroup

**Description:** This class represents the group of cluster ids. The cluster ids are stored in VIPClusterGroupMap

**Database table name :** *VT\_IP\_CLUSTER\_GROUP*

**Primary Keys :** clusterGroupId (*CLUSTER\_GROUP\_ID*)

Name	DB name	DB type	Java type	Description	Length
clusterGroupId	CLUSTER_GROUP_ID (PK)	BIGINT	Long	Id for this group	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
label	LABEL	TEXT	String	Label for this cluster group. This should be unique among the IP cluster groups.	4000
description	DESCRIPTION	TEXT	String	Description for this group.	4000
notes	NOTES	TEXT	String	Note against this node	4000

### 5.2.130 VIPClusterGroupMap

**Description:** This is used as an element in VIPClusterGroup

**Database table name :** *VT\_IP\_CLUSTER\_GROUPMAP*

**Primary Keys :** clusterGroupMapId (*CLUSTER\_GROUPMAP\_ID*)

Name	DB name	DB type	Java type	Description	Length
clusterGroupMapId	CLUSTER_GROUPMAP_ID (PK)	BIGINT	Long	Id for the group map	16
clusterGroupId	CLUSTER_GROUP_ID	BIGINT	Long	Id for the cluster group	16
clusterId	CLUSTER_ID	BIGINT	Long	Id for the cluster id	16

### 5.2.131 VRuleVersion

**Description:** Managing the versions of the rule

**Database table name :** *VR\_VERSION*

**Primary Keys :** versionId (*VERSION\_ID*)

Name	DB name	DB type	Java type	Description	Length
versionId	VERSION_ID (PK)	BIGINT	Long	Id for this version row	16

Name	DB name	DB type	Java type	Description	Length
parentVersionId	PARENT_VERSION_ID	BIGINT	Long	Parent version id	16
versionNumber	VERSION_NUM	INT	int	Number for this version.	10
versionName	VERSION_NAME	TEXT	String	Name for this version.	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
versionStatus	VERSION_STATUS	INT	int	Status of this version	3
runStatus	RUN_STATUS	INT	int	This is the runtime status, whether it is active run or not	3
editStatus	EDIT_STATUS	INT	int	This is the edit status, whether it is active edit or not	3
notes	NOTES	TEXT	String	Note against this version	4000

### 5.2.132 VRuleVersionHist

**Description:** History of rule versions

**Database table name :**VR\_VERSION\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
versionId	VERSION_ID	BIGINT	Long	Id for this version row	16
parentVersionId	PARENT_VERSION_ID	BIGINT	Long	Parent version id	16
versionNumber	VERSION_NUM	INT	int	Number for this version.	10
versionName	VERSION_NAME	TEXT	String	Name for this version.	4000
versionStatus	VERSION_STATUS	INT	int	Status of this version	3
runStatus	RUN_STATUS	INT	int	This is the runtime status, whether it is active run or not	3
editStatus	EDIT_STATUS	INT	int	This is the edit status, whether it is active edit or not	3
notes	NOTES	TEXT	String	Note against this version	4000

### 5.2.133 VRuleVersionTree

**Description:** Maintains the version tree

**Database table name :**VR\_VERSION\_TREE

**Primary Keys :** treeId (TREE\_ID)

Name	DB name	DB type	Java type	Description	Length
treeId	TREE_ID (PK)	BIGINT	Long	Id for this tree	16
versionId	VERSION_ID	BIGINT	Long	Version Id	16
olderVersionId	OLD_VERSION_ID	BIGINT	Long	Version Id of the ancestor	16
orderNumber	ORDER_NUMBER	INT	int	Order of the tree	3
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-

### 5.2.134 VRuleVersionMap

**Description:** Maps all the elements to the version

**Database table name :**VR\_VERSION\_MAP

**Primary Keys :** mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID (PK)	BIGINT	Long	Id for the map	16
versionId	VERSION_ID	BIGINT	Long	Version Id	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-
objectType	OBJECT_TYPE	INT	int	Type of the object. Example, PolicySet, Policy, Model, Rule, RuleMap, ..	3
objectId	OBJECT_ID	BIGINT	Long	Id of the object	16

### 5.2.135 VRule

**Description:** This is the rule template

**Database table name :**VCRYPT\_RULE

**Primary Keys :** ruleId (RULE\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
ruleId	RULE_ID (PK)	BIGINT	Long	Id for this rule	16	-
ruleName	RULE_NAME	TEXT	String	Name for this rule.	4000	-
ruleNameRBKey	RULE_NAME_RBKEY	TEXT	String	Resource bundle key for the rule name	4000	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-

Name	DB name	DB type	Java type	Description	Length	Enum values
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
minCompatibleVersion	MIN_COMPAT_VER	VARCHAR	String	Minimum compatible version	32	-
maxCompatibleVersion	MAX_COMPAT_VER	VARCHAR	String	Maximum compatible version	32	-
description	DESCRIPTION	TEXT	String	Description of the rule	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
ruleType	RULE_TYPE	INT	int	Type of the rule.	-	-
ruleStatus	RULE_STATUS	INT	int	Type of the rule.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
ruleMetaData	RULE_METADATA	TEXT	String	Meta data describing the attributes and other properties of the rule	-	-
ruleFileData	RULE_FILEDATA	TEXT	String	Content from the rule file	-	-
resultList	RESULT_LIST	TEXT	String	List of possible results stored in XML format	4000	-
defaultScore	DEFAULT_SCORE	INT	int	Default score for this rule template	-	-
defaultWeight	DEFAULT_WEIGHT	INT	int	Default weight for this rule template	-	-
notes	NOTES	TEXT	String	Note against this rule	4000	-

### 5.2.136 VRuleHist

**Description:** This is the rule object history

**Database table name :**VCRYPT\_RULE\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
ruleId	RULE_ID	BIGINT	Long	Id for this rule	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255

Name	DB name	DB type	Java type	Description	Length
versionId	VERSION_ID	BIGINT	Long	Version Id	16
ruleName	RULE_NAME	TEXT	String	Name for this rule.	4000
ruleNameRBKey	RULE_NAME_RBKEY	TEXT	String	Resource bundle key for the rule name	4000
minCompatibleVersion	MIN_COMPAT_VER	VARCHAR	String	Minimum compatible version	32
maxCompatibleVersion	MAX_COMPAT_VER	VARCHAR	String	Maximum compatible version	32
description	DESCRIPTION	TEXT	String	Description of the rule	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
ruleType	RULE_TYPE	INT	int	Type of the rule.	-
ruleStatus	RULE_STATUS	INT	int	Type of the rule.	2
ruleMetaData	RULE_METADATA	TEXT	String	Meta data describing the attributes and other properties of the rule	-
ruleFileData	RULE_FILEDATA	TEXT	String	Rule file name	-
resultList	RESULT_LIST	TEXT	String	List of possible results stored in XML format	4000
defaultScore	DEFAULT_SCORE	INT	int	Default score for this rule template	-
defaultWeight	DEFAULT_WEIGHT	INT	int	Default weight for this rule template	-
notes	NOTES	TEXT	String	Note against this rule	4000

### 5.2.137 VRuleCondition

**Description:** This is the rule condition template

**Database table name :** *VR\_RULE\_CONDN*

**Primary Keys :** conditionId (*CONDN\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
conditionId	CONDN_ID ( <i>PK</i> )	BIGINT	Long	Id for this rule condition	16	-
conditionName	CONDN_NAME	TEXT	String	Name for the condition.	4000	-
conditionNameRBKey	CONDN_NAME_RBKEY	TEXT	String	Resource bundle key for the condition name	4000	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-

Name	DB name	DB type	Java type	Description	Length	Enum values
minCompatibleVersion	MIN_COMPAT_VER	VARCHAR	String	Minimum compatible version	32	-
maxCompatibleVersion	MAX_COMPAT_VER	VARCHAR	String	Maximum compatible version	32	-
description	DESCRIPTION	TEXT	String	Description of the condition	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
conditionType	CONDITION_TYPE	INT	int	Type of the condition.	-	-
conditionStatus	CONDN_STATUS	INT	int	Type of the condition.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
conditionData	CONDN_DATA	TEXT	String	Condition expression. If it is Oracle database, then is stored as CLOB.	-	-
resultList	RESULT_LIST	TEXT	String	List of possible results stored in XML format	4000	-
notes	NOTES	TEXT	String	Note against this condition	4000	-

### 5.2.138 VRuleConditionHist

**Description:** This is the rule condition history

**Database table name :** *VR\_RULE\_CONDN\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
conditionId	CONDN_ID	BIGINT	Long	Id for this rule condition	16
conditionName	CONDN_NAME	TEXT	String	Name for the condition.	4000
conditionNameRBKey	CONDN_NAME_RBKEY	TEXT	String	Resource bundle key for the condition name	4000
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
minCompatibleVersion	MIN_COMPAT_VER	VARCHAR	String	Minimum compatible version	32

Name	DB name	DB type	Java type	Description	Length
maxCompatibleVersion	MAX_COMPAT_VER	VARCHAR	String	Maximum compatible version	32
description	DESCRIPTION	TEXT	String	Description of the condition	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
conditionType	CONDITION_TYPE	INT	int	Type of the condition.	-
conditionStatus	CONDN_STATUS	INT	int	Type of the condition.	2
conditionData	CONDN_DATA	TEXT	String	Condition expression. If it is Oracle database, then is stored as CLOB.	-
resultList	RESULT_LIST	TEXT	String	List of possible results stored in XML format	4000
notes	NOTES	TEXT	String	Note against this condition	4000

### 5.2.139 VRuleConditionScope

**Description:** Scope for the Rule Condition

**Database table name :** *VR\_RULE\_CONDN\_SCOPE*

**Primary Keys :** scopeId (*SCOPE\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
scopeId	SCOPE_ID ( <i>PK</i> )	BIGINT	Long	Id for the Scope	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
conditionId	CONDN_ID	BIGINT	Long	Id of the rule condition	16	-
status	STATUS	INT	int	Status of the scope.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
scopeEnumElementValue	SCOPE_ELEM_VALUE	INT	int	Value of the scope enum	-	-

### 5.2.140 VRuleConditionScopeHist

**Description:** Shadow table for Rule Condition Scope

**Database table name :** *VR\_RULE\_CONDN\_SCOPE\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
scopeId	SCOPE_ID	BIGINT	Long	Id for the Scope	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
conditionId	CONDN_ID	BIGINT	Long	Id of the rule condition	16
status	STATUS	INT	int	Status of the scope.	2
scopeEnumElementValue	SCOPE_ELEM_VALUE	INT	int	Value of the scope enum	-

### 5.2.141 VRuleConditionMap

**Description:** This contains mapping between Rule Template and Rule Conditions

**Database table name :** *VR\_RULE\_CONDN\_MAP*

**Primary Keys :** mapId (*MAP\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
mapId	MAP_ID ( <i>PK</i> )	BIGINT	Long	Id for the Map	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
mapName	MAP_NAME	TEXT	String	Name for this instance.	4000	-
mapNameRBKey	MAP_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000	-
description	DESCRIPTION	TEXT	String	Description of the map	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
ruleId	RULE_ID	BIGINT	Long	Id of the rule template	16	-
conditionId	CONDN_ID	BIGINT	Long	Id of the rule condition	16	-
status	MAP_STATUS	INT	int	Status of the map.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED



Name	DB name	DB type	Java type	Description	Length	Enum values
isPreCondition	IS_PRECONDN	CHAR	boolean	Is this a pre condition for the rule to execute	-	-
displayOrder	DISP_ORDER_NUMBER	INT	int	Order of display.	-	-
executionOrder	EXEC_ORDER_NUMBER	INT	int	Order of execution.	-	-
notes	NOTES	TEXT	String	Notes for this object	4000	-

### 5.2.142 VRuleConditionMapHist

**Description:** Shadow table for Rule Condition Map

**Database table name :**VR\_RULE\_CONDN\_MAP\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for the Map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
mapName	MAP_NAME	TEXT	String	Name for this instance.	4000
mapNameRBKey	MAP_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000
description	DESCRIPTION	TEXT	String	Description of the map	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
ruleId	RULE_ID	BIGINT	Long	Id of the rule template	16
conditionId	CONDN_ID	BIGINT	Long	Id of the rule condition	16
status	MAP_STATUS	INT	int	Status of the map.	2
isPreCondition	IS_PRECONDN	CHAR	boolean	Is this a pre condition for the rule to execute	-
displayOrder	DISP_ORDER_NUMBER	INT	int	Order of display.	-
executionOrder	EXEC_ORDER_NUMBER	INT	int	Order of execution.	-
notes	NOTES	TEXT	String	Notes for this object	4000

