Oracle® Adaptive Access Manager
SQL Server Maintenance Guide
10*g* (10.1.4.3.0)

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Oracle Adaptive Access Manager SQL Server Maintenance Guide, 10g (10.1.4.3.0)

Contents

Preface

The Oracle® Adaptive Access Manager SQL Server Maintenance Guide provides instructions to set up the Oracle Adaptive Access Manager Maintenance Plan to purge and archive scripts in the Oracle Adaptive Access Manager database tables of Microsoft SQL Server 2005. The manual also discusses in detail how to trigger the scripts and provides information on the verification and validation of script results.

Documentation

The Oracle Adaptive Access Manager 10g documentation includes the following:

- The Oracle® Adaptive Access Manager API Integration Guide, which provides information on natively integrating the client portion of the Adaptive Access Manager solutions. In an API integration, the client application invokes the Oracle Adaptive Access Manager APIs directly and manages the authentication and challenge flows.

- The Oracle® Adaptive Access Manager Database Installation Guide (Oracle), which provides information about installing the Adaptive Access Manager schema into an Oracle database. Access to the Adaptive Access Manager schema is a requirement of the Adaptive Access Manager Application Server, which hosts the Adaptive Strong Authenticator and the Adaptive Risk Manager. Note that the Adaptive Manager Access Manager schema needs to be installed into the Oracle database before proceeding to the installation of the proxy.

- The Oracle® Adaptive Access Manager Database Installation Guide for SQL Server 2005, which provides information about installing the Adaptive Access Manager schema into SQL Server 2005. Access to the Adaptive Access Manager schema is a requirement of the Adaptive Access Manager Application Server, which hosts the Adaptive Strong Authenticator and the Adaptive Risk Manager. Note that the Adaptive Manager Access Manager schema needs to be installed into SQL Server 2005 before proceeding to the installation of the proxy.

- The Oracle® Adaptive Access Manager Proxy Integration Guide, which provides programming information and instructions on the installation of the Adaptive Access Manager proxy, one of the components in the Adaptive Access Manager UIO deployment. The Oracle Adaptive Access Manager's Universal Installation Option (UIO) offers multi-factor authentication to Web applications without requiring any change to the application code. The Oracle® Adaptive Access Manager Proxy and The Oracle® Adaptive Access Manager Proxy Web Publishing Configuration are guides specific to the UIO deployment.

- The Oracle® Adaptive Access Manager Proxy Web Publishing Configuration, which provides information on creating web publishing rules and listeners so that Web applications and the WebUIO can be accessible from the Internet. The Oracle Adaptive Access Manager's Universal Installation Option (UIO) offers multi-factor authentication to Web applications without requiring any change to the application code. The Oracle® Adaptive Access Manager Proxy and The Oracle® Adaptive Access Manager Proxy Web Publishing Configuration are guides specific to the UIO deployment.

- The Oracle® Adaptive Risk Manager Online Installation Guide, which provides information on the installation of the administration user interface of Oracle Adaptive Access Manager. Adaptive Risk Manager Online is the administration user interface of Oracle Adaptive Access Manager, a set of web-based administration tools that provides sophisticated fraud monitoring, analysis, and tracking by user location, device, time of day, type of transaction, as well as a host of other factors, and evaluates these factors against a set of customizable rules.

- The Oracle® Adaptive Access Manager LDAP Configuration Guide, which provides information on how to configure the Oracle Adaptive Access Manager Application Server to allow a user to be authenticated via a user identifier and password. The intended audience of this manual are users of WebLogic and Tomcat who want to use LDAP to set up users instead of the functionality in WebLogic and Tomcat.

- The Oracle® Adaptive Access Manager Import/Export Manual, which provides information importing groups, rule templates, and models from the Adaptive Access Manager schema.

- The Oracle® Adaptive Risk Manager Online Customer Care API Guide, which provides information about the Adaptive Risk Manager Online Customer Care API and provides the XML definition for each of the APIs.

- The Oracle® Adaptive Access Manager Database Tables Archiving and Purging Procedure, which provides information on the purge and archive scripts in the Oracle Adaptive Access Manager Database Tables of Microsoft SQL Server 2005. The procedure to trigger the scripts and information on verification and validation of script results are also provided.

- The Oracle® Adaptive Access Manager SQL Server Maintenance Guide, which provides instructions to set up The Oracle Adaptive Access Manager Maintenance Plan to purge and archive scripts in the Oracle Adaptive Access Manager database tables of Microsoft SQL Server 2005. The manual also discusses in detail how to trigger the scripts and provides information on the verification and validation of script results.

- The Oracle® Adaptive Risk Manager™ Administrator's Guide, which provides step-by-step instructions for creating and managing groups, creating models that contain rules, and customizing and managing rules.

- The Oracle® Adaptive Risk Manager™ Dashboard and Reporting Guide, which provides detailed instructions on how to use the dashboard and reporting functionality within the Oracle® Adaptive Risk Manager Online. The Oracle® Adaptive Risk Manager Online includes a dashboard that provides a high-level overview of users and devices that have generated alerts and the alerts themselves, and it contains a comprehensive collection of reports on users, locations, devices, and security alerts.

- The Oracle® Adaptive Risk Manager™ Customer Care Administration Guide, which provides information on creating new customer cases and administering them.

Introduction

This document provides instructions to set up the Oracle Adaptive Access Manager Maintenance Plan to purge and archive scripts on the Oracle Adaptive Access Manager database tables in Microsoft SQL Server 2005. Also the procedure to trigger the scripts and information on the verification and validation of script results is discussed in detail.

Setup the Oracle Adaptive Access Manager Maintenance Plan

To create a maintenance plan by using the wizard

1. **Navigate to the Management folder within the SQL Server Management Studio, right-click the "Maintenance Plans" folder and choose Maintenance Plan Wizard.**

   Note that SQL Server Agent service must be running while you're creating a database maintenance plan.

   The initial wizard screen allows you to choose the target server and specify the security credentials necessary for connecting to the server.
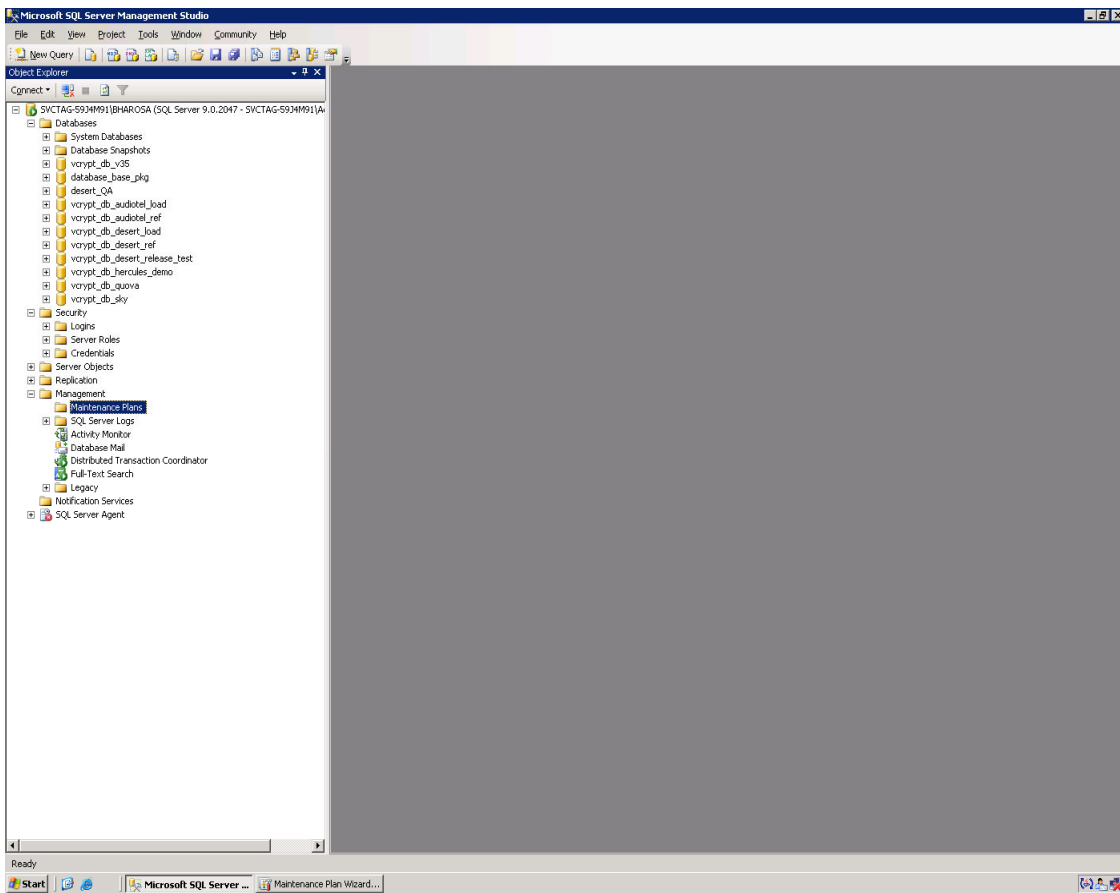
   Next, you can choose the maintenance tasks you wish to perform, as shown in the screen below:

