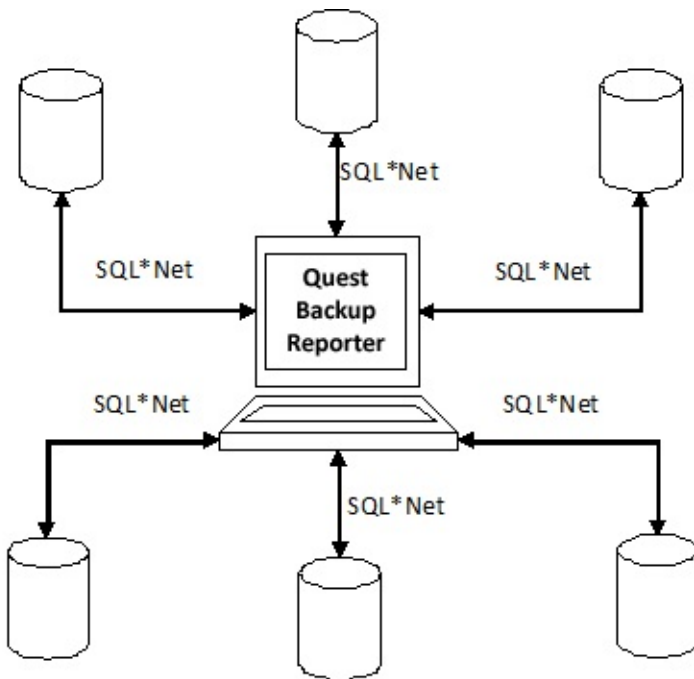# Welcome to Quest Backup Reporter

Oracle's Recovery Manager (RMAN) utility is an extremely popular tool for backing up and restoring critical Oracle data, but effective reporting and analysis of backups across large numbers of databases can be challenging using the native technology.

Quest Backup Reporter for Oracle solves this and many other challenges by providing a number of capabilities in the area of Oracle RMAN backup reporting and analysis:

- Multi-database reporting – dashboard reporting across all your managed databases or deep-dive into one database.
- RMAN policy definition and policy violation reporting – checks to ensure your backup strategy is actually working.
- RMAN health check – embodies advice from the leading RMAN experts.
- Backup performance tracking – both real-time and historical.

Architecture

The Quest Backup Reporter is a Windows client application. It connects to multiple databases using SQL*Net and reports on information directly from the Oracle data dictionary, V$ views, and Oracle Recovery Manager Catalog. The Quest Backup Reporter does not make any modifications to either the Oracle database or RMAN configuration. It is solely a read-only reporting tool.

The Quest Backup Reporter is designed to monitor a large number of databases. It maintains a small configuration file on the client that contains connection information. All passwords are stored in an encrypted format. The Quest Backup Reporter does not currently maintain any repository of backup information.

User Interface Overview

A dashboard displays when you launch Quest Backup Reporter with the following tabs:

Overview Tab

All registered data sources display under the Overview tab when you launch Quest Backup Reporter. By default, the data sources are registered with the *Connect at Startup* flag set. Quest Backup Reporter connects to the data source, runs the rules, and reports the current status. Fields are arranged in three groups: Identification, Most Recent Backup, and Violation Status.

Identification

Icons indicate the connection state. The *Display Name*, a user-selectable name, identifies the data source.

Most Recent Backup

This section displays information on the latest backup and indicates if there is a current backup in progress.

Note: The Activity column displays the current progress of an active backup.

Violation Status

This section indicates the current violation status by category of violation.

The highest severity of violations is reported.

⊗ 4	Error
⚠ 2	Warning
ⓘ 94	Notice
🟢 0	Clear
▨ 0	Unknown

Note: The gray number indicates the number of open violations.

Policies Tab

Quest Backup Reporter allows you to create policies that specify how backups should be run. Quest Backup Reporter then reports any violation of these policies.

Note: Quest Backup Reporter is a reporting utility only. It does not run backups, change data source parameters, change RMAN parameters, or otherwise affect the behavior of RMAN. You must perform your backups outside of the Quest Backup Reporter.

Review the following for additional information:

- [Create Policies](#)
- [Change Policy Assignments](#)

Violations Tab

Violations represent conditions that require your attention. Violations indicate that a Policy Rule or Healthcheck Rule has been violated. Policy Rules are user-defined rules that you create. Healthcheck Rules embody backup advice from industry experts who assist to improve the availability of your data source. See [About Violations](#) for more information.