### 5.2.143 VRuleParam

**Description:** This contains the parameter definition for the given rule template

**Database table name :**VCRYPT\_RULE\_PARAMS

**Primary Keys : paramId (PARAM\_ID)**

Name	DB name	DB type	Java type	Description	Length	Enum values
paramId	PARAM_ID (PK)	BIGINT	Long	Id for the parameter	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
ruleId	RULE_ID	BIGINT	Long	Id for the rule	16	-
conditionId	CONDN_ID	BIGINT	Long	Id of the rule condition	16	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
paramName	PARAM_NAME	TEXT	String	Name of the parameter	4000	-
paramNameRBKey	PARAM_NAME_RBKEY	TEXT	String	Key to the Resource Bundle for the parameter	4000	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
paramStatus	PARAM_STATUS	INT	int	Status of the parameter.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
promptLabel	PROMPT_LABEL	TEXT	String	Label to prompt	4000	-
promptLabelRBKey	PROMPT_LABEL_RBKEY	TEXT	String	Key to the resource bundle for Label	4000	-
description	DESCRIPTION	TEXT	String	Description of the rule parameter	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
orderNumber	ORDER_NUMBER	INT	int	Order number. This is used to create the grammar for prompts	-	-
compareOperator	COMPARE_OPER	INT	int	Comparison operator	-	-
javaClass	JAVA_CLASS	TEXT	String	Java class path	4000	-
valueType	VALUE_TYPE	INT	int	Value type	-	-
valueSubType	VALUE_SUB_TYPE	VARCHAR	String	Value sub type	128	-

Name	DB name	DB type	Java type	Description	Length	Enum values
validations	VALIDATIONS	TEXT	String	Constraints for the parameter	256	-
defaultValue	DEFAULT_VALUE	TEXT	String	Default value	4000	-
notes	NOTES	TEXT	String	Notes for this parameter	4000	-

### 5.2.144 VRuleParamHist

**Description:** Shadow table for Rule Param

**Database table name :** VCRYPT\_RULE\_PARAMS\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
paramId	PARAM_ID	BIGINT	Long	Id for the parameter	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
ruleId	RULE_ID	BIGINT	Long	Id for the rule	16
conditionId	CONDN_ID	BIGINT	Long	Id of the rule condition	16
paramName	PARAM_NAME	TEXT	String	Name of the parameter	4000
paramNameRBKey	PARAM_NAME_RBKEY	TEXT	String	Key to the Resource Bundle for the parameter	4000
paramStatus	PARAM_STATUS	INT	int	Status of the parameter.	2
promptLabel	PROMPT_LABEL	TEXT	String	Label to prompt	4000
promptLabelRBKey	PROMPT_LABEL_RBKEY	TEXT	String	Key to the resource bundle for Label	4000
description	DESCRIPTION	TEXT	String	Description of the rule parameter	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
orderNumber	ORDER_NUMBER	INT	int	Order number. This is used to create the grammar for prompts	-
compareOperator	COMPARE_OPER	INT	int	Comparison operator	-
javaClass	JAVA_CLASS	TEXT	String	Java class path	4000
valueType	VALUE_TYPE	INT	int	Value type	-
valueSubType	VALUE_SUB_TYPE	VARCHAR	String	Value sub type	128
validations	VALIDATIONS	TEXT	String	Constraints for the parameter	256
defaultValue	DEFAULT_VALUE	TEXT	String	Default value	4000

Name	DB name	DB type	Java type	Description	Length
notes	NOTES	TEXT	String	Notes for this paramter	4000

### 5.2.145 VRuleParamCustom

**Description:** Customization of Rule Parameters

**Database table name :** *VR\_RULE\_PARAM\_CUSTOM*

**Primary Keys :** customId (*CUSTOM\_ID*)

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
customId	CUSTOM_ID ( <i>PK</i> )	BIGINT	Long	Id for the customization	16
ruleParamId	PARAM_ID	BIGINT	Long	Id for the rule param	16
ruleConditionMapId	RULE_COND_MAP_ID	BIGINT	Long	Id to the rule condition map	16
paramName	PARAM_NAME	TEXT	String	Name of the parameter	4000
paramNameRBKey	PARAM_NAME_RBKEY	TEXT	String	Key to the Resource Bundle for the parameter	4000
promptLabel	PROMPT_LABEL	TEXT	String	Label to prompt	4000
promptLabelRBKey	PROMPT_LABEL_RBKEY	TEXT	String	Key to the resource bundle for Label	4000
description	DESCRIPTION	TEXT	String	Description of the rule parameter	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
defaultValue	DEFAULT_VALUE	TEXT	String	Default value	4000
notes	NOTES	TEXT	String	Notes for this paramter	4000

### 5.2.146 VRuleParamCustomHist

**Description:** Shadow table for VRuleParamCustom

**Database table name :** *VR\_RULE\_PARAM\_CUSTOM\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
customId	CUSTOM_ID	BIGINT	Long	Id for the customization	16
ruleParamId	PARAM_ID	BIGINT	Long	Id for the rule param	16

Name	DB name	DB type	Java type	Description	Length
ruleConditionMapId	RULE_COND_MAP_ID	BIGINT	Long	Id to the rule condition map	16
paramName	PARAM_NAME	TEXT	String	Name of the parameter	4000
paramNameRBKey	PARAM_NAME_RBKEY	TEXT	String	Key to the Resource Bundle for the parameter	4000
promptLabel	PROMPT_LABEL	TEXT	String	Label to prompt	4000
promptLabelRBKey	PROMPT_LABEL_RBKEY	TEXT	String	Key to the resource bundle for Label	4000
description	DESCRIPTION	TEXT	String	Description of the rule parameter	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
defaultValue	DEFAULT_VALUE	TEXT	String	Default value	4000
notes	NOTES	TEXT	String	Notes for this paramter	4000

### 5.2.147 VProfile

**Description:** This is the rule model object

**Database table name :** *VCRYPT\_PROFILE*

**Primary Keys :** profileId (*PROFILE\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
profileId	PROFILE_ID ( <i>PK</i> )	BIGINT	Long	Id for this profile	16	-
profileName	PROFILE_NAME	TEXT	String	Name for this profile.	4000	-
profileNameRBKey	PROFILE_NAME_RBKEY	TEXT	String	Key to the resource bundle for Model Name.	4000	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
description	DESCRIPTION	TEXT	String	Description of the profile	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
policyType	POLICY_TYPE	INT	int	Type of the policy.	3	-
profileType	PROFILE_TYPE	INT	int	Type of the profile.	6	-

Name	DB name	DB type	Java type	Description	Length	Enum values
profileScope	PROFILE_SCOPE	INT	int	Scope of the profile. Whether it is System or not	3	-
profileStatus	PROFILE_STATUS	INT	int	Status of the profile.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
run_mode	RUN_MODE	INT	int	Whether this model is running in test mode or some other mode	3	-
score	SCORE	INT	int	Score for this profile	-	-
weight	WEIGHT	INT	int	Weight for this profile	-	-
logLevel	LOG_LEVEL	INT	int	Level of logging	6	-
priorityLevel	PRIORITY_LEVEL	INT	int	Priority Level	6	-
scoringType	SCORING_TYPE	INT	int	Type of scoring	3	-
fileName	FILE_NAME	TEXT	String	Name of the file	512	-
notes	NOTES	TEXT	String	Note against this profile	4000	-

## 5.2.148 VProfileHist

**Description:** Shadow table for Profile table

**Database table name :** VCRYPT\_PROFILE\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
profileId	PROFILE_ID	BIGINT	Long	Id for this profile	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
profileName	PROFILE_NAME	TEXT	String	Name for this profile.	4000
profileNameRBKey	PROFILE_NAME_RBKEY	TEXT	String	Key to the resource bundle for Model Name.	4000
description	DESCRIPTION	TEXT	String	Description of the profile	4000

Name	DB name	DB type	Java type	Description	Length
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
policyType	POLICY_TYPE	INT	int	Type of the model.	3
profileType	PROFILE_TYPE	INT	int	Type of the profile.	6
profileScope	PROFILE_SCOPE	INT	int	Scope of the profile. Whether it is System or not	3
profileStatus	PROFILE_STATUS	INT	int	Status of the profile.	2
scoringType	SCORING_TYPE	INT	int	Type of scoring	3
fileName	FILE_NAME	TEXT	String	Name of the file	512
run_mode	RUN_MODE	INT	int	Whether this model is running in test mode or some other mode	3
score	SCORE	INT	int	Score for this profile	-
weight	WEIGHT	INT	int	Weight for this profile	-
logLevel	LOG_LEVEL	INT	int	Level of logging	6
priorityLevel	PRIORITY_LEVEL	INT	int	Priority Level	6
notes	NOTES	TEXT	String	Note against this profile	4000

### 5.2.149 VProfileRuleMap

**Description:** This is the profileRuleMap object

**Database table name :** VCRYPT\_PROFILE\_RULE\_MAP

**Primary Keys :** profileRuleMapId (PROFILE\_RULE\_MAP\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
profileRuleMapId	PROFILE_RULE_MAP_ID (PK)	BIGINT	Long	Id for this profileRuleMap	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
mapName	MAP_NAME	TEXT	String	Name for this instance.	4000	-
mapNameRBKey	MAP_NAME_RBKEY	TEXT	String	Key to the resource bundle for name for this instance.	4000	-
profileId	PROFILE_ID	BIGINT	Long	Id of the profile	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-

Details of each class

Name	DB name	DB type	Java type	Description	Length	Enum values
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
ruleId	RULE_ID	BIGINT	Long	Id rule	16	-
status	MAP_STATUS	INT	int	Type of the profile.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
orderNumber	ORDER_NUMBER	INT	int	Order of execution. Rule instances with same value will executed parallely	-	-
minDeviceScore	MIN_DEVICE_SCORE	INT	int	Minimum score of the device for executing this rule	-	-
maxDeviceScore	MAX_DEVICE_SCORE	INT	int	Maximum score of the device for executing this rule	-	-
minLocationScore	MIN_LOCATION_SCORE	INT	int	Minimum score of the location for executing this rule	-	-
maxLocationScore	MAX_LOCATION_SCORE	INT	int	Maximum score of the location for executing this rule	-	-
minCityScore	MIN_CITY_SCORE	INT	int	Minimum score of the city for executing this rule	-	-
maxCityScore	MAX_CITY_SCORE	INT	int	Maximum score of the city for executing this rule	-	-
minStateScore	MIN_STATE_SCORE	INT	int	Minimum score of the state for executing this rule	-	-
maxStateScore	MAX_STATE_SCORE	INT	int	Maximum score of the state for executing this rule	-	-
minCountryScore	MIN_COUNTRY_SCORE	INT	int	Minimum score of the country for executing this rule	-	-



Name	DB name	DB type	Java type	Description	Length	Enum values
maxCountryScore	MAX_COUNTRY_SCORE	INT	int	Maximum score of the country for executing this rule	-	-
exceptionUserGroupId	EXCEPT_USER_GROUP_ID	BIGINT	Long	Exception User Group Id	16	-
score	SCORE	INT	int	Score when this rule is executed	-	-
weight	WEIGHT	INT	int	Weight for this profile	-	-
logLevel	LOG_LEVEL	INT	int	Level of logging	6	-
priorityLevel	PRIORITY_LEVEL	INT	int	Priority Level	6	-
stopOnViolation	STOP_ON_VIOLATION	CHAR	boolean	Whether to stop processing of further rules, if this rule fails.	-	-
onTrueActionListId	ACTION_ID	BIGINT	Long	Id for the action list to be called when the condition is successful	16	-
onFalseActionListId	ON_FALSE_ACTION_LIST_ID	BIGINT	Long	Id for the action list to be called when the condition is successful	16	-
alertId	ALERT_ID	BIGINT	Long	Id for the alert list	16	-
notes	NOTES	TEXT	String	Notes for this profile rule map	4000	-

### 5.2.150 VProfileRuleMapHist

**Description:** Shadow table for VProfileRuleMap table

**Database table name :** VCRYPT\_PROFILE\_RULE\_MAP\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15

Name	DB name	DB type	Java type	Description	Length
profileRuleMapId	PROFILE_RULE_MAP_ID	BIGINT	Long	Id for this profileRuleMap	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
mapName	MAP_NAME	TEXT	String	Name for this instance.	4000
mapNameRBKey	MAP_NAME_RBKEY	TEXT	String	Key to the resource bundle for name for this instance.	4000
profileId	PROFILE_ID	BIGINT	Long	Id of the profile	16
ruleId	RULE_ID	BIGINT	Long	Id rule	16
status	MAP_STATUS	INT	int	Type of the profile.	2
orderNumber	ORDER_NUMBER	INT	int	Order of execution. Rule instances with same value will executed parallely	-
minDeviceScore	MIN_DEVICE_SCORE	INT	int	Minimum score of the device for executing this rule	-
maxDeviceScore	MAX_DEVICE_SCORE	INT	int	Maximum score of the device for executing this rule	-
minLocationScore	MIN_LOCATION_SCORE	INT	int	Minimum score of the location for executing this rule	-
maxLocationScore	MAX_LOCATION_SCORE	INT	int	Maximum score of the location for executing this rule	-
minCityScore	MIN_CITY_SCORE	INT	int	Minimum score of the city for executing this rule	-
maxCityScore	MAX_CITY_SCORE	INT	int	Maximum score of the city for executing this rule	-
minStateScore	MIN_STATE_SCORE	INT	int	Minimum score of the state for executing this rule	-
maxStateScore	MAX_STATE_SCORE	INT	int	Maximum score of the state for executing this rule	-
minCountryScore	MIN_COUNTRY_SCORE	INT	int	Minimum score of the country for executing this rule	-
maxCountryScore	MAX_COUNTRY_SCORE	INT	int	Maximum score of the country for executing this rule	-
exceptionUserGroupId	EXCEPT_USER_GROUP_ID	BIGINT	Long	Exception User Group Id	16
score	SCORE	INT	int	Score when this rule is executed	-
weight	WEIGHT	INT	int	Weight for this profile	-
logLevel	LOG_LEVEL	INT	int	Level of logging	6