   The Microsoft SQL Server Management Studio screen is shown below.
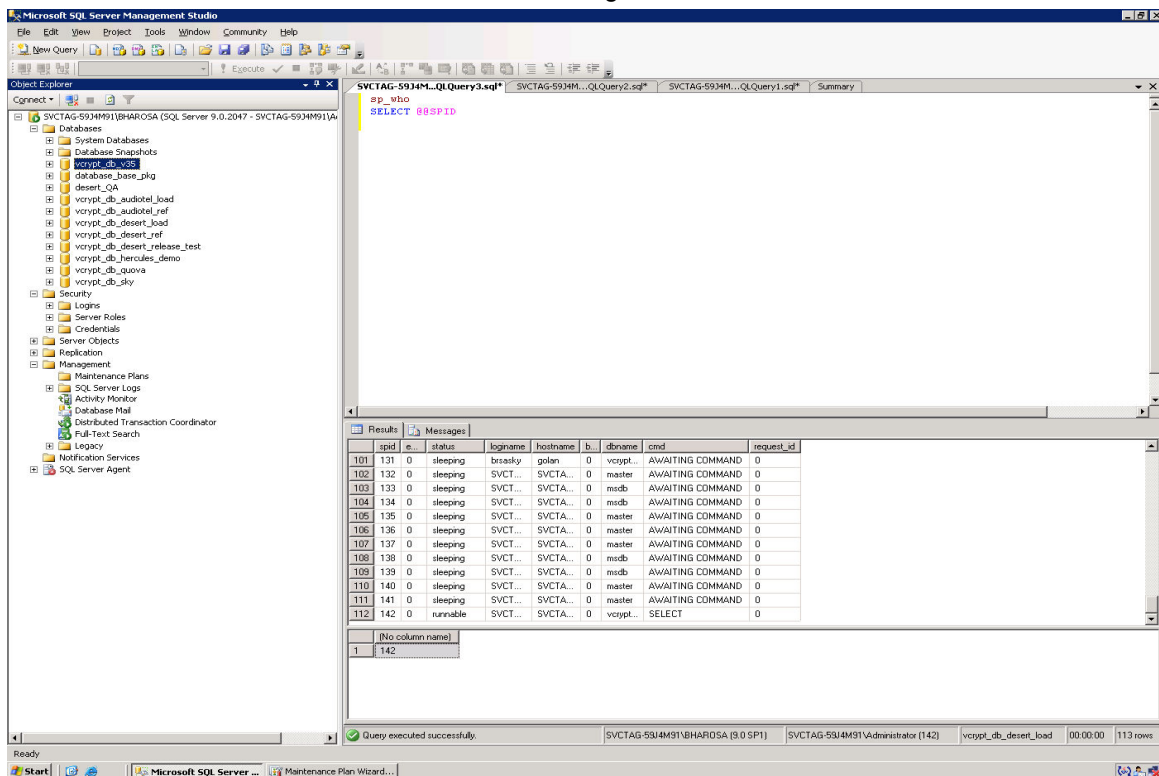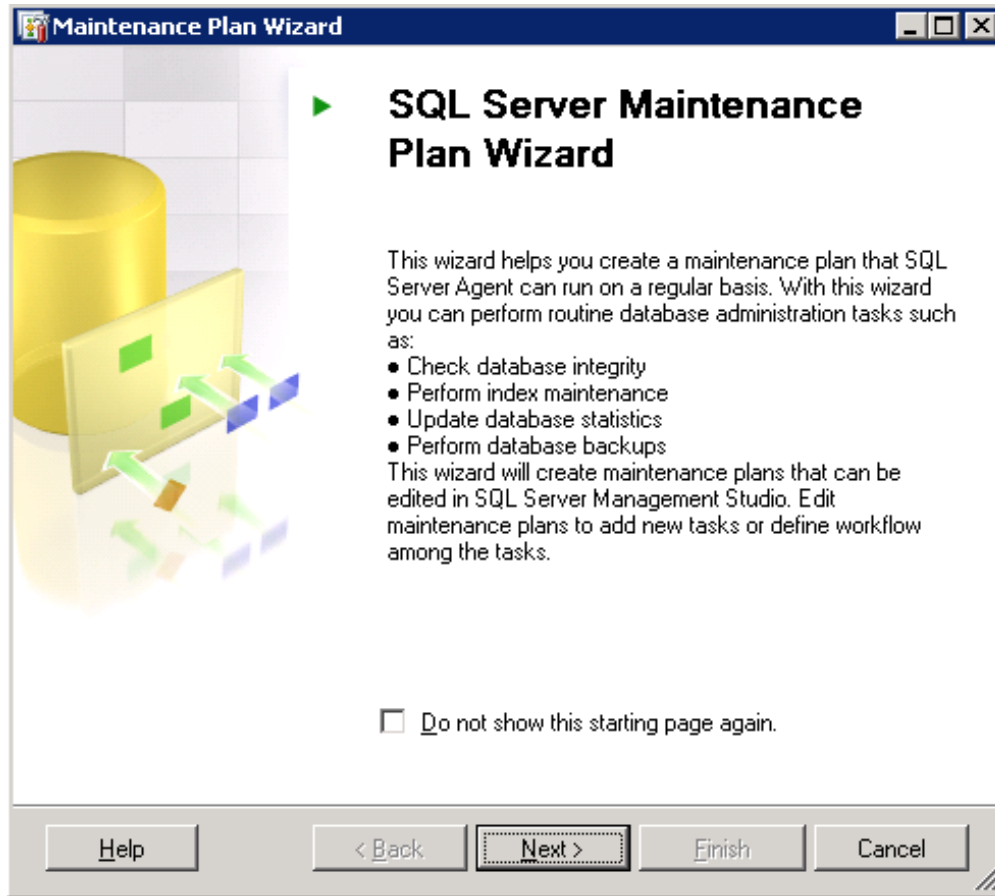
2. Navigate to Maintenance Plan

The Microsoft SQL Server Management Studio screen with Maintenance Plan selected is shown below.

3. Create Bharosa_Maintenance Plan

The SQL Server Maintenance Plan Wizard welcome screen is shown below.

The Maintenance Plan Wizard's Select a Target Server is shown below.

4. Choose maintenance tasks.

The screen gives you a brief overview of what you can accomplish with each type of maintenance task. So please select Check Database Integrity, Reorganize Index, Rebuild Index and Update Statistics.

The Maintenance Plan Wizard's Select Maintenance Tasks screen is shown below.
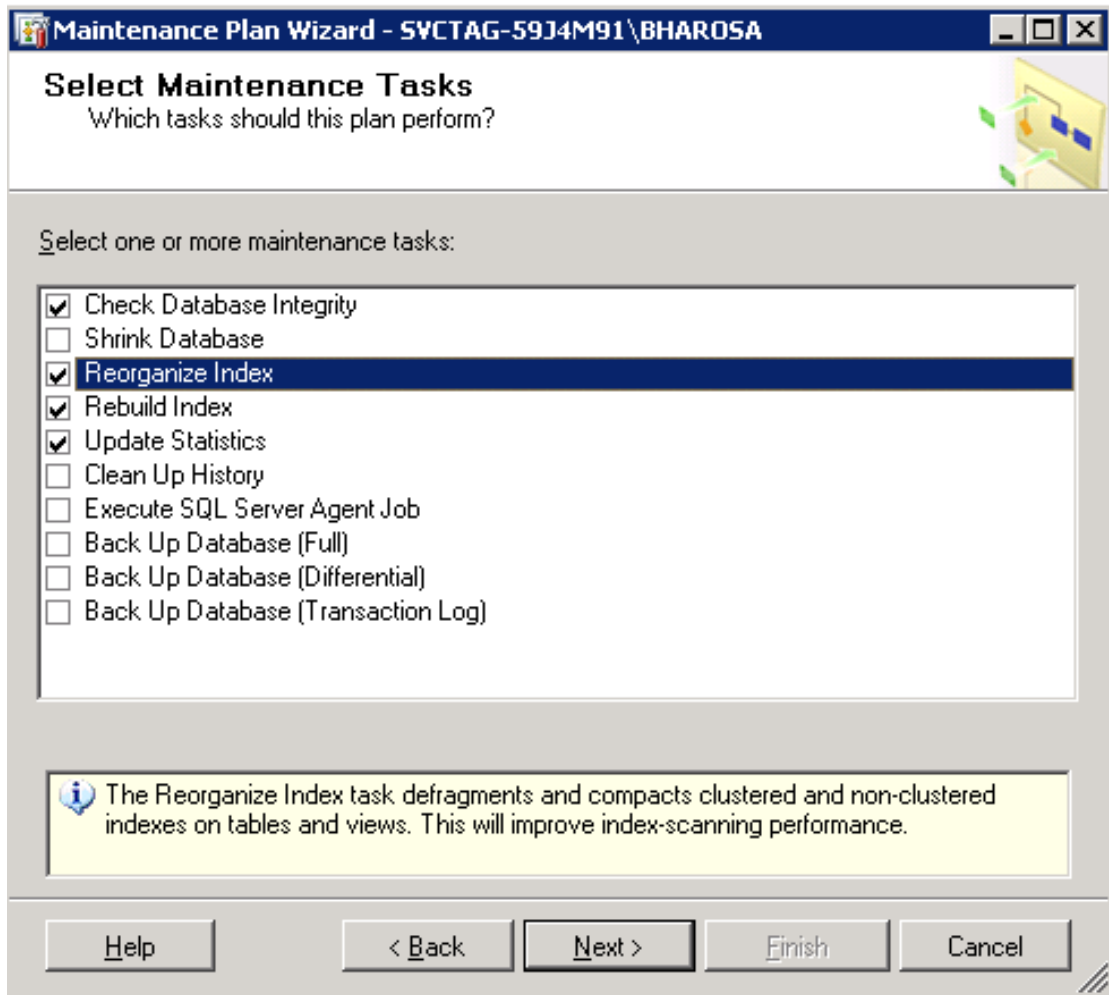
**5. Next you can define the order of execution for the maintenance plan tasks. Move Check Database Integrity to end of the list.**