Storage Tab

The **Storage** tab displays high-level summaries of total data source and backup storage.

Backups Tab

The **Backups** tab allows you to view more detailed information about a single database. Review the following for additional information:

- [Backup Performance](#)
- [Search Backups](#)
- [View Backups by Type](#)

Notes:

- A tab displays as disabled if there is no information available in the category.

- The **Corruptions** tab displays a list of physical database corruptions and information on objects affected. This tab is typically disabled since there are no data source corruptions.

Timeline Tab

The **Timeline** tab is available for all data sources or for individual data sources. Review the following for additional information:

- [Change the Time Scale in the Timeline](#)
- [View Data Sources in the Timeline](#)

RMAN Parameters Tab

The **RMAN Parameters** tab displays RMAN parameter settings.

Notes:

- Clicking All Data Summary displays all connected data sources.
- Clicking an individual data source displays tablespaces, datafiles, and parameter text in the lower half of the pane.

Parameter Grid

The Parameter Grid displays RMAN parameter settings for all registered data sources. This allows you to compare parameter settings among data sources. You can quickly identify non-default parameter settings shown in bold with a pale yellow background.

Tablespace List

The Tablespace List displays tablespaces for the data sources you click in the Parameter Grid.

Datafile List

The Datafile List contains a list of datafiles and indicates if there are auxiliary namse configured for the datafiles.

Parameter Text

The Parameter Text displays RMAN commands used to generate these settings. This is the same information provided by the SHOW ALL command of RMAN. This text may be copied or pasted to propagate RMAN settings between data sources.

Growth Tab

The **Growth** tab displays the size and duration of a backup in a chart.

Note: The growth chart is only available at a data source level.

Register Data Sources

Quest Backup Reporter reports across a large number of data sources simultaneously. In order to accomplish this task, the Quest Backup Reporter must know the SQL*Net connection parameters for each data source. Registering a data source tells Quest Backup Reporter about the SQL*Net data source connection parameters. The Quest Backup Reporter remembers the connection parameters and automatically connects to the data source the next time you start the Quest Backup Reporter.

To Register New Data Sources

1. Select **Data Source | Register New Data Source**.

2. Select **Select Control File and Data Dictionary View** or **Use Recovery Manager Catalog**.

3. Complete the wizard.

   Notes:

   - You can register a data source by a TNS service name or by entering the connection parameters. TNS entries are identified by tnsnames.ora in Oracle Home. You can register multiple TNS entries simultaneously.

   - The oracle account must be able to execute SELECTs from the data dictionary views. We recommend that you grant this account either the SELECT_CATALOG or DBA role. Another option is to grant the SELECT ANY DICTIONARY_ROLE privilege.

   - Quest Backup Reporter connects to the data source and reports any connection failures. If the connection fails, click **Back** and correct the connection parameters. Otherwise click Finish to complete registration.

   - The **Display Name** field is customizable and identifies the data source in most screens and reports. By default, hostname-database displays.

- The **Connect at startup** option is enabled by default. Quest Backup Report connects to the data source at startup and immediately displays its status. Clear the checkbox to disable.

To Edit Data Source Registrations

1. Select the **Data Source** tab.
2. Select **Edit Registration**.
3. Complete the wizard.

To Delete Data Source Registrations

1. Select the **Data Source** tab.
2. Select **Delete Registration**.
3. Confirm deletion to proceed.

   Note: Deleting a registration deletes connection and violation information.

Create Policies

Quest Backup Reporter allows you to create policies that specify how backups should be run. Quest Backup Reporter then reports any violation of these policies.

Note: Quest Backup Reporter is a reporting utility only. It does not run backups, change data source parameters, change RMAN parameters, or otherwise affect the behavior of RMAN. You must perform your backups outside of the Quest Backup Reporter.

Quest Backup Reporter comes with a default policy called "Default". The default policy cannot be modified. Although the Default policy provides an adequate default, we recommend you create additional policies to meet your needs.

You can create multiple policies. For example, you may have production data sources that are critical and require daily incremental and weekly full backups while having test data sources that require only monthly full backups. You can create two policies, such as "Production" and "Test," with different parameters. Assign your data sources to the appropriate policy.

Each data source is assigned to a single policy. Quest Backup Reporter reports violations of the selected policy.

Note: You can change policy assignments as needed. See Change Policy Assignments for more information.