Name	DB name	DB type	Java type	Description	Length
priorityLevel	PRIORITY_LEVEL	INT	int	Priority Level	6
stopOnViolation	STOP_ON_VIOLATION	CHAR	boolean	Whether to stop processing of further rules, if this rule fails.	-
onTrueActionListId	ACTION_ID	BIGINT	Long	Id for the action list to be called when the condition is successful	16
onFalseActionListId	ON_FALSE_ACTION_LIST_ID	BIGINT	Long	Id for the action list to be called when the condition is successful	16
alertId	ALERT_ID	BIGINT	Long	Id for the alert list	16
notes	NOTES	TEXT	String	Notes for this profile rule map	4000

### 5.2.151 VProfileListMap

**Description:** This is to assign profiles to a list.

**Database table name :** VCRYPT\_PROFILE\_LIST\_MAP

**Primary Keys :** mapId (MAP\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
mapId	MAP_ID (PK)	BIGINT	Long	Id for this profile list mapping	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of update.	-	-
profileId	PROFILE_ID	BIGINT	Long	Id of the profile	16	-
listId	LIST_ID	BIGINT	Long	Id for the list	16	-
status	MAP_STATUS	INT	int	Status for this mapping.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Notes for this profile list map	4000	-

### 5.2.152 VProfileListMapHist

**Description:** Shadow tables to the VProfileListMap.

**Database table name :** VCRYPT\_PROFILE\_LIST\_MAP\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16	-
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-	-

Name	DB name	DB type	Java type	Description	Length	Enum values
mapId	MAP_ID	BIGINT	Long	Id for this profile list mapping	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256	-
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15	-
profileId	PROFILE_ID	BIGINT	Long	Id of the profile	16	-
listId	LIST_ID	BIGINT	Long	Id for the list	16	-
status	MAP_STATUS	INT	int	Status for this mapping.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Notes for this profile list map	4000	-

### 5.2.153 VRuleParamValue

**Description:** This contains the values for the parameter of the rule instance

**Database table name :** VCRYPT\_RULE\_PARAM\_VALUES

**Primary Keys :** paramValueId (PARAM\_VALUE\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
paramValueId	PARAM_VALUE_ID (PK)	BIGINT	Long	Id for the param value	16	-
profileRuleMapId	PROFILE_RULE_MAP_ID	BIGINT	Long	Id of the profile rule map	16	-
paramId	PARAM_ID	BIGINT	Long	Id for the param	16	-
ruleConditionMapId	RULE_COND_MAP_ID	BIGINT	Long	Id to the rule condition map	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of update.	-	-
valueStatus	PARAM_VALUE_STATUS	INT	int	Status of the parameter value.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
valueType	VALUE_TYPE	INT	int	Value type	-	-
intValue	INT_VALUE	INT	int	Integer value	-	-
longValue	LONG_VALUE	BIGINT	long	Long value	-	-

Name	DB name	DB type	Java type	Description	Length	Enum values
stringValue	STRING_VALUE	TEXT	String	String value	4000	-
booleanValue	BOOLEAN_VALUE	CHAR	boolean	Boolean value.	-	-
dateValue	DATE_VALUE	DATETIME	Date	Date value.	-	-
notes	NOTES	TEXT	String	Notes for this param values	4000	-

### 5.2.154 VRuleParamValueHist

**Description:** Shadow table for VRuleParamValue

**Database table name :** VCRYPT\_RULE\_PARAM\_VALUES\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
paramValueId	PARAM_VALUE_ID	BIGINT	Long	Id for the param value	16
profileRuleMapId	PROFILE_RULE_MAP_ID	BIGINT	Long	Id of the profile rule map	16
paramId	PARAM_ID	BIGINT	Long	Id for the param	16
ruleConditionMapId	RULE_COND_MAP_ID	BIGINT	Long	Id to the rule condition map	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
valueStatus	PARAM_VALUE_STATUS	INT	int	Status of the parameter value.	2
valueType	VALUE_TYPE	INT	int	Value type	-
intValue	INT_VALUE	INT	int	Integer value	-
longValue	LONG_VALUE	BIGINT	long	Long value	-
stringValue	STRING_VALUE	TEXT	String	String value	4000
booleanValue	BOOLEAN_VALUE	CHAR	boolean	Boolean value.	-
dateValue	DATE_VALUE	DATETIME	Date	Date value.	-
notes	NOTES	TEXT	String	Notes for this param values	4000

### 5.2.155 VRuleOverride

**Description:** This is to over ride any rules that are fired.

**Database table name :** VR\_OVERRIDE

**Primary Keys :** overRideId (OVER\_RIDE\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
overrideId	OVER_RIDE_ID (PK)	BIGINT	Long	Id for this object	16	-
profileRuleMapId	PROFILE_RULE_MAP_ID	BIGINT	Long	Id of the profile rule map	-	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
allowFromTime	ALLOW_FROM_TIME	DATETIME	Date	Date value.	-	-
allowToTime	ALLOW_TO_TIME	DATETIME	Date	Date value.	-	-
objectStatus	OBJECT_STATUS	INT	int	Status of the object.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
runtimeType	RUNTIME_TYPE	INT	int	Type of scoring	6	-
overrideType	OVER_RIDE_TYPE	INT	int	Override type.	2	TYPE_COUNT, TYPE_DAY_RANGE, TYPE_PERMANENT
objectType	OBJECT_TYPE	INT	int	What is this rule exception for? Example, user, location, device	6	-
objectValue	OBJECT_VALUE	TEXT	String	Object value	4000	-
maxCountAllowed	MAX_COUNT_ALLOWED	INT	int	How many attempts the user should be allowed.	-	-
fromAction	FROM_ACTION	VARCHAR	String	From action	64	-
toAction	TO_ACTION	VARCHAR	String	To action	64	-
used_count	USED_COUNT	INT	int	Used count.	-	-
requestId	REQUEST_ID	TEXT	String	Id of the login session.	256	-
transactionId	TRX_ID	BIGINT	Long	Id for the session	-	-
notes	NOTES	TEXT	String	Note for this object	4000	-

### 5.2.156 VRuleOverRideHist

**Description:** Shadow table for VRuleOverRide table.

**Database table name :**VR\_OVERRIDE\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256

Name	DB name	DB type	Java type	Description	Length
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
overrideId	OVER_RIDE_ID	BIGINT	Long	Id for this object	16
profileRuleMapId	PROFILE_RULE_MAP_ID	BIGINT	Long	Id of the profile rule map	-
allowFromTime	ALLOW_FROM_TIME	DATETIME	Date	Date value.	-
allowToTime	ALLOW_TO_TIME	DATETIME	Date	Date value.	-
objectStatus	OBJECT_STATUS	INT	int	Status of the object.	2
runtimeType	RUNTIME_TYPE	INT	int	Type of scoring	6
overrideType	OVER_RIDE_TYPE	INT	int	Override type.	2
objectType	OBJECT_TYPE	INT	int	What type of object is allowed	6
objectValue	OBJECT_VALUE	TEXT	String	Object value	4000
maxCountAllowed	MAX_COUNT_ALLOWED	INT	int	How many attempts the user should be allowed.	-
fromAction	FROM_ACTION	VARCHAR	String	From action	64
toAction	TO_ACTION	VARCHAR	String	To action	64
used_count	USED_COUNT	INT	int	Used count.	-
requestId	REQUEST_ID	TEXT	String	Id of the login session.	256
transactionId	TRX_ID	BIGINT	Long	Id for the session	-
notes	NOTES	TEXT	String	Note for this object	4000

### 5.2.157 VRuleOverrideLog

**Description:** Logs to keep track of overrides.

**Database table name :** *VR\_OVERRIDE\_LOGS*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Id for this object	16
overrideId	OVER_RIDE_ID	BIGINT	Long	Id for this object	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-

### 5.2.158 VRuleException

**Description:** This is to over ride any rules that are fired.

**Database table name :** *VR\_EXCEPTION*

**Primary Keys :** exceptionId (*OVER\_RIDE\_ID*)

Name	DB name	DB type	Java type	Description	Length
exceptionId	OVER_RIDE_ID ( <i>PK</i> )	BIGINT	Long	Id for this object	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-

Name	DB name	DB type	Java type	Description	Length
overrideId	OVERRIDE_ID	BIGINT	Long	Id of the profile rule map	16
exceptionType	EXCEPTION_TYPE	INT	int	Type of exception. e.g List, rule, etc	3
exceptionName	EXCEPTION_NAME	INT	int	Name of the type. e.g listName, ruleName, etc	3
exceptionValue	EXCEPTION_VALUE	INT	int	Value for the name e.g values for the list	3

### 5.2.159 VRuleExceptionHist

**Description:** Shadow table for VRuleException table.

**Database table name :**VR\_EXCEPTION\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
exceptionId	OVER_RIDE_ID	BIGINT	Long	Id for this object	16
overrideId	OVERRIDE_ID	BIGINT	Long	Id of the profile rule map	16
exceptionType	EXCEPTION_TYPE	INT	int	Type of exception. e.g List, rule, etc	3
exceptionName	EXCEPTION_NAME	INT	int	Name of the type. e.g listName, ruleName, etc	3
exceptionValue	EXCEPTION_VALUE	INT	int	Value for the name e.g values for the list	3

### 5.2.160 VRuleSetRow

**Description:** This contains the rows for the rule set/ model. Each row determines how to interpret the result

**Database table name :**VR\_RULESET\_ROW

**Primary Keys :** rowId (RULESET\_ROW\_ID)

Name	DB name	DB type	Java type	Description	Length
rowId	RULESET_ROW_ID (PK)	BIGINT	Long	Id for the ruleset row	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
profileId	PROFILE_ID	BIGINT	Long	Id of the profile	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-



Name	DB name	DB type	Java type	Description	Length
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of latest update.	-
rowName	ROW_NAME	TEXT	String	Name for this instance.	4000
rowNameRBKey	ROW_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000
description	DESCRIPTION	TEXT	String	Description of the row	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
orderNumber	ORDER_NUMBER	INT	int	Order of evaluation. Evaluation will stop the first time all the	-
resultType	RESULT_TYPE	INT	int	Type of the result. It could be a score or model to execute.	3
scoringType	SCORING_TYPE	INT	int	Type of scoring	3
fileName	FILE_NAME	TEXT	String	Name of the file	512
actionListId	ACTION_LIST_ID	BIGINT	Long	Id of the action list	-
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-
includeAlertsPreference	INCLUDE_ALERTS_PREF	INT	int	Whether to include rule alerts when this override is true	4
includeActionsPreference	INCLUDE_ACTIONS_PREF	CHAR	boolean	Whether to include rule actions when this override is true	4
score	SCORE	INT	int	Score for this row	5
executeProfileId	EXE_PROFILE_ID	BIGINT	Long	Id of the profile to be executed if this	16
notes	NOTES	TEXT	String	Notes for this row	4000

### 5.2.161 VRuleSetRowHist

**Description:** Shadow table for VRuleSetRow

**Database table name :** *VR\_RULESET\_ROW\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
rowId	RULESET_ROW_ID	BIGINT	Long	Id for the ruleset row	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
profileId	PROFILE_ID	BIGINT	Long	Id of the profile	16

Name	DB name	DB type	Java type	Description	Length
rowName	ROW_NAME	TEXT	String	Name for this instance.	4000
rowNameRBKey	ROW_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000
description	DESCRIPTION	TEXT	String	Description of the row	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
orderNumber	ORDER_NUMBER	INT	int	Order of evaluation. Evaluation will stop the first time all the	-
resultType	RESULT_TYPE	INT	int	Type of the result. It could be a score or model to execute.	3
scoringType	SCORING_TYPE	INT	int	Type of scoring	3
fileName	FILE_NAME	TEXT	String	Name of the file	512
actionListId	ACTION_LIST_ID	BIGINT	Long	Id of the action list	-
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-
includeAlertsPreference	INCLUDE_ALERTS_PREF	INT	int	Whether to include rule alerts when this override is true	4
includeActionsPreference	INCLUDE_ACTIONS_PREF	CHAR	boolean	Whether to include rule actions when this override is true	4
score	SCORE	INT	int	Score for this row	5
includeRuleAlerts	INCLUDE_RULE_ALERTS	CHAR	boolean	Whether to include rule alerts when this override is true	-
includeRuleActions	INCLUDE_RULE_ACTIONS	CHAR	boolean	Whether to include rule actions when this override is true	-
executeProfileId	EXE_PROFILE_ID	BIGINT	Long	Id of the profile to be executed if this	16
notes	NOTES	TEXT	String	Notes for this row	4000

### 5.2.162 VRuleSetColumn

**Description:** This contains the columns for the rule set/ model.

**Database table name :**VR\_RULESET\_COL

**Primary Keys :** columnId (RULESET\_COL\_ID)

Name	DB name	DB type	Java type	Description	Length
columnId	RULESET_COL_ID (PK)	BIGINT	Long	Id for the ruleset column	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
rowId	ROW_ID	BIGINT	Long	Id of the row	16
profileRuleMapId	PROFILE_RULE_MAP_ID	BIGINT	Long	Id of the profile rule map	16

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of latest update.	-
ruleResult	RULE_RESULT	INT	int	What rule result show be considered	3
minScore	MIN_SCORE	INT	int	Minimum score of the rule to be considered	-
maxScore	MAX_SCORE	INT	int	Maximum score of the rule to be considered	-