The Maintenance Plan Wizard's Select Maintenance Task Order screen is shown below.
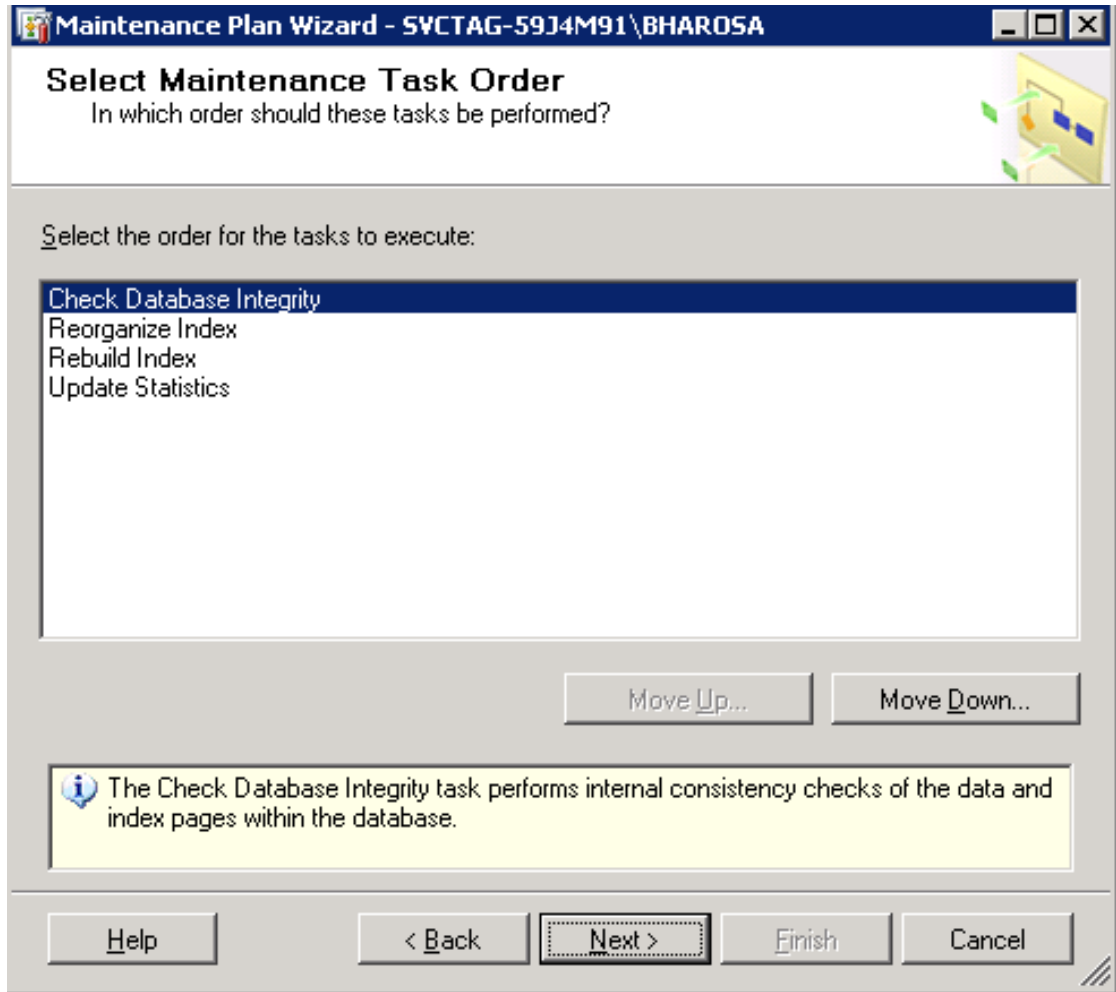
6. **Select database vcrypt_db_v35 for the Define Reorganize Index Task and click the Next tab.**

    The Maintenance Plan Wizard's Define Reorganize Index Task screen is shown below.
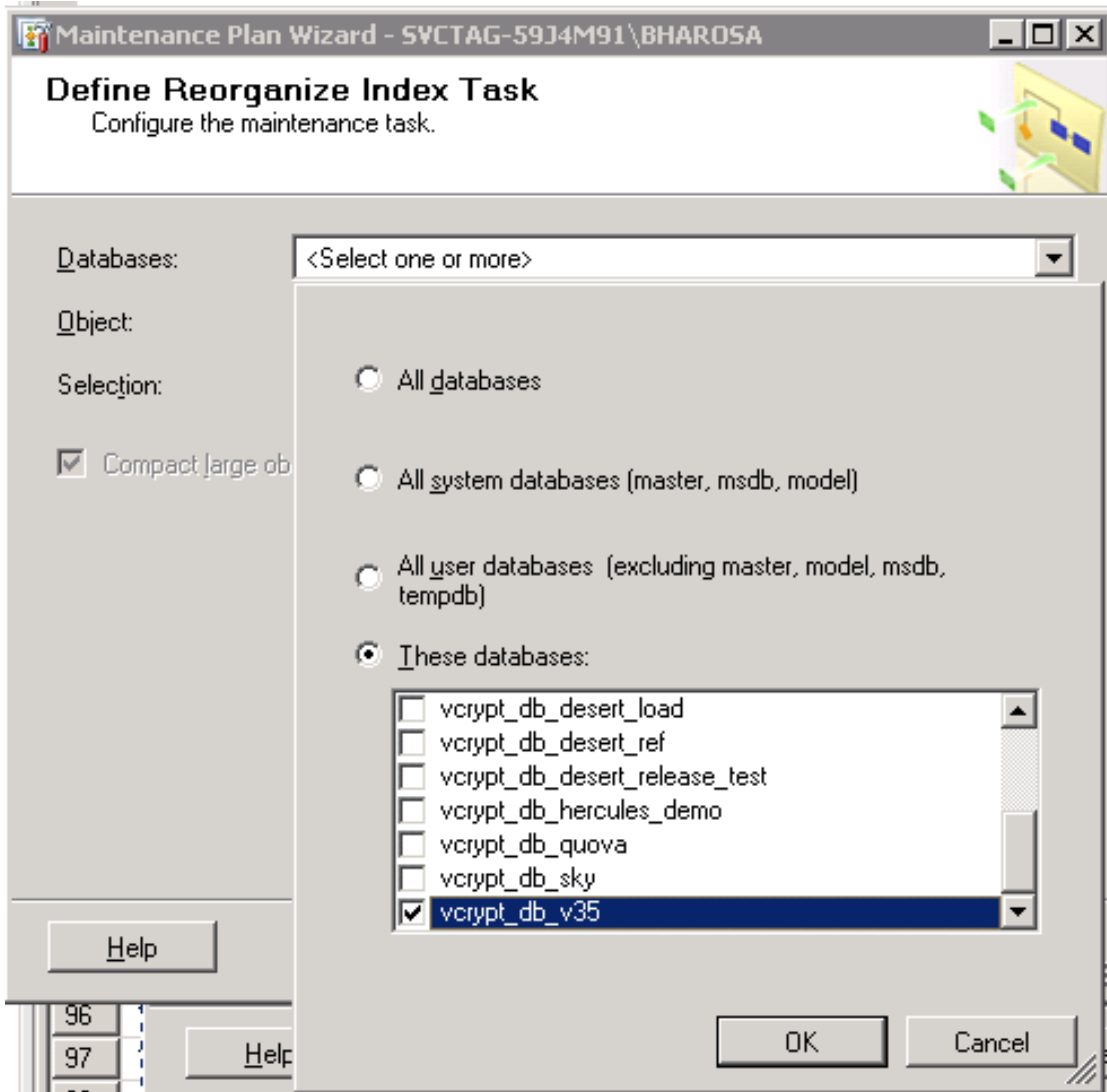
7. **Select database vcrypt_db_v35 for Rebuild Index Task. Ensure that the "Keep index online while reindexing" box is checked.**