To create new policies

1. Select the **Policies** tab.
2. Select **Policy | Create New Policy**.
3. Customize the display settings:

Name	Enter a user-identified name.
	Note: We suggest you use a policy name that reflects your backup strategy.
Retention	Enter the frequency and number of backups.

| Full Backups	Select appropriate checkboxes and enter parameters. You can enable or disable any parameter.
(Full) Incremental Backups	Select appropriate checkboxes and enter parameters. You can enable or disable any parameter
Other Incremental Backups	Select appropriate checkboxes and enter parameters. You can enable or disable any parameter
Archived Log Backups	Select appropriate checkboxes and enter parameters. You can enable or disable any parameter
Performance	Enter performance-related parameter.

4. Click **Create**.

Tips:

- To edit a policy, select it and click **Edit**. You cannot edit the default policy.

- To delete a policy, select it and click **Delete**.

  Note: You cannot delete policies that have assigned data sources. Reassign the data source to another policy prior to deleting the policy.

Change Policy Assignments

To change policy assignments

1. Select the **Policies** tab.

2. Select the **Policy Assignment** tab on the left-hand side of the **Display Name**.

3. Select **Edit**.

4. Click on the desired data source.

5. Select the desired policy from the **Policy** list
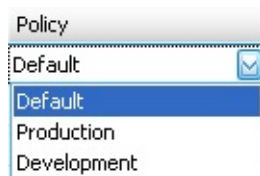
Related Topics

[Create Policies](#)

About Violations

Violations represent conditions that require your attention. Violations indicate that a Policy Rule or Healthcheck Rule has been violated. Policy Rules are user-defined rules that you create. Healthcheck Rules embody backup advice from industry experts who assist to improve the availability of your data source.

The Quest Backup Reporter opens a violation at one of the following severity levels according to the rule.

Severity	Description
Error	Indicates backups are not meeting assigned policies or there is a healthcheck violation that might affect recoverability.
Warning	Typically a healthcheck violation that indicates a problem.
Notice	Typically indicates an informational healthcheck violation, but might be a problem.
Cleared	The condition causing the original violation no longer applies. For example, a violation shows the data source archiver is not running. The archiver starts, and the violation clears. **Note:** Cleared violations do not affect dashboard status

Notes:

- Select All Data Sources in the Data Source Tree to display all violations or click on a particular data source to display individual violations.

- If Quest Backup Reporter opens a violation and later detects the underlying condition has changed and the rule no longer applies, Quest Backup Reporter changes the severity to *Cleared*

- You can typically ignore violations with a severity of Cleared

Violation Details

The Violation Details pane displays the following:

Cause	Indicates why the violation has been raised.
Action	Provides an additional description and suggests possible solutions.
Additional Info	Provides additional background information to help evaluate or resolve the issue. **Notes:** • Not available for all violations • May contain hyperlinks for additional details

Violation Workflow

Quest Backup Reporter opens a violation when it detects a problem and tracks the state of each violation. A violation is either *Open* or *Closed*. *Open* violations display in the violations list and affect dashboard status. *Closed* violations do not display in the violation list and do not affect dashboard status.

Note: A green status displays when you close all violations.

Close, Re-open, and Disable Violations

To Close Violations

Quest Backup Report allows you to mark a violation as Closed after you address the issue. You must manually close violations. The Quest Backup Reporter never automatically closes a violation.

1. Select the **Violations** tab.

2. Right-click a violation and select **Close**.

   Notes:

   - If you close a violation by mistake, you can manually re-open the violation.

   - Quest Backup Reporter occasionally re-opens a violation if the root cause of a violation re-occurs. For example, you have a retention policy requiring three copies of your backups, but only two copies are generated. Quest Backup Reporter opens a violation. In response, you create an additional backup and close the violation since it no longer applies. If the retention policy is violated in the future, Quest Backup Reporter re-opens the violation.

To Re-Open Violations

You can manually re-open violations you close by mistake.

» Select **Violation | Reopen Violations** in the menu.

To Disable Violations

1. Select **Violation |Violation Settings** in the menu.

2. Click the rule you want to disable.

3. Select **Yes** in the **Disabled** field.

| Category	Disabled
Retention	**Yes**
Retention	No

Generating Reports

Reports are generated using the Reports menu. These reports may be previewed, printed, emailed or exported in a variety of formats, including PDF and HTML.