### 5.2.163 VRuleSetColumnHist

**Description:** Shadow table for VRuleSetColumn

**Database table name :** *VR\_RULESET\_COL\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
columnId	RULESET_COL_ID	BIGINT	Long	Id for the ruleset column	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
rowId	ROW_ID	BIGINT	Long	Id of the row	16
profileRuleMapId	PROFILE_RULE_MAP_ID	BIGINT	Long	Id of the profile rule map	16
ruleResult	RULE_RESULT	INT	int	What rule result show be considered	3
minScore	MIN_SCORE	INT	int	Minimum score of the rule to be considered	-
maxScore	MAX_SCORE	INT	int	Maximum score of the rule to be considered	-

### 5.2.164 VScoreAction

**Description:** Mapping actions for scores

**Database table name :** *VR\_SCORE\_ACTION*

**Primary Keys :** scoreActionId (*SCORE\_ACTION\_ID*)

Name	DB name	DB type	Java type	Description	Length
scoreActionId	SCORE_ACTION_ID ( <i>PK</i> )	BIGINT	Long	Id for this object	16

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of latest update.	-
scoreName	SCORE_NAME	TEXT	String	Name for this score action.	4000
scoreNameRBKey	SCORE_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000
description	DESCRIPTION	TEXT	String	Description of the row	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
minScore	MIN_SCORE	INT	int	Minimum score	-
maxScore	MAX_SCORE	INT	int	Maximum score	-
runLevel	RUN_LEVEL	INT	int	Level where this mapping should run	5
runTimeType	RUN_TIME_TYPE	INT	int	Runtime type	6
actionListId	ACTION_LIST_ID	BIGINT	Long	Id of the action list	-
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-
notes	NOTES	TEXT	String	Notes for this record	4000

### 5.2.165 VScoreActionHist

**Description:** Historing for VScoreAction

**Database table name :**VR\_SCORE\_ACTION\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
scoreActionId	SCORE_ACTION_ID	BIGINT	Long	Id for this object	16
scoreName	SCORE_NAME	TEXT	String	Name for this score action.	4000
scoreNameRBKey	SCORE_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000
description	DESCRIPTION	TEXT	String	Description of the row	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
minScore	MIN_SCORE	INT	int	Minimum score	-
maxScore	MAX_SCORE	INT	int	Maximum score	-
runLevel	RUN_LEVEL	INT	int	Level where this mapping should run	5
runTimeType	RUN_TIME_TYPE	INT	int	Runtime type	6

Name	DB name	DB type	Java type	Description	Length
actionListId	ACTION_LIST_ID	BIGINT	Long	Id of the action list	-
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-
notes	NOTES	TEXT	String	Notes for this record	4000

### 5.2.166 VMaxBlock

**Description:** Action/Score override based on threshold of the action. This can be used for gating.

**Database table name :** *VR\_MAX\_BLOCKS*

**Primary Keys :** blockId (*BLOCK\_ID*)

Name	DB name	DB type	Java type	Description	Length
blockId	BLOCK_ID ( <i>PK</i> )	BIGINT	Long	Id for this object	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of latest update.	-
blockName	BLOCK_NAME	TEXT	String	Name for this block action.	4000
blockNameRBKey	BLOCK_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000
description	DESCRIPTION	TEXT	String	Description of the row	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
runTimeType	RUN_TIME_TYPE	INT	int	Runtime type	6
fromAction	FROM_ACTION	VARCHAR	String	From action	64
toAction	TO_ACTION	VARCHAR	String	To action	64
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-
maxCountAllowed	MAX_COUNT_ALLOWED	INT	int	Number of actions .	-
duration	DURATION	INT	int	Duration in minutes	5
notes	NOTES	TEXT	String	Notes for this record	4000

### 5.2.167 VMaxBlockHist

**Description:** History for VMaxBlock

**Database table name :** *VR\_MAX\_BLOCKS\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
blockId	BLOCK_ID	BIGINT	Long	Id for this object	16

Name	DB name	DB type	Java type	Description	Length
blockName	BLOCK_NAME	TEXT	String	Name for this block action.	4000
blockNameRBKey	BLOCK_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000
runTimeType	RUN_TIME_TYPE	INT	int	Runtime type	6
fromAction	FROM_ACTION	VARCHAR	String	From action	64
toAction	TO_ACTION	VARCHAR	String	To action	64
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-
maxCountAllowed	MAX_COUNT_ALLOWED	INT	int	Number of actions .	-
duration	DURATION	INT	int	Duration in minutes	5
notes	NOTES	TEXT	String	Notes for this record	4000

### 5.2.168 VMaxBlockLogs

**Description:** Logging for max blocks

**Database table name :**VR\_MAX\_BLOCKS\_LOGS

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Id for this object	16
blockId	BLOCK_ID	BIGINT	Long	Id for this object	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-
localUserId	LOCAL_USER_ID	BIGINT	Long	Id for this object	16
deviceId	DEVICE_ID	BIGINT	Long	Id for this object	16
remoteIPAddr	REMOTE_IP_ADDR	BIGINT	String	The IP address from where the client connected	15
baseIPAddr	BASE_IP_ADDR	BIGINT	String	This is the base IP address for quick search	15

### 5.2.169 VPolicySetPkg

**Description:** Policy Set package

**Database table name :**V\_POLICY\_SET\_PKG

**Primary Keys :** policySetId (POLICY\_SET\_ID)

Name	DB name	DB type	Java type	Description	Length
policySetId	POLICY_SET_ID (PK)	BIGINT	Long	Id for the policy set package	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	LABEL	TEXT	String	Name	4000

Name	DB name	DB type	Java type	Description	Length
nameRBKey	LABEL_RBKEY	TEXT	String	Key in the resource bundle for name	4000
description	DESCRIPTION	TEXT	String	Description	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
policySet	RA_POLICY_SET	TEXT	String	Policy set in zip format	-
notes	NOTES	TEXT	String	Notes	4000

### 5.2.170 VPolicySet

**Description:** This contains properties for the policy set

**Database table name :** *VR\_POLICY\_SET*

**Primary Keys :** policySetId (*POLICY\_SET\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
policySetId	POLICY_SET_ID (PK)	BIGINT	Long	Id for the policy set	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of latest update.	-	-
name	LABEL	TEXT	String	Name	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Key in the resource bundle for name	4000	-
description	DESCRIPTION	TEXT	String	Description	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
status	STATUS	INT	int	Status of the policy set.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
scoringType	SCORING_TYPE	INT	int	Type of scoring	3	-
fileName	FILE_NAME	TEXT	String	Name of the file	512	-
actionListId	ACTION_LIST_ID	BIGINT	Long	Id of the action list	-	-
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-	-
notes	NOTES	TEXT	String	Notes for this record	4000	-

### 5.2.171 VPolicySetHist

**Description:** This contains properties for the policy set

**Database table name :** *VR\_POLICY\_SET\_HIST*

**Primary Keys : logId (LOG\_ID)**

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
policySetId	POLICY_SET_ID	BIGINT	Long	Id for the policy set	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
name	LABEL	TEXT	String	Name	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Key in the resource bundle for name	4000
description	DESCRIPTION	TEXT	String	Description	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
status	STATUS	INT	int	Status of the policy set.	2
scoringType	SCORING_TYPE	INT	int	Type of scoring	3
fileName	FILE_NAME	TEXT	String	Name of the file	512
actionListId	ACTION_LIST_ID	BIGINT	Long	Id of the action list	-
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-
notes	NOTES	TEXT	String	Notes for this record	4000

**5.2.172 VPolicy**

**Description:** This contains properties for the policy

**Database table name :**VR\_POLICY

**Primary Keys :** policyId (POLICY\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
policyId	POLICY_ID (PK)	BIGINT	Long	Id for the policy	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionId	VERSION_ID	BIGINT	Long	Version Id	16	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of latest update.	-	-
name	LABEL	TEXT	String	Name	4000	-
nameRBKey	LABEL_RBKEY	TEXT	String	Key in the resource bundle for name	4000	-
description	DESCRIPTION	TEXT	String	Description	4000	-



Name	DB name	DB type	Java type	Description	Length	Enum values
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
policyType	POLICY_TYPE	INT	int	Policy type	3	-
status	STATUS	INT	int	Status of the policy.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
score	SCORE	INT	int	Default score for this policy	-	-
weight	WEIGHT	INT	int	Weight for this profile	-	-
scoringType	SCORING_TYPE	INT	int	Type of scoring	3	-
fileName	FILE_NAME	TEXT	String	Name of the file	512	-
actionListId	ACTION_LIST_ID	BIGINT	Long	Id of the action list	-	-
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-	-
notes	NOTES	TEXT	String	Notes for this record	4000	-

### 5.2.173 VPolicyHist

**Description:** Shadow table for policy

**Database table name :** *VR\_POLICY\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
policyId	POLICY_ID	BIGINT	Long	Id for the policy	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionId	VERSION_ID	BIGINT	Long	Version Id	16
name	LABEL	TEXT	String	Name	4000
nameRBKey	LABEL_RBKEY	TEXT	String	Key in the resource bundle for name	4000
description	DESCRIPTION	TEXT	String	Description	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
policyType	POLICY_TYPE	INT	int	Policy type	3
status	STATUS	INT	int	Status of the policy.	2
score	SCORE	INT	int	Default score for this policy	-
weight	WEIGHT	INT	int	Weight for this profile	-

Name	DB name	DB type	Java type	Description	Length
scoringType	SCORING_TYPE	INT	int	Type of scoring	3
fileName	FILE_NAME	TEXT	String	Name of the file	512
actionListId	ACTION_LIST_ID	BIGINT	Long	Id of the action list	-
alertListId	ALERT_LIST_ID	BIGINT	Long	Id for the alert list	-
notes	NOTES	TEXT	String	Notes for this record	4000

### 5.2.174 VPolicySetLog

**Description:** Logs for rules at PolicySet level

**Database table name :**VR\_POLICYSET\_LOGS

**Primary Keys :** policySetLogId (POLICYSET\_LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
policySetLogId	POLICYSET_LOG_ID (PK)	BIGINT	Long	Log id	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time of this transaction.	-
requestId	REQUEST_ID	TEXT	String	Id of the login session.	256
transactionLogId	TRX_LOG_ID	BIGINT	Long	Id for the transaction	16
runtimeType	RUNTIME_TYPE	INT	int	Type of scoring	6
policySetId	POLICYSET_ID	BIGINT	Long	Id of PolicySet	16
status	STATUS	INT	int	Execution status for this policy set execution	3
totalTime	TOTAL_TIME	BIGINT	long	Time taken to execute this	10
score	SCORE	INT	int	Type of scoring	5
transactionData	TRX_DATA	TEXT	String	Transaction data as name value pair.	4000
finalAction	FINAL_ACTION	TEXT	String	Final action for this policyset	256
actionList	ACTION_LIST	TEXT	String	List of action.	256
alertIdList	ALERT_ID_LIST	TEXT	String	List of alert id list.	256
alertTemplateIdList	ALERT_TEMPL_ID_LIST	TEXT	String	List of alert template id list.	256

### 5.2.175 VPolicyLog

**Description:** Logs for rules at Policy level

**Database table name :**VR\_POLICY\_LOGS

**Primary Keys :** policyLogId (POLICY\_LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
policyLogId	POLICY_LOG_ID (PK)	BIGINT	Long	Log id	16
policySetLogId	POLICYSET_LOG_ID	BIGINT	Long	Id of Policy Set	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time of this transaction.	-

Name	DB name	DB type	Java type	Description	Length
policyId	POLICY_ID	BIGINT	Long	Id of Policy	16
status	STATUS	INT	int	Execution status for this policy execution	3
totalTime	TOTAL_TIME	BIGINT	long	Time taken to execute this	10
score	SCORE	INT	int	Type of scoring	5
actionList	ACTION_LIST	TEXT	String	List of action.	256
alertIdList	ALERT_ID_LIST	TEXT	String	List of alert id list.	256
alertTemplateIdList	ALERT_TEMPL_ID_LIST	TEXT	String	List of alert template id list.	256

### 5.2.176 VModelLog

**Description:** Logs for rules at Model level

**Database table name :** VR\_MODEL\_LOGS

**Primary Keys :** modelLogId (MODEL\_LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
modelLogId	MODEL_LOG_ID (PK)	BIGINT	Long	Log id	16
policyLogId	POLICY_LOG_ID	BIGINT	Long	Id of Policy	16
parentModelLogId	PARENT_MODEL_LOG_ID	BIGINT	Long	Id of calling model id	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time of this transaction.	-
profileId	MODEL_ID	BIGINT	Long	Id of profile/model	16
scoreRowId	SCORE_ROW_ID	BIGINT	Long	Id of the row score	16
status	STATUS	INT	int	Execution status for this model	3
totalTime	TOTAL_TIME	BIGINT	long	Time taken to execute this	10
score	SCORE	INT	int	Type of scoring	5
actionList	ACTION_LIST	TEXT	String	List of action.	256
alertIdList	ALERT_ID_LIST	TEXT	String	List of alert id list.	256
alertTemplateIdList	ALERT_TEMPL_ID_LIST	TEXT	String	List of alert template id list.	256