The Maintenance Plan Wizard's Define Rebuild Index Task screen is shown below.
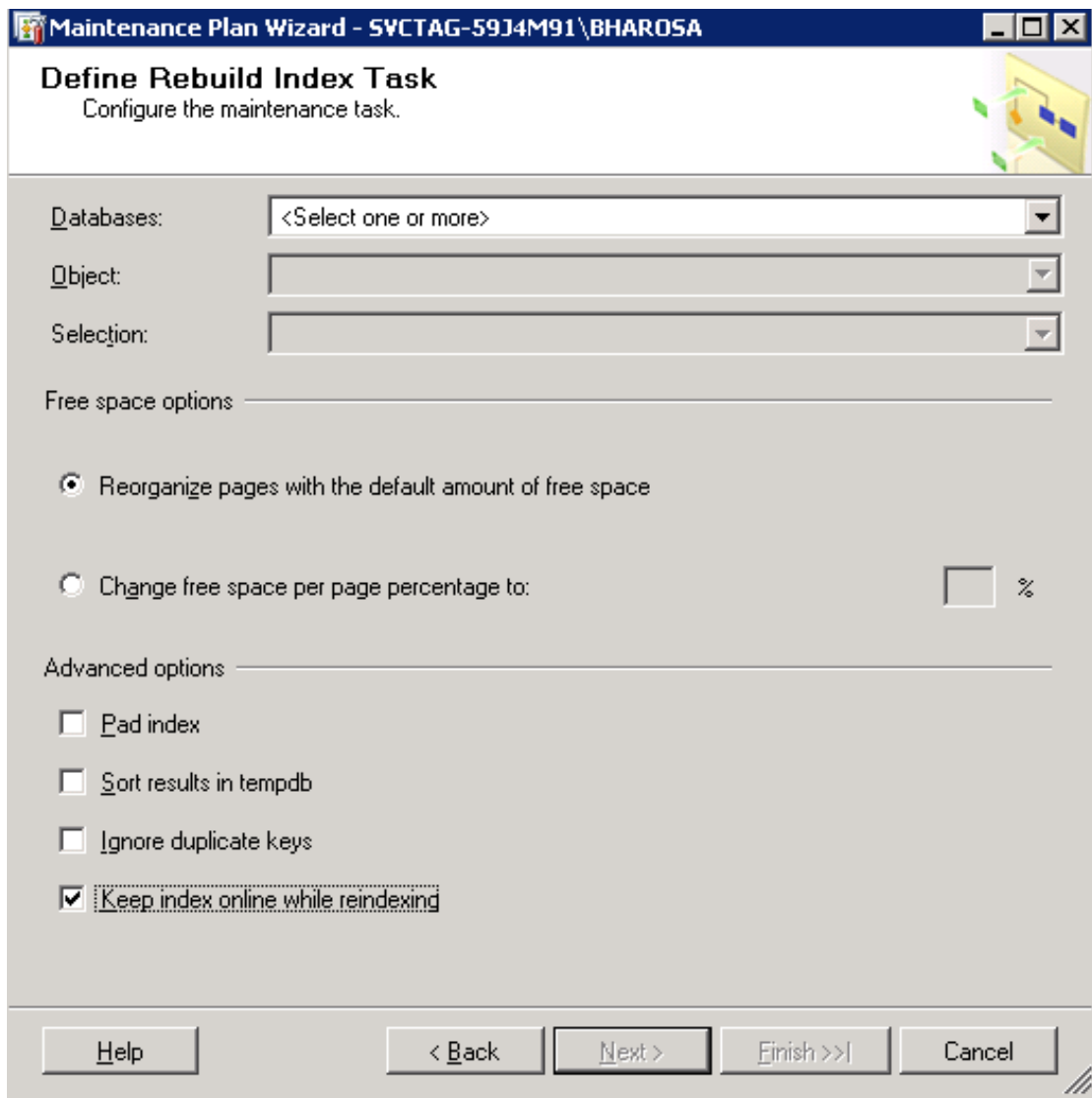
The Maintenance Plan Wizard's Define Rebuild Index Task is shown below.
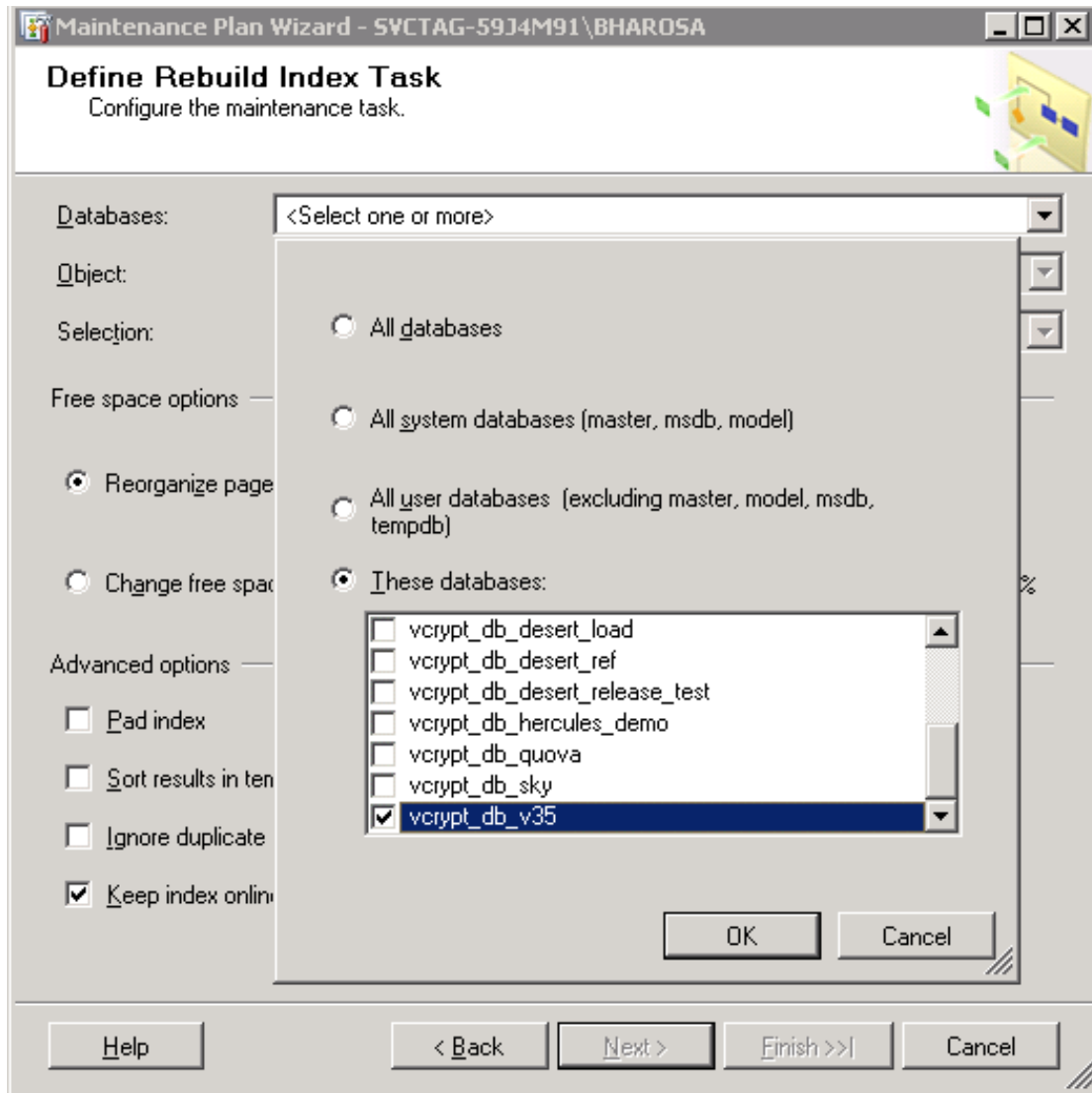
8. **Select database vcrypt_db_v35 for Update Statistics option and click Next.**