Most of the screens in Backup Reporter may be rendered in a report format. If you have sorted or filtered data in a screen, this sorting and filtering is typically reflected in the report as well. To render the current screen as a report, select **Reports | Print Preview this tab** or **Reports | Print this tab** .
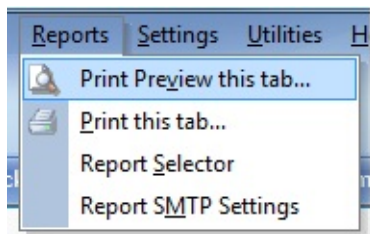

The Report Selector menu option allows access to all reports regardless of the currently selected screen. Some reports may be customized by selecting report options or data filters.
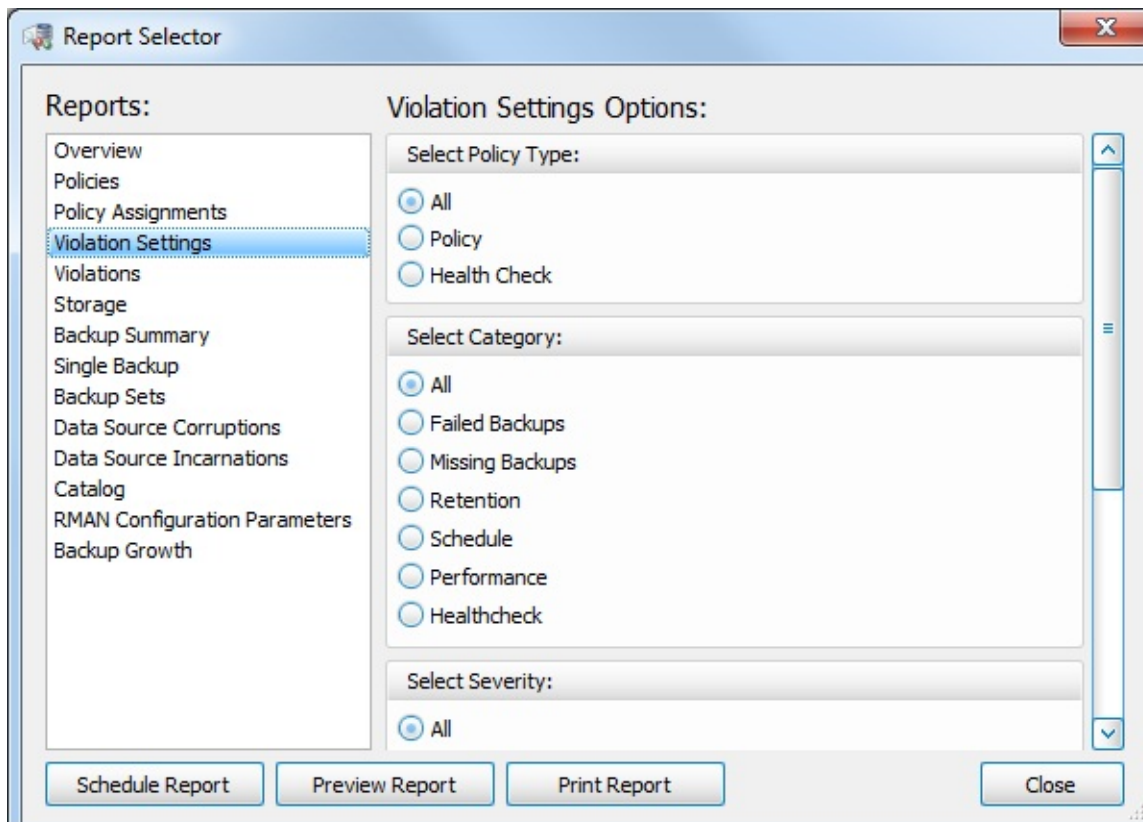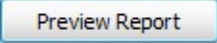
Configuring Email

By default, Backup Reporter sends email via Outlook. If you are not using Outlook, or for security reasons, Outlook does not permit Backup Reporter to send email, you can configure an email gateway using **Reports | Report SMTP Settings**.
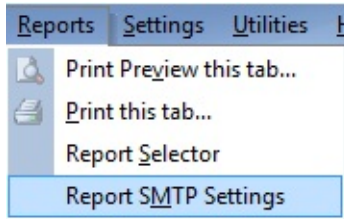
Review the following options for these settings:

Option	Purpose
Sender	Sender's email address.
SMTP Server Host Name	Hostname of your Simple Mail Transport Protocol server. This is your mail gateway.
SMTP Port	TCP port that the SMPT server listens on. By default, this is port 25.
Connect Using	Anonymous Access does not send any credentials to the SMPT server. Typically this only works with SMTP servers inside of your firewall.
	Windows Authentication uses your current login as credentials to the SMPT server.
	Basic Authentication sends a user name and password to the SMPT server to authenticate.
Use SSL	Causes the network traffic to the SMTP server to be encrypted.
Send To	Recipient of the test email.