### 5.2.177 VRuleLog

**Description:** Logs for rules at Rule level

**Database table name :** VR\_RULE\_LOGS

**Primary Keys :** ruleLogId (RULE\_LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
ruleLogId	RULE_LOG_ID (PK)	BIGINT	Long	Log id	16
modelLogId	MODEL_LOG_ID	BIGINT	Long	Id of model log	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time of this transaction.	-

Name	DB name	DB type	Java type	Description	Length
ruleMapId	RULE_MAP_ID	BIGINT	Long	Id of ruleMap	16
status	STATUS	INT	int	Execution status for this model	3
totalTime	TOTAL_TIME	BIGINT	long	Time taken to execute this	10
score	SCORE	INT	int	Type of scoring	5
actionList	ACTION_LIST	TEXT	String	List of action.	256
alertIdList	ALERT_ID_LIST	TEXT	String	List of alert id list.	256
alertTemplateIdList	ALERT_TEMPL_ID_LIST	TEXT	String	List of alert template id list.	256

### 5.2.178 VDynamicAction

**Description:** This is the Dynamic Action

**Database table name :** VR\_DYN\_ACTION

**Primary Keys :** actionId (ACTION\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
actionId	ACTION_ID (PK)	BIGINT	Long	Id for this action	16	-
versionNumber	VERSION_NUM	INT	int	Version Number	-	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
dynamicActionName	ACTION_NAME	TEXT	String	Name for this action.	4000	-
dynamicActionNameRBKey	ACTION_NAME_RBKEY	TEXT	String	Key in the resource bundle for name	4000	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
description	DESCRIPTION	TEXT	String	Description of the action	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
actionType	ACTION_TYPE	INT	int	Type of the action.	-	-
status	STATUS	INT	int	Status of the object.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED

Name	DB name	DB type	Java type	Description	Length	Enum values
javaClass	JAVA_CLASS	TEXT	String	Java class path	4000	-
notes	NOTES	TEXT	String	Note against this action	4000	-

### 5.2.179 VDynamicActionHist

**Description:** This is the action object history

**Database table name :**VR\_DYN\_ACTION\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
actionId	ACTION_ID	BIGINT	Long	Id for this action	16
dynamicActionName	ACTION_NAME	TEXT	String	Name for this action.	4000
dynamicActionNameRBKey	ACTION_NAME_RBKEY	TEXT	String	Key in the resource bundle for name	4000
versionNumber	VERSION_NUM	INT	int	Version Number	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
description	DESCRIPTION	TEXT	String	Description of the action	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
actionType	ACTION_TYPE	INT	int	Type of the action.	-
status	STATUS	INT	int	Status of the object.	2
javaClass	JAVA_CLASS	TEXT	String	Java class path	4000
notes	NOTES	TEXT	String	Note against this action	4000

### 5.2.180 VDynamicActionParam

**Description:** This contains the parameter definition for the given action

**Database table name :**VR\_DYN\_ACT\_PAR

**Primary Keys :** paramId (PARAM\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
paramId	PARAM_ID (PK)	BIGINT	Long	Id for the parameter	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
actionId	ACTION_ID	BIGINT	Long	Id for the action	16	-

Name	DB name	DB type	Java type	Description	Length	Enum values
versionNumber	VERSION_NUM	INT	int	Version Number	-	-
paramName	PARAM_NAME	TEXT	String	Name of the parameter	4000	-
paramNameRBKey	PARAM_NAME_RBKEY	TEXT	String	Key in the resource bundle for name of the parameter	4000	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-	-
status	STATUS	INT	int	Status of the parameter.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
promptLabel	PROMPT_LABEL	TEXT	String	Label to prompt	4000	-
promptLabelRBKey	PROMPT_LABEL_RBKEY	TEXT	String	Key in the resource bundle for label	4000	-
description	DESCRIPTION	TEXT	String	Description of the parameter	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
valueType	VALUE_TYPE	INT	int	Value type	-	-
valueSubType	VALUE_SUB_TYPE	VARCHAR	String	Value sub type	128	-
validations	VALIDATIONS	TEXT	String	Constraints for the parameter	4000	-
defaultValue	DEFAULT_VALUE	TEXT	String	Default value	4000	-
notes	NOTES	TEXT	String	Notes for this paramter	4000	-

## 5.2.181 VDynamicActionParamHist

**Description:** Shadow table for Action Param

**Database table name :** VR\_DYN\_ACT\_PAR\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
paramId	PARAM_ID	BIGINT	Long	Id for the parameter	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
actionId	ACTION_ID	BIGINT	Long	Id for the action	16
versionNumber	VERSION_NUM	INT	int	Version Number	-

Name	DB name	DB type	Java type	Description	Length
paramName	PARAM_NAME	TEXT	String	Name of the parameter	4000
paramNameRBKey	PARAM_NAME_RBKEY	TEXT	String	Key in the resource bundle for name of the parameter	4000
status	STATUS	INT	int	Status of the parameter.	2
promptLabel	PROMPT_LABEL	TEXT	String	Label to prompt	4000
promptLabelRBKey	PROMPT_LABEL_RBKEY	TEXT	String	Key in the resource bundle for label	4000
description	DESCRIPTION	TEXT	String	Description of the parameter	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
valueType	VALUE_TYPE	INT	int	Value type	-
valueSubType	VALUE_SUB_TYPE	VARCHAR	String	Value sub type	128
validations	VALIDATIONS	TEXT	String	Constraints for the parameter	4000
defaultValue	DEFAULT_VALUE	TEXT	String	Default value	4000
notes	NOTES	TEXT	String	Notes for this paramter	4000

### 5.2.182 VDynamicActionInstance

**Description:** Instance of dynamic action. This is associated with a VValueList.

**Database table name :** VR\_DYN\_ACTION\_INST

**Primary Keys :** instanceId (*INSTANCE\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of latest update.	-	-
instanceId	INSTANCE_ID (PK)	BIGINT	Long	Id for the instance	16	-
mapName	MAP_NAME	TEXT	String	Name for this instance.	4000	-
mapNameRBKey	MAP_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000	-
description	DESCRIPTION	TEXT	String	Description of the map	4000	-
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
actionId	ACTION_ID	BIGINT	Long	Id for the action	16	-
runtimeType	RUNTIME_TYPE	INT	int	Type of scoring	6	-
timeToLiveInMilliseconds	TIME_TO_LIVE_MS	INT	int	How long this action is valid from the time it is schedule. Zero or negative number means for infinite time	-	-

Name	DB name	DB type	Java type	Description	Length	Enum values
execType	EXEC_TYPE	INT	int	Execution type for this action. E.g. Synchronous or Asynchronous	5	-
execPriority	EXEC_PRIORITY	INT	int	Priority of execution	5	-
actionToTrigger	ACTION_TO_TRIGGER	INT	Integer	This is the action required to trigger	5	-
finalActionToTrigger	FINAL_ACTION_TO_TRIGGER	INT	Integer	Final action required to trigger	5	-
minScoreToTrigger	MIN_SCORE	INT	int	Minimum score required for triggering this dynamic action	-	-
maxScoreToTrigger	MAX_SCORE	INT	int	Maximum score required for triggering this dynamic action	-	-
logLevel	LOG_LEVEL	INT	int	Logging/Tracking level for this action instance	5	-
status	STATUS	INT	int	Status of the parameter.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Notes for this paramter	4000	-

### 5.2.183 VDynamicActionInstanceHist

**Description:** Instance of dynamic action. This is associated with a VValueList.

**Database table name :** VR\_DYN\_ACTION\_INST\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
instanceId	INSTANCE_ID	BIGINT	Long	Id for the instance	16
mapName	MAP_NAME	TEXT	String	Name for this instance.	4000
mapNameRBKey	MAP_NAME_RBKEY	TEXT	String	Resource bundle key for this instance	4000
description	DESCRIPTION	TEXT	String	Description of the map	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
actionId	ACTION_ID	BIGINT	Long	Id for the action	16
runtimeType	RUNTIME_TYPE	INT	int	Type of scoring	6



Name	DB name	DB type	Java type	Description	Length
timeToLiveInMilliSeconds	TIME_TO_LIVE_MS	INT	int	How long this action is valid from the time it is schedule. Zero or negative number means for infinite time	-
execType	EXEC_TYPE	INT	int	Execution type for this action. E.g. Synchronous or Asynchronous	5
execPriority	EXEC_PRIORITY	INT	int	Priority of execution	5
actionToTrigger	ACTION_TO_TRIGGER	INT	Integer	This is the action required to trigger	5
finalActionToTrigger	FINAL_ACTION_TO_TRIGGER	INT	Integer	Final action required to trigger	5
minScoreToTrigger	MIN_SCORE	INT	int	Minimum score required for triggering this dynamic action	-
maxScoreToTrigger	MAX_SCORE	INT	int	Maximum score required for triggering this dynamic action	-
logLevel	LOG_LEVEL	INT	int	Logging/Tracking level for this action instance	5
status	STATUS	INT	int	Status of the parameter.	2
notes	NOTES	TEXT	String	Notes for this paramter	4000

### 5.2.184 VDynamicActionParamValue

**Description:** This contains the values for the parameter of the dynamic action instance

**Database table name :** VR\_DYN\_ACT\_PAR\_VAL

**Primary Keys :** paramValueId (PARAM\_VALUE\_ID)

Name	DB name	DB type	Java type	Description	Length
paramValueId	PARAM_VALUE_ID (PK)	BIGINT	Long	Id for the param value	16
actionInstanceId	INSTANCE_ID	BIGINT	Long	Id of the instance	16
paramId	PARAM_ID	BIGINT	Long	Id for the param	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this oject.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of update.	-
valueType	VALUE_TYPE	INT	int	Value type	-
intValue	INT_VALUE	INT	int	Integer value	-
longValue	LONG_VALUE	BIGINT	long	Long value	-
stringValue	STRING_VALUE	TEXT	String	String value	4000
booleanValue	BOOLEAN_VALUE	CHAR	boolean	Boolean value.	-
dateValue	DATE_VALUE	DATETIME	Date	Date value.	-
notes	NOTES	TEXT	String	Notes for this param values	4000

## 5.2.185 VDynamicActionParamValueHist

**Description:** History object dynamic action parama value

**Database table name :**VR\_DYN\_ACT\_PAR\_VAL\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
paramValueId	PARAM_VALUE_ID	BIGINT	Long	Id for the param value	16
actionInstanceId	INSTANCE_ID	BIGINT	Long	Id of the instance	16
paramId	PARAM_ID	BIGINT	Long	Id for the param	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
valueType	VALUE_TYPE	INT	int	Value type	-
intValue	INT_VALUE	INT	int	Integer value	-
longValue	LONG_VALUE	BIGINT	long	Long value	-
stringValue	STRING_VALUE	TEXT	String	String value	4000
booleanValue	BOOLEAN_VALUE	CHAR	boolean	Boolean value.	-
dateValue	DATE_VALUE	DATETIME	Date	Date value.	-
notes	NOTES	TEXT	String	Notes for this param values	4000

## 5.2.186 VDynamicActionExecLog

**Description:** Log of dynamic action executions

**Database table name :**VT\_DYN\_ACT\_EXEC\_LOG

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	DATETIME	Date	Date/Time when this object was updated.	-
requestId	REQUEST_ID	TEXT	String	Id of the request. This is used to co-relate the post authentication request.	256
actionInstanceId	INSTANCE_ID	BIGINT	Long	Id of the instance	16
sessionActionMapId	SESS_ACT_MAP_ID	BIGINT	Long	Id to the session action map (VTSessionActionMap)	16

Name	DB name	DB type	Java type	Description	Length
execStatus	EXEC_STATUS	INT	int	Status of the execution	5
startTime	START_TIME	DATETIME	Date	Date/Time when the execution started	-
totalTime	TOTAL_TIME	BIGINT	long	Time taken to execute this	10
paramData	PARAM_DATA	TEXT	String	Parameter data	4000
notes	NOTES	TEXT	String	Notes for this execution	4000

### 5.2.187 VAlertTemplate

**Description:** List containing alert values for rule instance

**Database table name :**VCRYPT\_ALERT\_TEMPLATES

**Primary Keys :** templateId (*TEMPLATE\_ID*)

Name	DB name	DB type	Java type	Description	Length
templateId	TEMPLATE_ID ( <i>PK</i> )	BIGINT	Long	Id for the alert template	16
listId	LIST_ID	BIGINT	Long	Id for the list	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of latest update.	-
alertType	ALERT_TYPE	INT	int	Type of alert	-
alertLevel	ALERT_LEVEL	INT	int	Level of alert	-
alertMessage	ALERT_MESSAGE	TEXT	String	Alert message	4000
notes	NOTES	TEXT	String	Notes for this list	4000

### 5.2.188 VAlertTemplateHist

**Description:** Shadow table for VAlertTemplate

**Database table name :**VCRYPT\_ALERT\_TEMPLATES\_HIST

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
templateId	TEMPLATE_ID	BIGINT	Long	Id for the alert template	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255

Name	DB name	DB type	Java type	Description	Length
versionNumber	VERSION_NUM	INT	int	Version Number	-
listId	LIST_ID	BIGINT	Long	Id for the list	16
alertType	ALERT_TYPE	INT	int	Type of alert	-
alertLevel	ALERT_LEVEL	INT	int	Level of alert	-
alertMessage	ALERT_MESSAGE	TEXT	String	Alert message	4000
notes	NOTES	TEXT	String	Notes for this list	4000