The Maintenance Plan Wizard's Define Update Statistics Task screen is shown below.
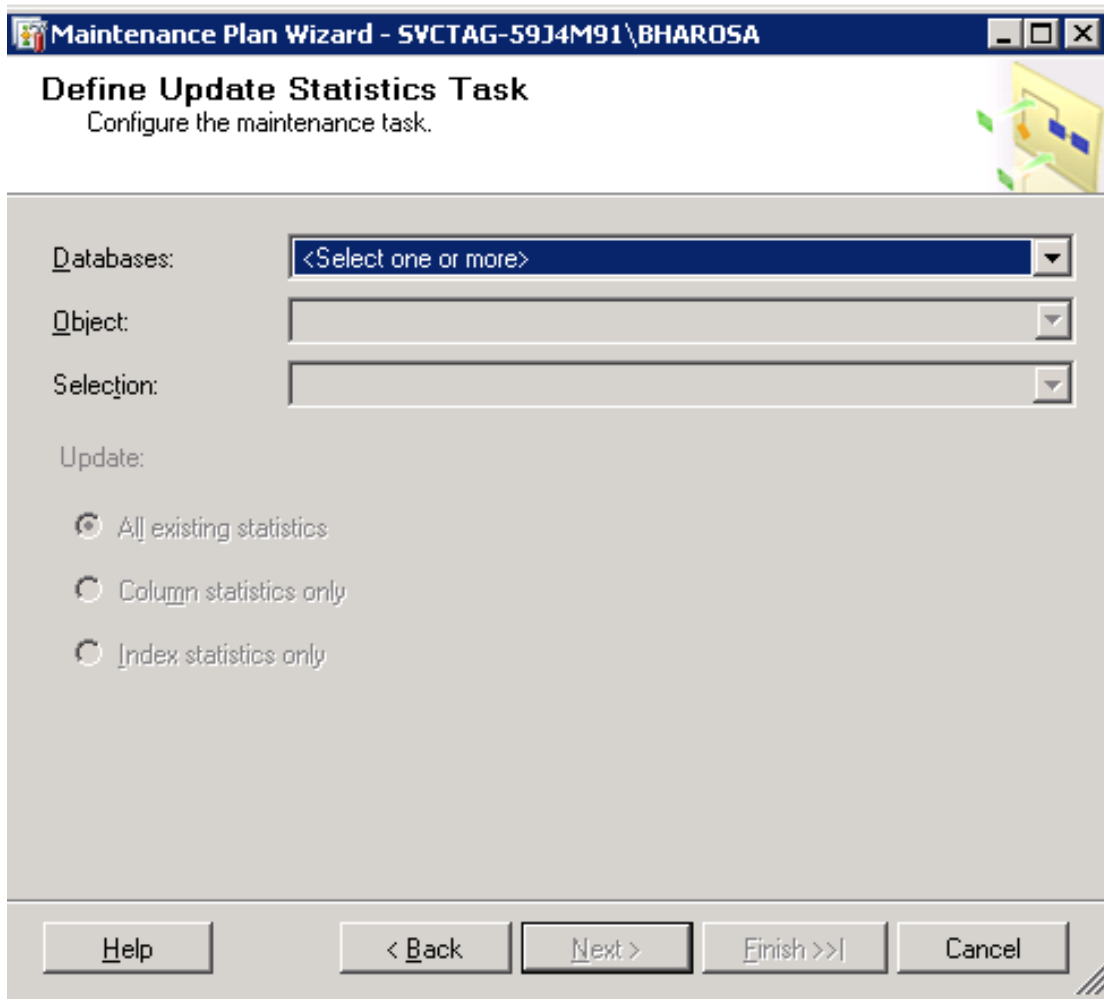
The Maintenance Plan Wizard's Define Update Statistics Task screen is shown below.
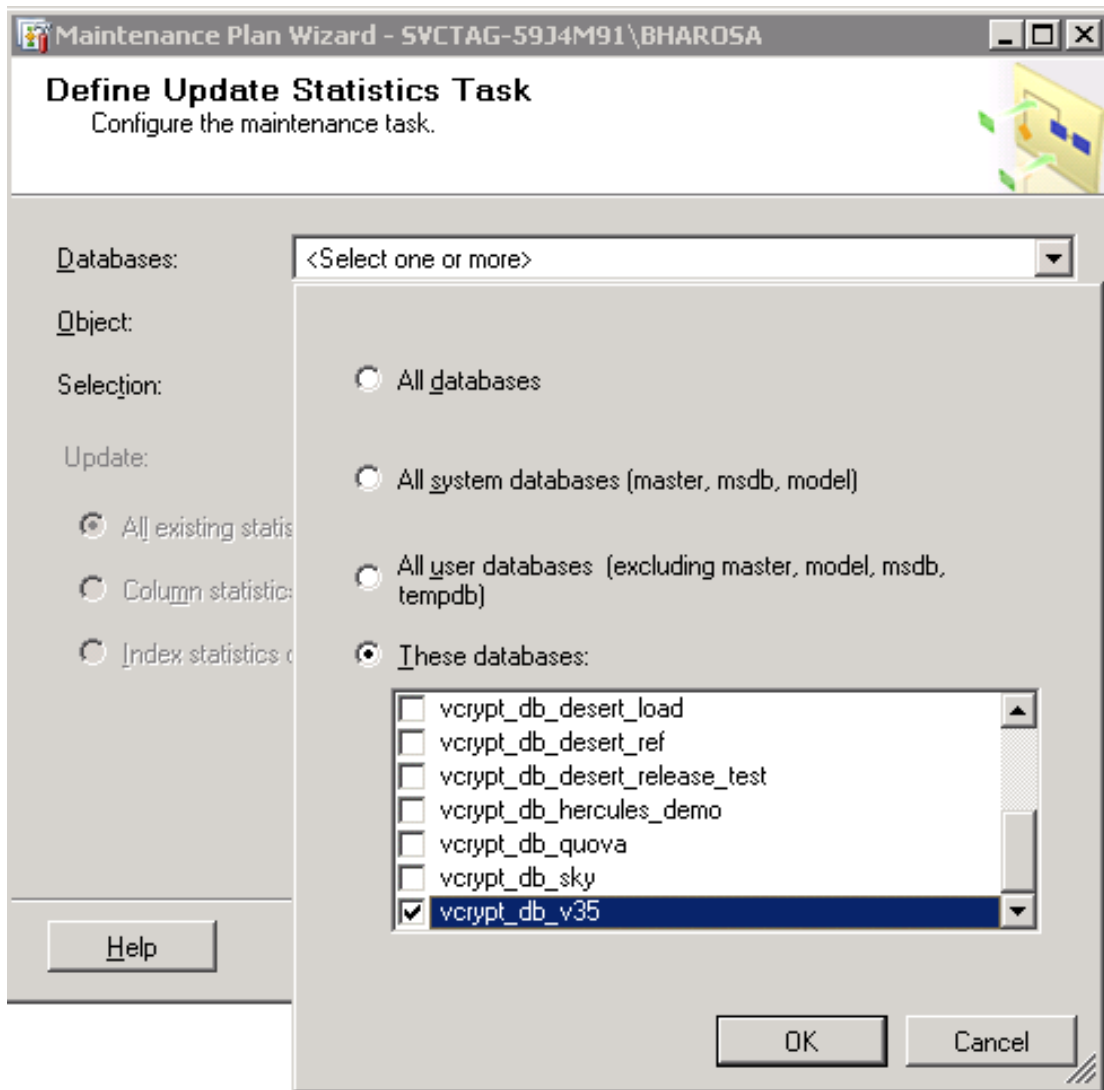
9. **Select database vcrypt_db_v35 for Check Database Integrity Task and click Next.**