Saving and Emailing Reports

Reports may be saved or emailed in a variety of formats including PDF and HTML. First preview the report by either selecting the **Print Preview this tab** menu or click Preview Report

on the Report Selector.

Once the report displays in the preview window, select **File | Export Document** to export the report or select **File | Send via E-mail** to email the report.

Scheduling Reports

You may use the Report Selector to schedule a report to run at a future point in time. The result may be saved to a file or emailed. Reports may be scheduled one time or on a repeating schedule.

To schedule a report

» Click [Schedule Report] on the Report Selector.

Using CL+ for Databases

CL+ for Databases is an enhanced version of PuTTY that facilitates using the RMAN and SQL*Plus command line tools. CL+ for Databases now ships with Backup Reporter and performs syntax highlighting for RAMN and SQL*Plus.

To access CL+ for Databases

» Select Utilities | CL+ for Databases.

View Backups by Type

The **Backups By Type** tab displays detailed information organized by backup type.

Note: The detailed information for the BackupSet (Raw) Data tab is the same as under the Backups By Type tab.

To view backups by type

1. Click the backup type from the left-side tabs.

2. Click the desired backup from the **Started** field.

Backup Sets	Typically a backup consists of a single backup set; however, if the database contains tablespaces of different block, the backup is split among multiple backup sets. Other RMAN parameters like FILES_PER_SET may affect how a backup is split into multiple backup sets.
Backup Pieces	Displays a list of backup pieces contained within the backup. The backup piece corresponds to a disk file containing the backup data when you back up to disk. The backup piece is a logical unit of storage when you back up to a tape or VTL.
Datafiles	Displays the data files backed up.
Archive Logs	Displays the archive logs included in an archive log backup.
Server Parameter Files	Displays details on a Server Parameter file if included in the backup.
Block Corruptions	Displays database corruptions. This tab is typically disabled because there are no database corruptions.

Backup Performance

The Performance tab displays performance information for current and recent backups.

A list of backup sets displays at the top of the window and includes the following information:

Type	Backup set type:
	- Active Backup – Backup is currently active - Completed Backup – Backup is complete - Failed Backup – A failed backup - Validate Backupset – Results of a VALIDATE BACKUPSET command
Backup Set	Backup set ID if known.
Open Time	Date and time of start of backup.
Close Time	Date and time of end of backup if known.
Elapsed Time	Elapsed time of backup if known.
Input Files	Number of input.
Input Bytes	Total size of input files.
Input Rate	Average aggregate input rate in bytes per second.
Input Ready	Percentage of reads when data was immediately available.
Input Short Waits	Percentage of reads when data was not immediately available, but data became available after a non-blocking pool for I/O.
Input Long Waits	Percentage of reads in which data did not become available until after a blocking I/O operation.
Input Sync	Total read time spent on synchronous I/O (if using

IO	synchronous as opposed to asynchronous I/O).
Output Files	Number of output files.
Output Bytes	Total size of output files.
Output Rate	Average aggregate output rate in bytes per second.
Output Ready	Percentage of writes when data could be immediately written.
Output Short Waits	Percentage of writes when data could not be immediately written, but was written after a non-blocking I/O operation.
Output Long Waits	Percentage of writes that resulted in a blocking I/O operation.
Output Sync IO	Total write time spent on synchronous I/O (if using synchronous as opposed to asynchronous I/O)
Empty Block Compression	Percentage of data files that did not need to be read because they did not contain active data.
Null Block Compression	Percentage of blocks read but not written because the blocks were null.
SID	Session ID of RMAN backup session
Serial	Serial number of RMAN backup session
Usage	Usage number of RMAN backup session

Note: This information primarily comes from the V$BACKUP_ASYNC_IO and V$BACKUP_SYNC_IO views. The views are volatile and clear when the data source shutdowns. This list usually includes data for all backups.

Performance details display in the lower pane and includes the following information:

|	
Summary	Displays a high-level analysis of the performance data. The top portion of the pane displays some summary information. The lower half displays performance-related observations from the expert-system healthcheck.