### 5.2.189 VValueList

**Description:** This contains the vector values

**Database table name :**VCRYPT\_VALUE\_LIST

**Primary Keys :** listId (*LIST\_ID*)

Name	DB name	DB type	Java type	Description	Length
listId	LIST_ID ( <i>PK</i> )	BIGINT	Long	Id for the list	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of latest update.	-
listName	LIST_NAME	TEXT	String	Name of the list	4000
listNameRBKey	LIST_NAME_RBKEY	TEXT	String	Resource bundle key for this list name	4000
description	DESCRIPTION	TEXT	String	Description of the map	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
cacheType	CACHE_TYPE	INT	int	Whether this list should be cached	4
listType	LIST_CLASS_CODE	INT	int	What is the type of this list	-
valueType	VALUE_TYPE	INT	int	Type of the value	-
notes	NOTES	TEXT	String	Notes for this list	4000

### 5.2.190 VValueListHist

**Description:** Shadow table for VValueList

**Database table name :**VCRYPT\_VALUE\_LIST\_HIST

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256

Name	DB name	DB type	Java type	Description	Length
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
listId	LIST_ID	BIGINT	Long	Id for the list	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
listName	LIST_NAME	TEXT	String	Name of the list	4000
listNameRBKey	LIST_NAME_RBKEY	TEXT	String	Resource bundle key for this list name	4000
description	DESCRIPTION	TEXT	String	Description of the map	4000
descriptionRBKey	DESC_RBKEY	TEXT	String	Resource bundle key for the description	4000
listType	LIST_CLASS_CODE	INT	int	What is the type of this list	-
cacheType	CACHE_TYPE	INT	int	Whether this list should be cached	4
valueType	VALUE_TYPE	INT	int	Type of the value	-
notes	NOTES	TEXT	String	Notes for this list	4000

### 5.2.191 VStringValueElement

**Description:** String elements of the list

**Database table name :** *VCRYPT\_STRING\_VALUE\_ELEMENT*

**Primary Keys :** elementId (*ELEMENT\_ID*)

Name	DB name	DB type	Java type	Description	Length
elementId	ELEMENT_ID ( <i>PK</i> )	BIGINT	Long	Element Id	16
listId	LIST_ID	BIGINT	Long	Id for the list	16
value	ELEMENT_VALUE	TEXT	String	String value	4000

### 5.2.192 VLongValueElement

**Description:** Long elements of the list

**Database table name :** *VCRYPT\_LONG\_VALUE\_ELEMENT*

**Primary Keys :** elementId (*ELEMENT\_ID*)

Name	DB name	DB type	Java type	Description	Length
elementId	ELEMENT_ID ( <i>PK</i> )	BIGINT	Long	Element Id	16
listId	LIST_ID	BIGINT	Long	Id for the list	16
value	ELEMENT_VALUE	BIGINT	long	Long value	-

### 5.2.193 VIntValueElement

**Description:** Int elements of the list

**Database table name :** *VCRYPT\_INT\_VALUE\_ELEMENT*

**Primary Keys :** elementId (*ELEMENT\_ID*)

Name	DB name	DB type	Java type	Description	Length
elementId	ELEMENT_ID (PK)	BIGINT	Long	Element Id	16
listId	LIST_ID	BIGINT	Long	Id for the list	16
value	ELEMENT_VALUE	INT	int	Int value	-

### 5.2.194 VDateValueElement

**Description:** Date elements of the list

**Database table name :** VCRYPT\_DATE\_VALUE\_ELEMENT

**Primary Keys :** elementId (ELEMENT\_ID)

Name	DB name	DB type	Java type	Description	Length
elementId	ELEMENT_ID (PK)	BIGINT	Long	Element Id	16
listId	LIST_ID	BIGINT	Long	Id for the list	16
value	ELEMENT_VALUE	DATETIME	Date	Date value	-

### 5.2.195 VRunStatus

**Description:** This has the run status for critical operations

**Database table name :** V\_RUN\_STATUS

**Primary Keys :** runStatusId (RUN\_STATUS\_ID)

Name	DB name	DB type	Java type	Description	Length
runStatusId	RUN_STATUS_ID (PK)	BIGINT	Long	Id of the operation	16
runStatusType	RUN_STATUS_TYPE	INT	int	Type of the operation	4
runStatusSubType	RUN_STATUS_SUB_TYPE	VARCHAR	String	Sub type of the operation	64
runStatusValue	RUN_STATUS_VALUE	VARCHAR	String	Run status value	64
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this user.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-

### 5.2.196 VRunStatusHist

**Description:** This has the run status for critical operations. Shadow table.

**Database table name :** V\_RUN\_STATUS\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15

Name	DB name	DB type	Java type	Description	Length
runStatusId	RUN_STATUS_ID	BIGINT	Long	Id of the operation	16
runStatusType	RUN_STATUS_TYPE	INT	int	Type of the operation	4
runStatusSubType	RUN_STATUS_SUB_TYPE	VARCHAR	String	Sub type of the operation	64
runStatusValue	RUN_STATUS_VALUE	VARCHAR	String	Run status value	64

### 5.2.197 VCacheStatus

**Description:** Has the last update status of all the caches

**Database table name :** *VCRYPT\_CACHE\_STATUS*

**Primary Keys :** cacheId (*CACHE\_ID*)

Name	DB name	DB type	Java type	Description	Length
cacheId	CACHE_ID ( <i>PK</i> )	BIGINT	Long	Id of the cache	16
cacheType	CACHE_TYPE	INT	int	Type of the cache	-
objectValue	OBJECT_VALUE	VARCHAR	String	Value of the object	255
version	VERSION	INT	int	Version of the cache	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time.	-

### 5.2.198 VGlobalLookup

**Description:** Global lookup tables for constants

**Database table name :** *V\_G\_LOOKUP*

**Primary Keys :** lookupId (*LOOKUP\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
lookupId	LOOKUP_ID ( <i>PK</i> )	BIGINT	Long	Lookup ID	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
versionNumber	VERSION_NUM	INT	int	Version Number	-	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time.	-	-
lookupType	LOOKUP_TYPE	INT	int	Type of lookup. E.g. for profiles, etc	-	-
name	NAME	TEXT	String	Name of the lookup	4000	-
description	DESCRIPTION	TEXT	String	Description	4000	-
status	STATUS	INT	int	Status of the lookup	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED

### 5.2.199 VGlobalLookupHist

**Description:** Global lookup tables for constants. Shadow table

**Database table name :** *V\_G\_LOOKUP\_HIST*

**Primary Keys : logId (LOG\_ID)**

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
lookupId	LOOKUP_ID	BIGINT	Long	Lookup ID	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
versionNumber	VERSION_NUM	INT	int	Version Number	-
lookupType	LOOKUP_TYPE	INT	int	Type of lookup. E.g. for profiles, etc	-
name	NAME	TEXT	String	Name of the lookup	4000
description	DESCRIPTION	TEXT	String	Description	4000
status	STATUS	INT	int	Status of the lookup	2

### 5.2.200 VReportQuery

**Description:** Report Query

**Database table name :**V\_REP\_QUERY

**Primary Keys :** queryId (QUERY\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
queryId	QUERY_ID (PK)	BIGINT	Long	Id of the query	16	-
queryName	QUERY_NAME	TEXT	String	Name of the query	4000	-
description	QUERY_DESC	TEXT	String	Description of the report	4000	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-	-
query	QUERY	TEXT	String	Query of the report	4000	-
accessType	ACCESS_TYPE	INT	int	Type of access.	2	ACCESS_PUBLIC, ACCESS_PRIVATE
adminLoginId	ADMIN_LOGIN_ID	VARCHAR	String	Id of the admin	30	-

### 5.2.201 VReportQueryHist

**Description:** Report Query shadow object

**Database table name :**V\_REP\_QUERY\_HIST

**Primary Keys :** logId (LOG\_ID)



Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
queryId	QUERY_ID	BIGINT	Long	Id of the query	16
queryName	QUERY_NAME	TEXT	String	Name of the query	4000
description	QUERY_DESC	TEXT	String	Description of the report	4000
query	QUERY	TEXT	String	Query of the report	4000
accessType	ACCESS_TYPE	INT	int	Type of access.	2
adminLoginId	ADMIN_LOGIN_ID	VARCHAR	String	Id of the admin	30

### 5.2.202 VReportSchedule

**Description:** These are the reports which are scheduled

**Database table name :** V\_REP\_SCHED

**Primary Keys :** scheduleId (SCHED\_ID)

Name	DB name	DB type	Java type	Description	Length	Enum values
scheduleId	SCHED_ID (PK)	BIGINT	Long	Id of the report	16	-
reportName	REPORT_NAME	TEXT	String	Name of the report	4000	-
description	REPORT_DESC	TEXT	String	Description of the report	4000	-
status	SCHEDULE_STATUS	INT	int	Status of the schedule.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
fileType	FILETYPE	INT	int	File Type of the report	-	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-	-
startDate	START_DATE	DATETIME	Date	Date to start this schedule.	-	-
executeTimeInSeconds	EXEC_TIME_SECS	INT	int	Time of the day to run this report.	-	-
endDate	END_DATE	DATETIME	Date	Date to end this schedule.	-	-
intervalType	INTERVAL_TYPE	INT	int	Type of interval.	2	INTERVAL_MIN, INTERVAL_HOUR, INTERVAL_DAY, INTERVAL_WEEK, INTERVAL_MONTH, INTERVAL_QUARTER, INTERVAL_YEAR, INTERVAL_NONE

Name	DB name	DB type	Java type	Description	Length	Enum values
intervalValue	FILE_TYPE	TEXT	String	Value for the interval	256	-
lastRunTime	LAST_RUN_TIME	DATETIME	Date	Last time the report of run.	-	-
queryId	QUERY_ID	BIGINT	Long	Id of the query	16	-
actionType	ACTION_TYPE	INT	int	Type of action.	2	ACTION_SAVE ACTION_SAVE_ AND_SEND ACTION_SAVE_ AND_NOTIFY
emailList	EMAIL_LIST	TEXT	String	Email list	4000	-
notes	NOTES	TEXT	String	Notes	4000	-

### 5.2.203 VReportScheduleHist

**Description:** Shadow table for report schedule

**Database table name :** V\_REP\_SCHED\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
scheduleId	SCHED_ID	BIGINT	Long	Id of the schedule	16
reportName	REPORT_NAME	TEXT	String	Name of the report	4000
description	REPORT_DESC	TEXT	String	Description of the report	4000
status	SCHEDULE_STATUS	INT	int	Status of the schedule.	2
fileType	FILETYPE	INT	int	File Type of the report	-
startDate	START_DATE	DATETIME	Date	Date to start this schedule.	-
executeTimeInSeconds	EXEC_TIME_SECS	INT	int	Time of the day to run this report.	-
endDate	END_DATE	DATETIME	Date	Date to end this schedule.	-
intervalType	INTERVAL_TYPE	INT	int	Type of interval.	2
intervalValue	FILE_TYPE	TEXT	String	Value for the interval	256
lastRunTime	LAST_RUN_TIME	DATETIME	Date	Last time the report of run.	-
queryId	QUERY_ID	BIGINT	Long	Id of the query	16
actionType	ACTION_TYPE	INT	int	Type of action.	2
emailList	EMAIL_LIST	TEXT	String	Email list	4000
notes	NOTES	TEXT	String	Notes	4000

## 5.2.204 VReportSaved

**Description:** This is the saved report.

**Database table name :** *V\_REP\_SAVED*

**Primary Keys :** savedId (*REPORT\_SAVED\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
savedId	REPORT_SAVED_ID (PK)	BIGINT	Long	Id of the saved report	16	-
scheduleId	SCHEM_ID	BIGINT	Long	If this was a scheduled report, then the id of the schedule	16	-
reportName	REPORT_NAME	TEXT	String	Name of the report	4000	-
description	REPORT_DESC	TEXT	String	Description of the report	4000	-
filePath	FILE_PATH	TEXT	String	Path for the file	1024	-
fileType	FILETYPE	INT	int	File Type of the report	-	-
status	REPORT_STATUS	INT	int	Status of the schedule.	2	STATUS_SUCCESS, STATUS_ERROR, STATUS_FILE_NOT_FOUND, STATUS_DELETED
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-	-
processTime	PROCESS_TIME	INT	int	Time taken to process this report.	10	-
queryId	QUERY_ID	BIGINT	Long	Id of the query	-	-
query	QUERY	TEXT	String	Query of the report	4000	-
emailList	EMAIL_LIST	TEXT	String	Email list	4000	-
errorMessage	ERROR_MSG	TEXT	String	Error message if failed	4000	-
notes	NOTES	TEXT	String	Notes	4000	-

## 5.2.205 VReportSavedHist

**Description:** This is the saved report shadow table.

**Database table name :** *V\_REP\_SAVED\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15

Name	DB name	DB type	Java type	Description	Length
savedId	REPORT_SAVED_ID	BIGINT	Long	Id of the saved report	16
scheduleId	SCHED_ID	BIGINT	Long	If this was a scheduled report, then the id of the schedule	16
reportName	REPORT_NAME	TEXT	String	Name of the report	4000
description	REPORT_DESC	TEXT	String	Description of the report	4000
filePath	FILE_PATH	TEXT	String	Path for the file	1024
fileType	FILETYPE	INT	int	File Type of the report	-
status	REPORT_STATUS	INT	int	Status of the schedule.	2
processTime	PROCESS_TIME	INT	int	Time taken to process this report.	10
queryId	QUERY_ID	BIGINT	Long	Id of the query	-
query	QUERY	TEXT	String	Query of the report	4000
emailList	EMAIL_LIST	TEXT	String	Email list	4000
errorMessage	ERROR_MSG	TEXT	String	Error message if failed	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.206 VJavaBinaryClass