The Maintenance Plan Wizard's Define Database Check Integrity Task is shown below.
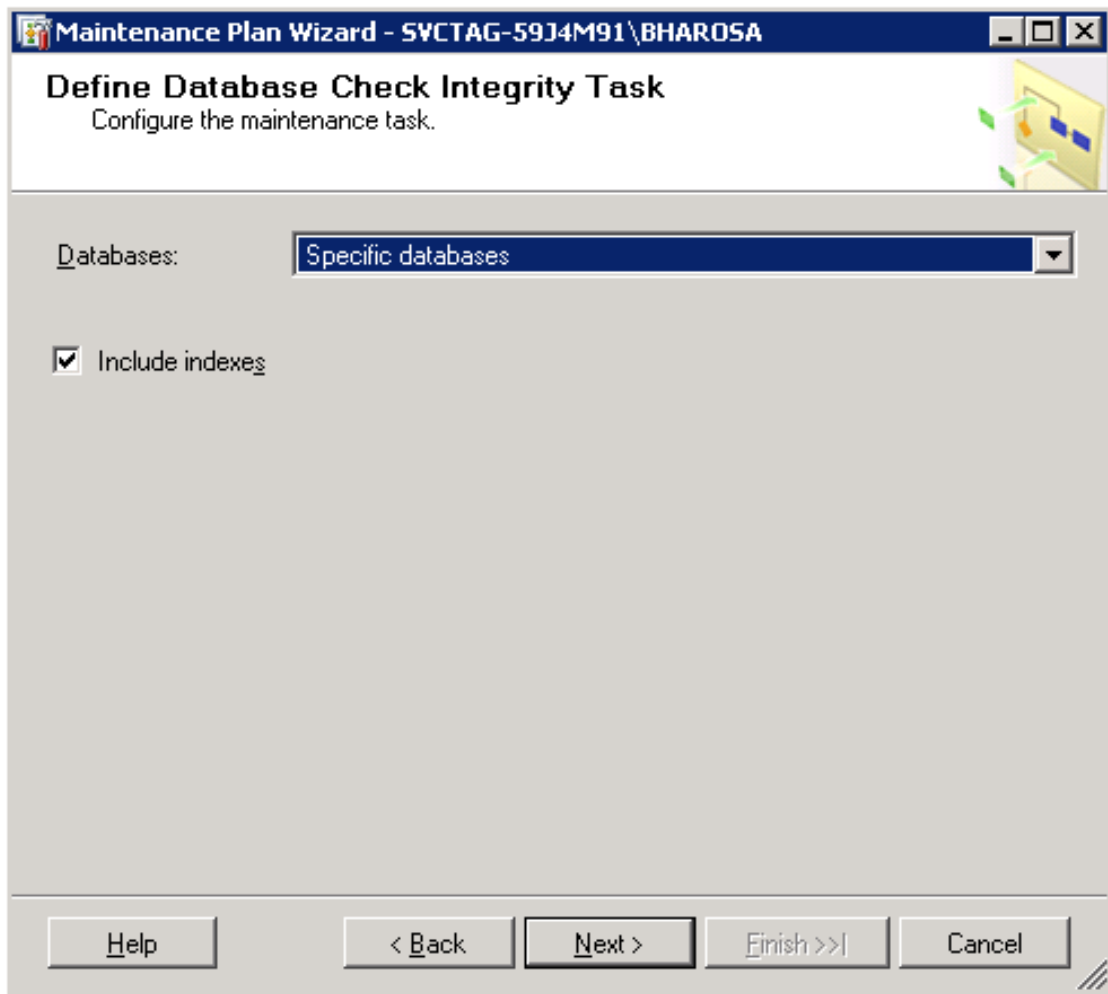
The Maintenance Plan Wizard's Define Database Check Integrity Task screen is shown below.
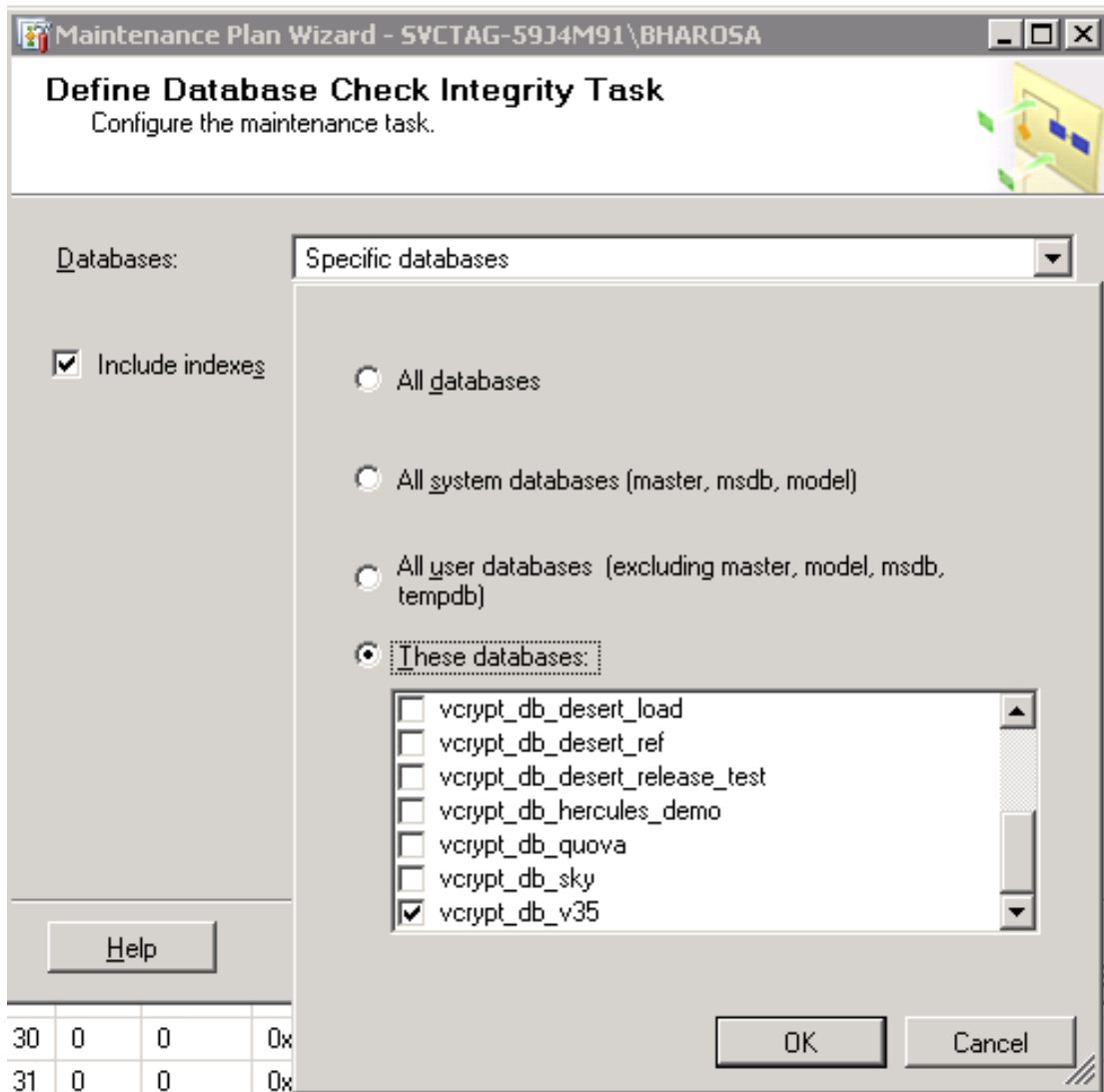
The Maintenance Plan Wizard's Select Plan Properties screen is shown below.
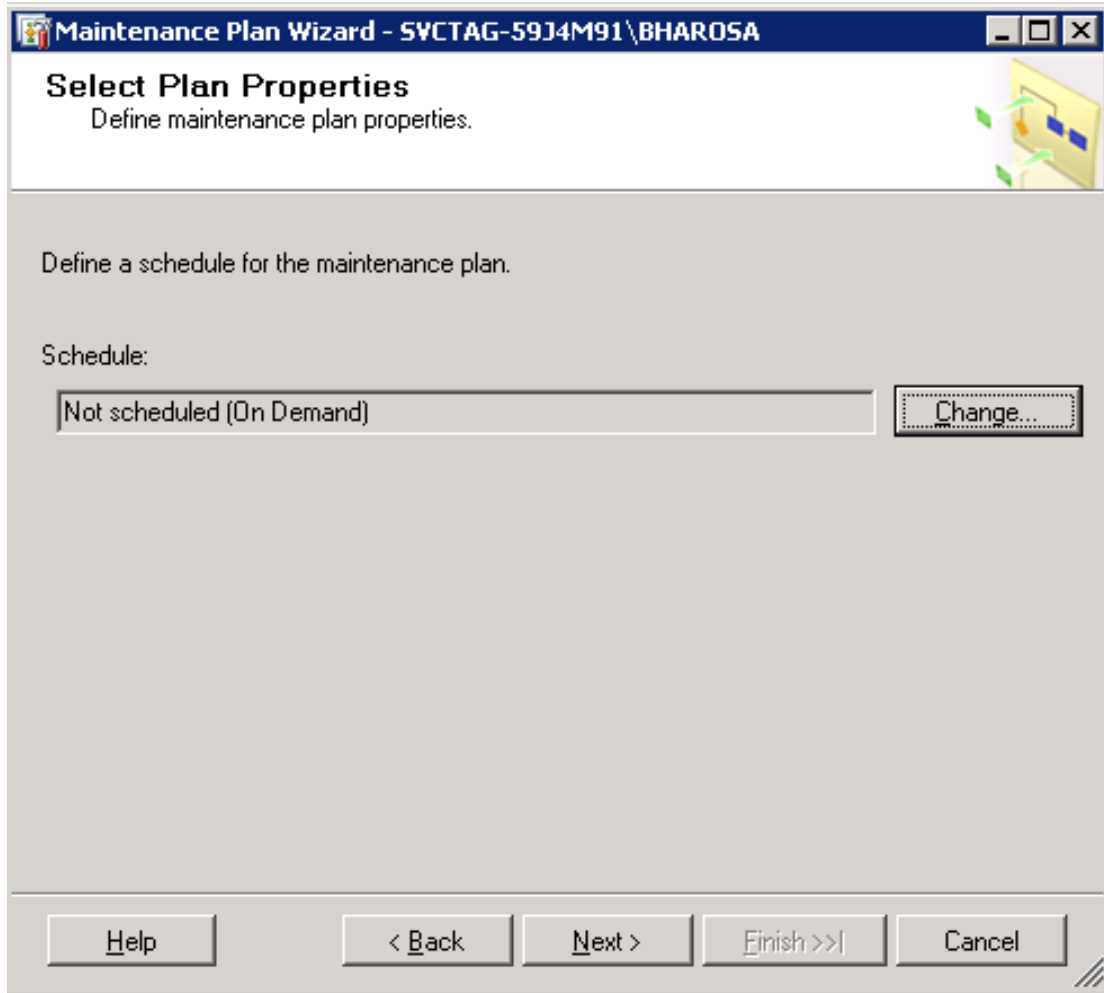
10. Next, define the schedule for executing your maintenance plan

- Name : "Bharosa_maint_sched"

- Enabled : Check

- Schedule type: Recurring

- Occurs:Weeky

- Recurs Every: 1 Week

- Day : Sunday

- Occurs: 12.00 AM

The New Job Schedule panel is shown below.

11. Click Next.

The Maintenance Plan Wizard's Select Plan Properties screen is shown below.
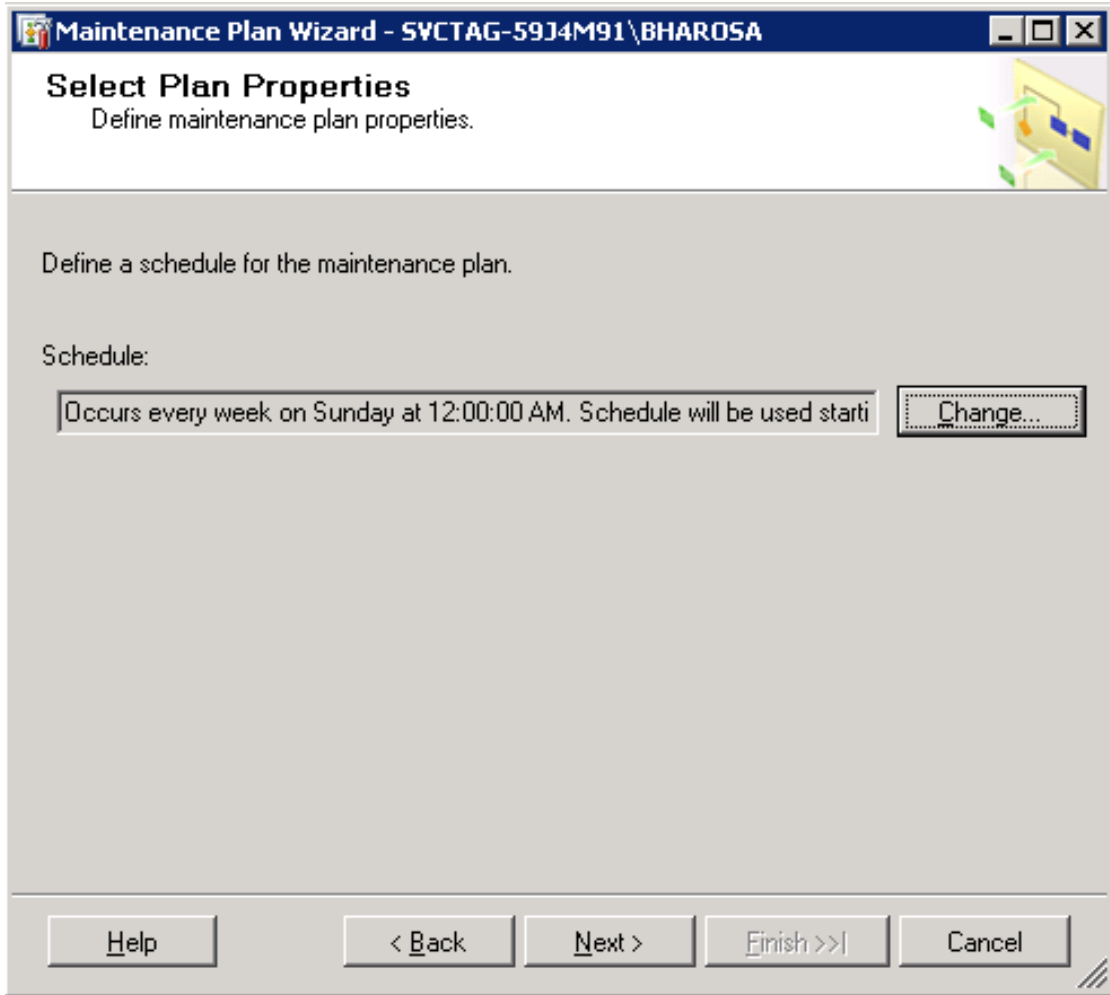
12. Select the destination for the report: i.e. "E:\bharosa."

The Maintenance Plan Wizard's Select Report Options screen is shown below.
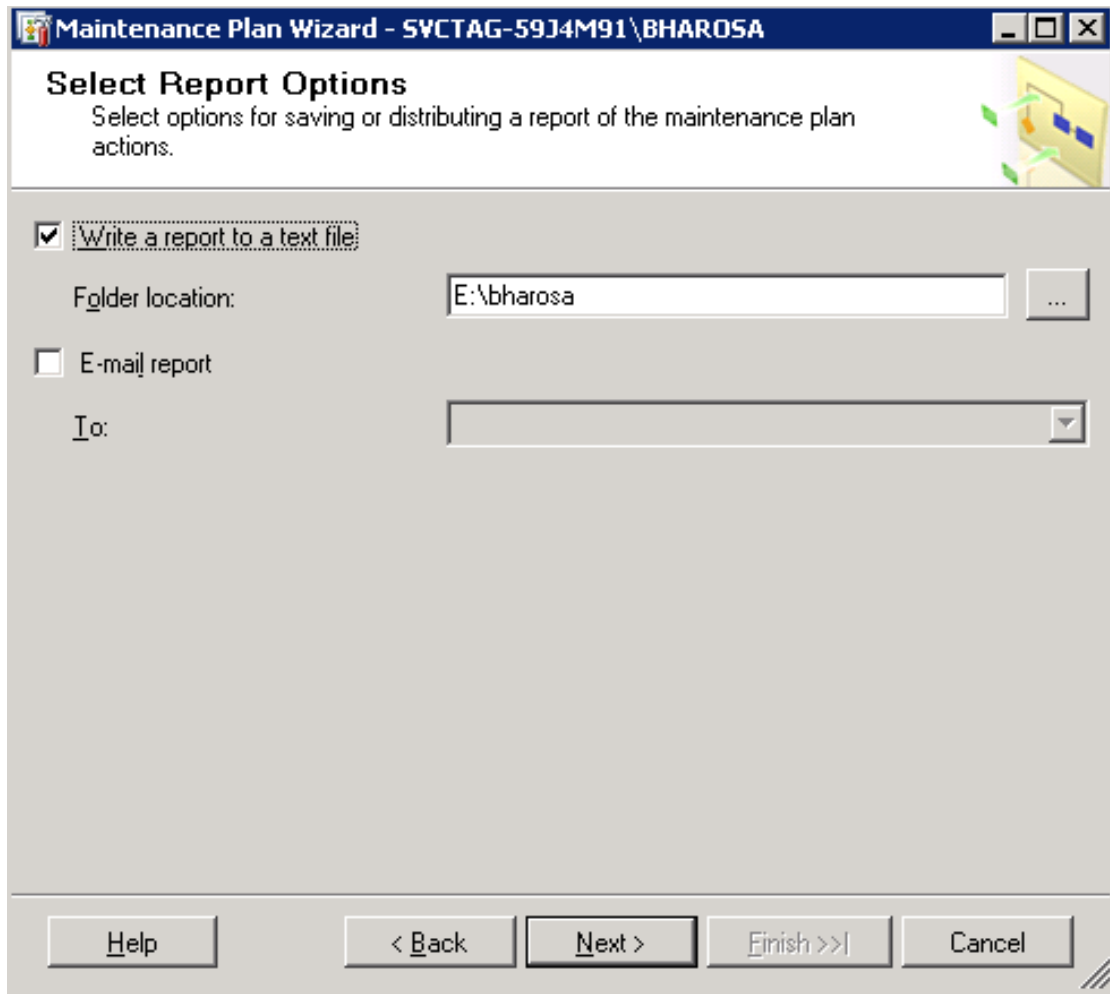
The Maintenance Plan Wizard's Complete the Wizard screen is shown below.
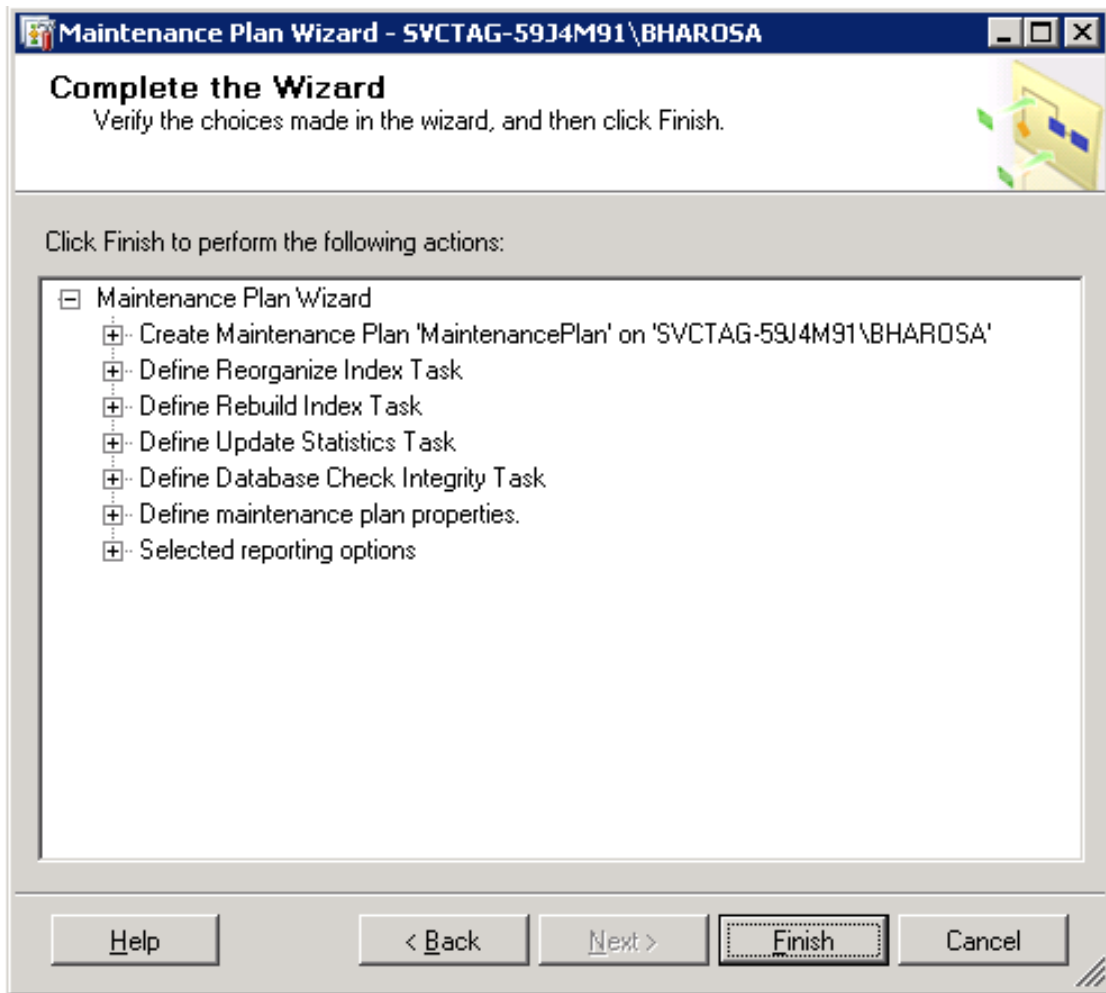
The Maintenance Plan Wizard's Progress screen is shown below.
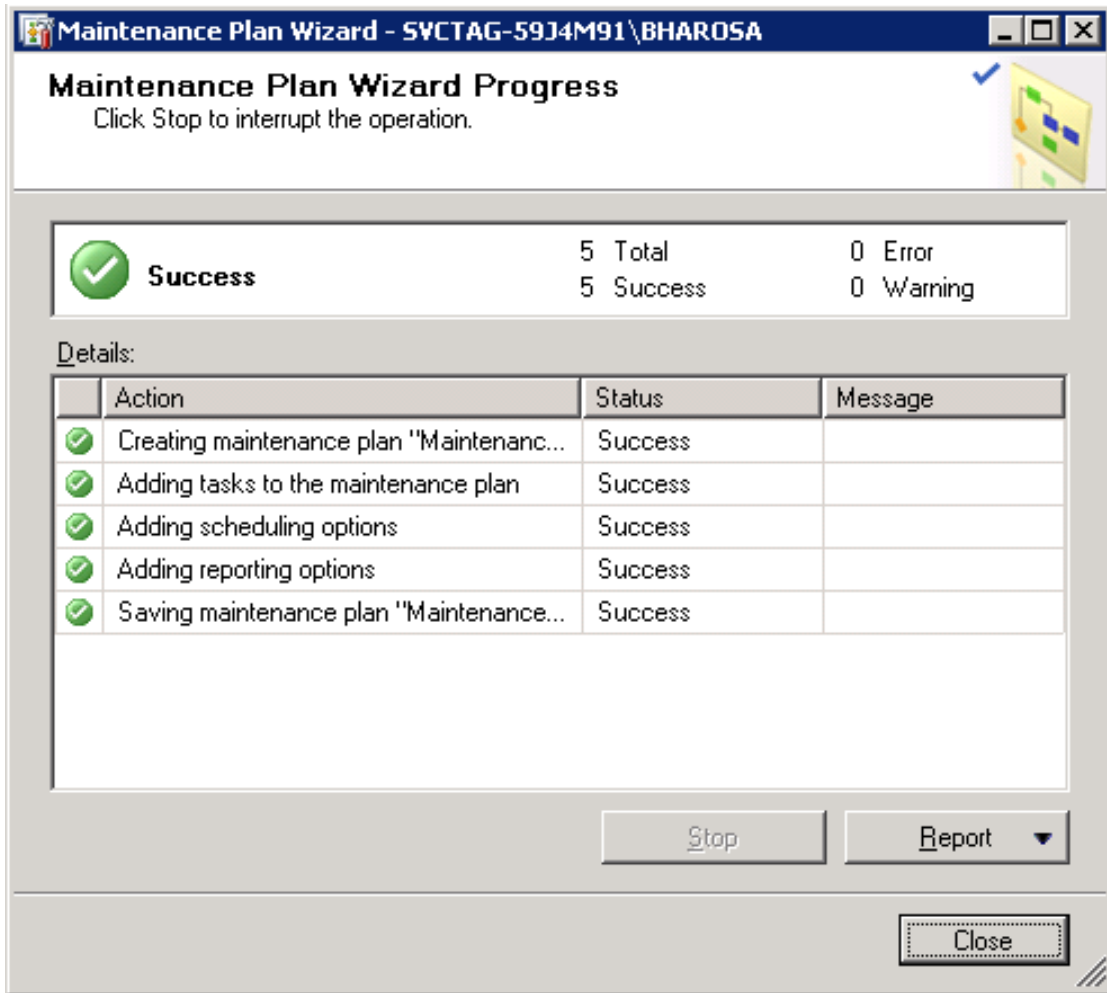
Purge and Archive Scripts