**Description:** This contains the binary class code

**Database table name :** *VR\_JAVA\_BIN*

**Primary Keys :** javaClassId (*JAVA\_CLASS\_ID*)

Name	DB name	DB type	Java type	Description	Length	Enum values
createTime	CREATE_TIME	DATETIME	Date	Date/Time creation of this object.	-	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Time of update.	-	-
javaClassId	JAVA_CLASS_ID (PK)	BIGINT	Long	Id for the object	16	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255	-
referenceObjectId	OBJECT_ID	BIGINT	Long	Id to the object it belongs to	-	-
referenceObjectClassName	OBJECT_CLASS_NAME	VARCHAR	String	Class name for the reference objectId	-	-
checksum	CHECK_SUM	INT	int	Check sum for the class	-	-
javaClassName	JAVA_CLASS_NAME	TEXT	String	Java class name	4000	-

Name	DB name	DB type	Java type	Description	Length	Enum values
javaClassBinary	JAVA_CLASS_BIN	TEXT	String	This is the class code in binary format	-	-
status	STATUS	INT	int	Status of the parameter.	2	STATUS_ACTIVE, STATUS_DISABLED, STATUS_DELETED
notes	NOTES	TEXT	String	Notes for this param values	4000	-

### 5.2.207 VJavaBinaryClassHist

**Description:** History object dynamic action java class

**Database table name :**VR\_JAVA\_BIN\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
javaClassId	JAVA_CLASS_ID	BIGINT	Long	Id for the object	16
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
referenceObjectId	OBJECT_ID	BIGINT	Long	Id to the object it belongs to	-
referenceObjectClassName	OBJECT_CLASS_NAME	VARCHAR	String	Class name for the reference objectId	-
checksum	CHECK_SUM	INT	int	Check sum for the class	-
javaClassName	JAVA_CLASS_NAME	TEXT	String	Java class name	4000
javaClassBinary	JAVA_CLASS_BIN	TEXT	String	This is the class code in binary format	-
status	STATUS	INT	int	Status of the parameter.	2
notes	NOTES	TEXT	String	Notes for this param values	4000

### 5.2.208 VAlert

**Description:** This is the Alert object

**Database table name :**VCRYPT\_ALERT

**Primary Keys :** alertId (ALERT\_ID)

Details of each class

Name	DB name	DB type	Java type	Description	Length
alertId	ALERT_ID ( <i>PK</i> )	BIGINT	Long	Id for this alert	16
templateId	TEMPLATE_ID	BIGINT	Long	Id for the alert template	16
sessActionMapId	SESS_ACTION_MAP_ID	BIGINT	Long	Reference to the session action map	16
alertLevel	ALERT_LEVEL	INT	int	Alert level	-
alertType	ALERT_TYPE	INT	int	Alert type	-
alertStatus	ALERT_STATUS	INT	int	Alert status	-
createTime	CREATE_TIME	DATETIME	Date	Create time for this alert.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-
week	CREATE_WEEK	INT	int	Week the alert was created	-
month	CREATE_MONTH	INT	int	Week the alert was created	-
quarter	CREATE_QUARTER	INT	int	Week the alert was created	-
year	CREATE_YEAR	INT	int	Year the alert was created	-
requestId	REQUEST_ID	TEXT	String	Id of the request. This is used to co-relate the post authentication request.	256
transactionLogId	TRX_LOG_ID	BIGINT	Long	Id of the transaction for which this alert was created.	16
sourceType	SOURCE_TYPE	INT	int	The type could be from rule or other source like model	4
sourceId	PROFILE_RULE_MAP_ID	BIGINT	Long	Id of the source. It could be ruleMapId or any other id	16
runtimeType	RUNTIME_TYPE	INT	Integer	Type of runtime(if available)	6
nodeId	NODE_ID	BIGINT	Long	Node Id	-
userId	USER_ID	TEXT	String	User Id of the user if available.	256
loginId	USER_LOGIN_ID	TEXT	String	Login Id of the user if available.	256
remoteIPAddr	REMOTE_IP_ADDR	BIGINT	String	The IP address from where the client connected	15
baseIPAddr	BASE_IP_ADDR	BIGINT	String	This is the base IP address for quick search	15
inputList	INPUT_LIST	TEXT	String	Input value list.	4000
probableCause	PROBABLE_CAUSE	VARCHAR	String	Cause of this alert.	128
category	ALERT_SOURCE	VARCHAR	String	Alert category	64
alertMessage	ALERT_MESSAGE	TEXT	String	Alert message	4000
notes	NOTES	TEXT	String	Note for this alert	4000

## 5.2.209 VCSRCase

**Description:** CSR Case

**Database table name :** *V\_CASE*

**Primary Keys :** caseId (*CASE\_ID*)

Name	DB name	DB type	Java type	Description	Length
caseId	CASE_ID ( <i>PK</i> )	BIGINT	Long	Id for this case	16
extUserId	USER_LOGIN_ID	TEXT	String	External User Id of the user if available.	256
requestId	REQUEST_ID	TEXT	String	Id of the session.	256
lastActionType	LOG_ACCESS_TYPE	INT	int	The last reportable action type for this case	3
caseStatus	CASE_STATUS	INT	int	Status of the case	3
disposition	DISPOSITION	INT	int	Disposition of the case	6
caseType	CASE_TYPE	INT	int	Type of the case	6
createType	CREATE_TYPE	INT	int	How the case got created	6
severityLevel	SEVERITY_LEVEL	INT	int	Severity level for the case	-
ownerGroupId	ADMIN_GROUP_ID	BIGINT	Long	Id for the owner group	16
adminUserId	ADMIN_USER_ID	BIGINT	Long	Admin User Id	16
externalCaseId	EXT_CASE_ID	TEXT	String	Id of the external caseld	256
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTA MP	Date	Date/Time of the last update.	-
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this case expires	-
notes	NOTES	TEXT	String	Notes	4000

## 5.2.210 VCSRCaseHist

**Description:** CSR Case shadow table

**Database table name :** *V\_CASE\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
caseId	CASE_ID	BIGINT	Long	Id for this case	16
extUserId	USER_LOGIN_ID	TEXT	String	External User Id of the user if available.	256

Name	DB name	DB type	Java type	Description	Length
requestId	REQUEST_ID	TEXT	String	Id of the session.	256
lastActionType	LOG_ACCESS_TYPE	INT	int	The last reportable action type for this case	3
caseStatus	CASE_STATUS	INT	int	Status of the case	3
caseType	CASE_TYPE	INT	int	Type of the case	6
createType	CREATE_TYPE	INT	int	How the case got created	6
disposition	DISPOSITION	INT	int	Disposition of the case	6
severityLevel	SEVERITY_LEVEL	INT	int	Severity level for the case	3
ownerGroupId	ADMIN_GROUP_ID	BIGINT	Long	Id for the owner group	16
adminUserId	ADMIN_USER_ID	BIGINT	Long	Admin User Id	16
externalCaseId	EXT_CASE_ID	TEXT	String	Id of the external caseId	256
expirationTime	EXPIRE_TIME	DATETIME	Date	Date/Time when this case expires	-
notes	NOTES	TEXT	String	Note for this alert	4000

### 5.2.211 VCaseActionLogSessionMap

**Description:** Mapping between action log and session

**Database table name :** *V\_ACTION\_LOG\_SESS\_MAP*

**Primary Keys :** mapId (*MAP\_ID*)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID ( <i>PK</i> )	BIGINT	Long	Id for the map	16
sessionId	SESSION_ID	BIGINT	Long	Id for this session	16
caseId	CASE_ID	BIGINT	Long	Id for this session	16

### 5.2.212 VCaseMap

**Description:** Mapping between case and other entities

**Database table name :** *V\_CASE\_MAP*

**Primary Keys :** mapId (*MAP\_ID*)

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Date/Time of this transaction.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Last update time for this object.	-
mapId	MAP_ID ( <i>PK</i> )	BIGINT	Long	Id for the map	16
caseId	CASE_ID	BIGINT	Long	Id for the case	16
objectId	OBJECT_ID	BIGINT	Long	Id of the object.	16
entityDefId	ENTITY_DEF_ID	BIGINT	Long	Id for the entity type	16
relationType	RELATION_TYPE	INT	int	Type of the relationship	6
mapStatus	MAP_STATUS	INT	int	Status of the case map	5



Name	DB name	DB type	Java type	Description	Length
adminSessionId	ADM_SESSION_ID	BIGINT	Long	Id of the admin session	16
notes	NOTES	TEXT	String	Note for this alert	4000

### 5.2.213 VCaseMapHist

**Description:** Shadow table for VCaseMap

**Database table name :** V\_CASE\_MAP\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for the map	16
caseId	CASE_ID	BIGINT	Long	Id for the case	16
objectId	OBJECT_ID	BIGINT	Long	Id of the object.	16
entityDefId	ENTITY_DEF_ID	BIGINT	Long	Id for the entity type	16
relationType	RELATION_TYPE	INT	int	Type of the relationship	6
mapStatus	MAP_STATUS	INT	int	Status of the case map	5
adminSessionId	ADM_SESSION_ID	BIGINT	Long	Id of the admin session	16
notes	NOTES	TEXT	String	Note for this alert	4000

### 5.2.214 VAdminUser

**Description:** Admin User

**Database table name :** V\_ADMIN\_USER

**Primary Keys :** adminUserId (USER\_ID)

Name	DB name	DB type	Java type	Description	Length
adminUserId	USER_ID (PK)	BIGINT	Long	Id for admin user	16
extUserId	USER_LOGIN_ID	TEXT	String	External User Id of the user if available.	256
status	STATUS	INT	int	The status of the admin user.	5
notes	NOTES	TEXT	String	Note for this alert	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-

### 5.2.215 VAdminUserHist

**Description:** Admin User shadow table

**Database table name :** *V\_ADMIN\_USER\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
adminUserId	USER_ID	BIGINT	Long	Id for admin user	16
extUserId	USER_LOGIN_ID	TEXT	String	External User Id of the user if available.	256
status	STATUS	INT	int	The status of the admin user.	5
notes	NOTES	TEXT	String	Notes	4000

### 5.2.216 VAdminUserGroup

**Description:** Admin User Group

**Database table name :** *V\_ADMIN\_USERGROUP*

**Primary Keys :** adminUserGroupId (*USER\_GROUP\_ID*)

Name	DB name	DB type	Java type	Description	Length
adminUserGroupId	USER_GROUP_ID ( <i>PK</i> )	BIGINT	Long	Id for admin user group	16
extGroupId	EXT_USER_GROUP_ID	TEXT	String	External Grup Id of the user if available.	256
status	STATUS	INT	int	The status of the admin user.	5
notes	NOTES	TEXT	String	Note for this alert	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-

### 5.2.217 VAdminUserGroupHist

**Description:** Admin User Group shadow table

**Database table name :** *V\_ADMIN\_USER\_GROUP\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256

Name	DB name	DB type	Java type	Description	Length
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
adminUserGroupId	USER_GROUP_ID	BIGINT	Long	Id for admin user group	16
extGroupId	EXT_USER_GROUP_ID	TEXT	String	External Grup Id of the user if available.	256
status	STATUS	INT	int	The status of the admin user.	5
notes	NOTES	TEXT	String	Notes	4000

### 5.2.218 VAdminUserGroupMap

**Description:** Admin User Group Map

**Database table name :** *V\_ADMIN\_USERGROUP\_MAP*

**Primary Keys :** mapId (*MAP\_ID*)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID ( <i>PK</i> )	BIGINT	Long	Id for map	16
adminUserId	ADMIN_USER_ID	BIGINT	Long	Admin User Id	16
adminUserGroupId	ADMIN_USERGROUP_ID	BIGINT	Long	Admin User Group Id	16
status	STATUS	INT	int	The status of the admin user.	5
notes	NOTES	TEXT	String	Note for this alert	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-

### 5.2.219 VAdminUserGroupMapHist

**Description:** Admin User Group Map shadow table

**Database table name :** *V\_ADMIN\_USERGROUP\_MAP\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
mapId	MAP_ID	BIGINT	Long	Id for map	16
adminUserId	ADMIN_USER_ID	BIGINT	Long	Admin User Id	16
adminUserGroupId	ADMIN_USERGROUP_ID	BIGINT	Long	Admin User Group Id	16
status	STATUS	INT	int	The status of the admin user.	5
notes	NOTES	TEXT	String	Note for this alert	4000

### 5.2.220 VAdminUserProfile

**Description:** Admin User Profile

**Database table name :** *V\_ADMIN\_USERPROFILE*

**Primary Keys :** adminUserProfileId (*USER\_PROFILE\_ID*)

Name	DB name	DB type	Java type	Description	Length
adminUserProfileId	USER_PROFILE_ID ( <i>PK</i> )	BIGINT	Long	Id for admin user profile	16
adminUserId	ADMIN_USER_ID	BIGINT	Long	Admin User Id	16
status	STATUS	INT	int	The status of the admin user.	5
name	ATTR_NAME	TEXT	String	Name of the attribute	4000
value	ATTR_VALUE	TEXT	String	Value of the attribute	4000
notes	NOTES	TEXT	String	Note for this alert	4000
createTime	CREATE_TIME	DATETIME	Date	Date/Time when this object was created.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date/Time of the last update.	-