Scripts to create Archive Tables and Stored Procedures are

- `cr_purge_tables_sqlserver.sql`
- `cr_sp_arch_purge_tracker_data.sql`
- `cr_sp_arch_purge_rules_log.sql`
- `cr_sp_purge_vcrypt_users_sql`

These scripts are to be applied on the Oracle Adaptive Access Manager Database as one time operation to create archive tables and stored procedures for scheduled scripts.

Scripts to be scheduled or triggered for archiving based on database management and business requirement policies are

- `cr_archive_purge_tracker_data.sql`
- `cr_archive_purge_rule_log.sql`
- `cr_archive_purge_vcrypt_users.sql`

cr_purge_tables_sqlserver.sql

This sql creates the archiving tables for all the tables which will be purged during archiving and purging process. Following tables will be created.

- VR_POLICYSET_LOGS_PURGE
- VR_RULE_LOGS_PURGE
- VR_MODEL_LOGS_PURGE
- VR_POLICY_LOGS_PURGE
- VCRYPT_AUTH_ATTEMPTS_PURGE
- VCRYPT_AUTH_SESSIONS_PURGE
- VCRYPT_PIN_RETRIEVALS_PURGE
- VCRYPT_TRACKER_NODE_HISTORY_PURGE
- VCRYPT_TRACKER_NODE_PURGE
- VCRYPT_TRACKER_USERNODE_LOGS_PURGE
- VCRYPT_USER_LOGS_PURGE
- VCRYPT_USERS_PURGE
- VT_USER_DEVICE_MAP_PURGE
- V_USER_QA

cr_sp_arch_purge_tracker_data.sql

This SQL script creates procedure `sp_archive_purge_tracker_data`. This stored procedure Archives and purges data from Tracker tables, also this procedure rebuilds the indexes and collects statistics using **DBCC Reindex** .This SQL script is to be run as one time operation on The Oracle Adaptive Access Manager Database.

cr_archive_purge_tracker_data.sql

This SQL script triggers the Stored Procedure `sp_archive_purge_tracker_data` created by `cr_sp_arch_purge_tracker_data.sql`. Triggered stored procedure takes number of days as input (set inside `cr_archive_tracker_data.sql`) at run time. The following tables will be archived and purged when running this script.

- VCRYPT_TRACKER_NODE_HISTORY
- VCRYPT_TRACKER_NODE
- VCRYPT_TRACKER_USERNODE_LOGS
- VT_USER_DEVICE_MAP

cr_sp_arch_purge_rules_log.sql

This SQL script creates procedure `sp_archive_purge_rule_log`. This stored procedure Archives and purges data from Rules Engine tables, also this procedure rebuilds the indexes and collects statistics using **DBCC Reindex**. This SQL script is to be run as one time operation on The Oracle Adaptive Access Manager Database

cr_archive_purge_rule_log.sql

This SQL script triggers the Stored Procedure `sp_archive_purge_rule_log` created by `cr_sp_arch_purge_rules_log.sql`. Triggered stored procedure takes number of days as input (set inside `cr_archive_purge_rule_log.sql`) at run time. Following tables will be archived and purged when running this script.

- VR_POLICYSET_LOGS
- VR_RULE_LOGS
- VR_MODEL_LOGS
- VR_POLICY_LOGS

cr_sp_purge_vcrypt_users.sql

This SQL script creates procedure `sp_purge_vcrypt_users`. This stored procedure Archives and purges data from User Tables. This SQL script is to be run as one time operation on The Oracle Adaptive Access Manager Database

cr_archive_purge_vcrypt_users.sql

This SQL script triggers the Stored Procedure `sp_purge_vcrypt_users` created by `cr_sp_purge_vcrypt_users.sql`. Triggered procedure takes `ext_user_id` as input (set inside `cr_archive_purge_vcrypt_users.sql`) at run time. Following tables will be archived and purged when running this script.

- VCRYPT_AUTH_ATTEMPTS
- VCRYPT_AUTH_SESSIONS
- VCRYPT_PIN_RETRIEVALS
- VCRYPT_USER_LOGS
- VCRYPT_USERS
- V_USER_QA

Also the stored procedure `sp_purge_vcrypt_users` sets the `UPDATE_TIME` in the following tables.

- VCRYPT_USERS_HIST
- V_USER_QA_HIST

Verification and Validation

Scripts `cr_archive_purge_tracker_data.sql` and `cr_archive_purge_rule_log.sql` can be validated by querying Fraud Analyzer for the period of purge which should result in no records to be fetched

Script `cr_archive_purge_vcrypt_users.sql` can be validated by querying for user to be present in archive tables and not present user tables

Eg: `select * from vcrypt_users_purge where ext_user_id='SAMPLE_USER';`

Maintenance Frequency and Archive and Purge Period

The schedule for executing your maintenance plan and Archive and purge periods are set based on business requirement specified for retention periods. Refer to release notes for specific archive and purge periods.