### 5.2.221 VAdminUserProfileHist

**Description:** Admin User Profile shadow table

**Database table name :** *V\_ADMIN\_USER\_PROFILE\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
adminUserProfileId	USER_PROFILE_ID	BIGINT	Long	Id for admin user profile	16
adminUserId	ADMIN_USER_ID	BIGINT	Long	Admin User Id	16
status	STATUS	INT	int	The status of the admin user.	5
name	ATTR_NAME	TEXT	String	Name of the attribute	4000
value	ATTR_VALUE	TEXT	String	Value of the attribute	4000
notes	NOTES	TEXT	String	Note for this alert	4000

### 5.2.222 VRAConfig

**Description:** RA Config

**Database table name :** *VRA\_CONFIG*

**Primary Keys :** configId (*CONFIG\_ID*)

Name	DB name	DB type	Java type	Description	Length
configId	CONFIG_ID ( <i>PK</i> )	BIGINT	Long	Id for the config	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	NAME	TEXT	String	Name	4000
configType	CONFIG_TYPE	INT	int	The type of this config.	5
configStatus	CONFIG_STATUS	INT	int	The status of the config.	5
notes	NOTES	TEXT	String	Notes	4000

### 5.2.223 VRAConfigHist

**Description:** RA Config shadow

**Database table name :** *VRA\_CONFIG\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
configId	CONFIG_ID	BIGINT	Long	Id for the config	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
name	NAME	TEXT	String	Name	4000
configType	CONFIG_TYPE	INT	int	The type of this config.	5
configStatus	CONFIG_STATUS	INT	int	The status of the config.	5
notes	NOTES	TEXT	String	Notes	4000

### 5.2.224 VRAConfigProperty

**Description:** RA Config Property

**Database table name :** *VRA\_CONFIG\_PROP*

**Primary Keys :** propertyId (*PROPERTY\_ID*)

Name	DB name	DB type	Java type	Description	Length
propertyId	PROPERTY_ID ( <i>PK</i> )	BIGINT	Long	Id for the property	16
versionNumber	VERSION_NUM	INT	int	Version Number	-

Name	DB name	DB type	Java type	Description	Length
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
configId	CONFIG_ID	BIGINT	Long	Id of the config	16
name	PROP_NAME	TEXT	String	Name of the attribute	4000
value	PROP_VALUE	TEXT	String	Value of the attribute	4000
propType	PROP_TYPE	INT	int	The type of this property.	5
isEncrypted	IS_SECURE	CHAR	boolean	Is this property encrypted	-
status	STATUS	INT	int	The status of the property.	5
description	DESCRIPTION	TEXT	String	Description	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.225 VRAConfigPropertyHist

**Description:** RA Config Property shadow

**Database table name :** *VRA\_CONFIG\_PROP\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
propertyId	PROPERTY_ID	BIGINT	Long	Id for the property	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
globalId	GLOBAL_ID	VARCHAR	String	Unique identifier which is used in import and export feature.	255
configId	CONFIG_ID	BIGINT	Long	Id of the config	16
name	PROP_NAME	TEXT	String	Name of the attribute	4000
value	PROP_VALUE	TEXT	String	Value of the attribute	4000
propType	PROP_TYPE	INT	int	The type of this property.	5
isEncrypted	IS_SECURE	CHAR	boolean	Is this property encrypted	-
status	STATUS	INT	int	The status of the property.	5
description	DESCRIPTION	TEXT	String	Description	4000
notes	NOTES	TEXT	String	Notes	4000

## 5.2.226 VRARunLogs

**Description:** RA Run Logs

**Database table name :** *VRA\_RUN\_LOGS*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Id for the run log	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
serverId	SERVER_ID	TEXT	String	Id of the server	512
raRunSessionId	RUN_SESS_ID	BIGINT	Long	Id for the run session id	16
name	LOG_NAME	TEXT	String	Name for the log	4000
value	LOG_VALUE	TEXT	String	Value of the log	4000
logType	LOG_TYPE	INT	int	The type of the log.	5
notes	NOTES	TEXT	String	Notes	4000

## 5.2.227 VRASessionSet

**Description:** RA Session Set

**Database table name :** *VRA\_SESS\_SET*

**Primary Keys :** setId (*SET\_ID*)

Name	DB name	DB type	Java type	Description	Length
setId	SET_ID ( <i>PK</i> )	BIGINT	Long	Id for this session set	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
name	NAME	TEXT	String	Name	4000
setType	SET_TYPE	INT	int	The type of this set.	5
beginTime	BEGIN_TIME	DATETIME	Date	Date/Time for session begin time.	-
endTime	END_TIME	DATETIME	Date	End time.	-
dbQuery	DB_QUERY	TEXT	String	DBQuery for this session set	4000
notes	NOTES	TEXT	String	Notes	4000

## 5.2.228 VRASessionSetHist

**Description:** RA Session Set

**Database table name :** *VRA\_SESS\_SET\_HIST*

**Primary Keys :** logId (*LOG\_ID*)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID ( <i>PK</i> )	BIGINT	Long	Log Id	16

Name	DB name	DB type	Java type	Description	Length
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
setId	SET_ID	BIGINT	Long	Id for this session set	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
setType	SET_TYPE	INT	int	The type of this set.	5
name	NAME	TEXT	String	Name	4000
beginTime	BEGIN_TIME	DATETIME	Date	Date/Time for session begin time.	-
endTime	END_TIME	DATETIME	Date	End time.	-
dbQuery	DB_QUERY	TEXT	String	DBQuery for this session set	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.229 VRARunSession

**Description:** RA Run Session

**Database table name :** VRA\_RUN\_SESS

**Primary Keys :** runSessionId (RUN\_SESS\_ID)

Name	DB name	DB type	Java type	Description	Length
runSessionId	RUN_SESS_ID (PK)	BIGINT	Long	Id for this run	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
name	LABEL	TEXT	String	Name	4000
scheduledTime	SCHEDULED_TIME	DATETIME	Date	Date/Time for this to run.	-
runType	RUN_TYPE	INT	int	Type of the run. e.g. Load or Playback	5
runStatus	RUN_STATUS	INT	int	Status of the run	5
raSessionSetId	RA_SESS_SET_ID	BIGINT	Long	Reference to the RA session set	16
policySetPkgId	POLICY_SET_PKG_ID	BIGINT	Long	Reference to the policy set package	16
raScheduleId	RA_SCHED_ID	BIGINT	Long	Id of the RA schedule	16
configId	CONFIG_ID	BIGINT	Long	Id of the config	16
beginTime	BEGIN_TIME	DATETIME	Date	Date/Time for session begin time.	-
endTime	END_TIME	DATETIME	Date	End time.	-
lastProcessedTime	LAST_PROCESSED_TIME	DATETIME	Date	Last processed time stamp	-



Name	DB name	DB type	Java type	Description	Length
lastRequestId	LAST_REQUEST_ID	TEXT	String	Id of the request id that was processed	256
notes	NOTES	TEXT	String	Notes	4000

### 5.2.230 VRARunSessionHist

**Description:** RA Session Set

**Database table name :** VRA\_RUN\_SESS\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
runSessionId	RUN_SESS_ID	BIGINT	Long	Id for this run	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
name	LABEL	TEXT	String	Name	4000
scheduledTime	SCHEDULED_TIME	DATETIME	Date	Date/Time for this to run.	-
runType	RUN_TYPE	INT	int	Type of the run. e.g. Load or Playback	5
runStatus	RUN_STATUS	INT	int	Status of the run	5
raSessionSetId	RA_SESS_SET_ID	BIGINT	Long	Reference to the RA session set	16
policySetPkgId	POLICY_SET_PKG_ID	BIGINT	Long	Reference to the policy set package	16
raScheduleId	RA_SCHED_ID	BIGINT	Long	Id of the RA schedule	16
configId	CONFIG_ID	BIGINT	Long	Id of the config	16
beginTime	BEGIN_TIME	DATETIME	Date	Date/Time for session begin time.	-
endTime	END_TIME	DATETIME	Date	End time.	-
lastProcessedTime	LAST_PROCESSED_TIME	DATETIME	Date	Last processed time stamp	-
lastRequestId	LAST_REQUEST_ID	TEXT	String	Id of the request id that was processed	256
notes	NOTES	TEXT	String	Notes	4000

### 5.2.231 VRAReports

**Description:** RA reports

**Database table name :** VRA\_REPORTS

**Primary Keys :** reportId (REPORT\_ID)

Name	DB name	DB type	Java type	Description	Length
reportId	REPORT_ID (PK)	BIGINT	Long	Id for the report	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
savedReportId	SAVED_REPORT_ID	BIGINT	Long	Id for the saved report	16
raRunSessionId	RUN_SESS_ID	BIGINT	Long	Id for the run session	16

### 5.2.232 VRASchedule

**Description:** RA schedule

**Database table name :** VRA\_SCHEDULE

**Primary Keys :** scheduleId (SCHEDULE\_ID)

Name	DB name	DB type	Java type	Description	Length
scheduleId	SCHEDULE_ID (PK)	BIGINT	Long	Id for the schedule	16
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
beginTime	BEGIN_TIME	DATETIME	Date	Date/Time for session begin time.	-
endTime	END_TIME	DATETIME	Date	End time.	-
raSessionSetId	RA_SESS_SET_ID	BIGINT	Long	Reference to the RA session set	16
configId	CONFIG_ID	BIGINT	Long	Id of the config	16
policySetPkgId	POLICY_SET_PKG_ID	BIGINT	Long	Reference to the policy set package	16
status	SCHEDULE_STATUS	INT	int	Status of the schedule.	5
executeTimeInSeconds	EXEC_TIME_SECS	INT	int	Time of the day to run this job.	-
suspendTimeInSeconds	SUSPEND_TIME_SECS	INT	int	Suspend or how long the schedule job should run	-
intervalType	INTERVAL_TYPE	INT	int	Type of interval.	5
intervalValue	FILE_TYPE	TEXT	String	Value for the interval	256
lastRunTime	LAST_RUN_TIME	DATETIME	Date	Last time the report of run.	-
description	DESCRIPTION	TEXT	String	Description	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.233 VRAScheduleHist

**Description:** RA schedule shadow

**Database table name :** VRA\_SCHEDULE\_HIST

**Primary Keys :** logId (LOG\_ID)

Name	DB name	DB type	Java type	Description	Length
logId	LOG_ID (PK)	BIGINT	Long	Log Id	16

Name	DB name	DB type	Java type	Description	Length
fromTime	FROM_TIME	DATETIME	Date	Active from time.	-
toTime	TO_TIME	DATETIME	Date	Active to time.	-
accessLoginId	ACCESS_LOGIN_ID	TEXT	String	Id of the administrator.	256
accessIPAddress	ACCESS_IP_ADDR	BIGINT	String	IP address from where the request came from	15
scheduleId	SCHEDULE_ID	BIGINT	Long	Id for the schedule	16
beginTime	BEGIN_TIME	DATETIME	Date	Date/Time for session begin time.	-
endTime	END_TIME	DATETIME	Date	End time.	-
raSessionSetId	RA_SESS_SET_ID	BIGINT	Long	Reference to the RA session set	16
configId	CONFIG_ID	BIGINT	Long	Id of the config	16
policySetPkgId	POLICY_SET_PKG_ID	BIGINT	Long	Reference to the policy set package	16
status	SCHEDULE_STATUS	INT	int	Status of the schedule.	5
executeTimeInSeconds	EXEC_TIME_SECS	INT	int	Time of the day to run this report.	-
suspendTimeInSeconds	SUSPEND_TIME_SECS	INT	int	Suspend or how long the schedule job should run	-
intervalType	INTERVAL_TYPE	INT	int	Type of interval.	5
intervalValue	FILE_TYPE	TEXT	String	Value for the interval	256
lastRunTime	LAST_RUN_TIME	DATETIME	Date	Last time the report of run.	-
description	DESCRIPTION	TEXT	String	Description	4000
notes	NOTES	TEXT	String	Notes	4000

### 5.2.234 VRADeviceMap

**Description:** RA Device Map

**Database table name :** *VRA\_DEVICE\_MAP*

**Primary Keys :** mapId (*MAP\_ID*)

Name	DB name	DB type	Java type	Description	Length
mapId	MAP_ID ( <i>PK</i> )	BIGINT	Long	Id for the map	16
versionNumber	VERSION_NUM	INT	int	Version Number	-
createTime	CREATE_TIME	DATETIME	Date	Date/Time for this log.	-
updateTime	UPDATE_TIME	TIMESTAMP	Date	Date value.	-
extNodeId	EXT_NODE_ID	TEXT	String	External node id	256
secureCookie	SECURE_COOKIE	TEXT	String	Secure cookie	256
digitalCookie	DIGITAL_COOKIE	TEXT	String	Digital cookie	256
expectedSecureCookie	OLD_SECURE_COOKIE	TEXT	String	Expected Secure cookie	256
expectedDigitalCookie	OLD_DIGITAL_COOKIE	TEXT	String	Expected Digital cookie	256



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