Files	Displays a file-level visualization of the backup.
	The left side represents the input files:
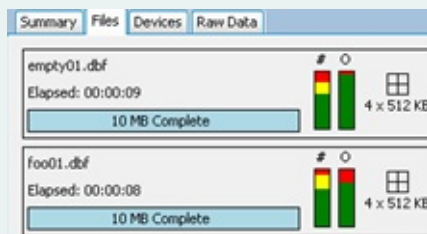
Notes:

- Each box displays a file and the file's attributes.
- The vertical bars display the relative percentage of Long Waits (red), Short Waits (yellow), and Ready conditions (green).
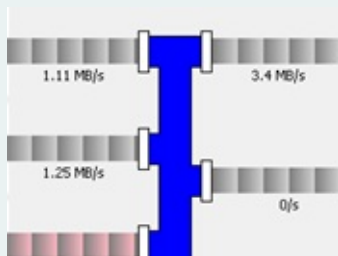- You can hover over any control to display a tool tip.

The right side represents the output files:
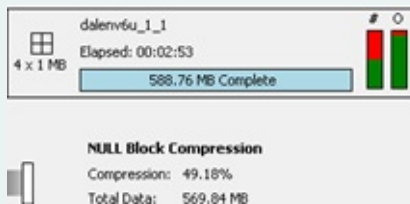
Notes:

- NULL Block Compression refers to RMAN's ability to detect unused blocks that do not require backup.
- NULL Block Compression displays a data evaporating from the end of the pipe.

The center section represents the flow of data through the Oracle shadow process that writes the backup:

Devices	Displays data at a device level. **Notes:** - Cylinders represent disk devices. - Cylinders with a single flow are being read or written. - Cylinders with two flows are being read and written.
Raw Data	Displays data gathered from the V$BACKUP_AYSNC_IO and V$BACKUP_SYNC_IO tables. **Notes:** - You can find column descriptions in the *Oracle Reference Guide*. - Quest Backup Report adds the following columns: Filesize, Short Filename,, and Filesystem.

Search Backups

The **Search Backup** tab lets you search for backups with particular criteria.

To Search Backups

1. Select the **Backups** tab.
2. Click a data source in the Data Source Tree.
3. Select **Search Backups**.
4. Select file type at **Select File Type**.
5. Select appropriate criteria from the drop-down lists.
6. Click **Start Find**.

View Data Sources in the Timeline

To view all data sources

1. Select the **Timeline** tab.
2. Click **All Data Summary**.

To select a view

You can select a calendar view for **All Data Sources**.

1. Select the **Timeline** tab.
2. Click **All Data Summary**.
3. Place your cursor in the calendar pane.
4. Right-click and select the type of view to display.
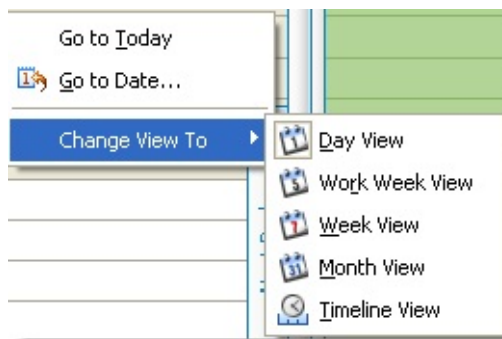
Change the Time Scale in the Timeline

To display time scale in different granularities

1. Select the **Timeline** tab.

2. Place cursor on calendar and right-click.

3. Click **Change View To | Timeline View**.

4. Right-click and click **Time Scales**.
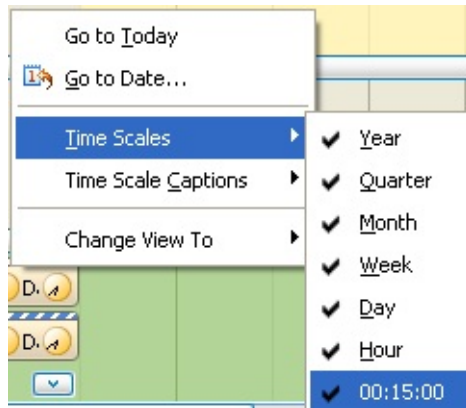
Contact Quest Support

Quest Support is available to customers who have a trial version of a Quest product or who have purchased a Quest product and have a valid maintenance contract. Quest Support provides unlimited 24x7 access to Support Portal at www.quest.com/support.

From our Support Portal, you can do the following:

- Retrieve thousands of solutions from our online Knowledge Base
- Download the latest releases and service packs
- Create, update and review Support cases

View the ***Global Support Guide*** for a detailed explanation of support programs, online services, contact information, policies and procedures. The guide is available at: www.quest.com/support.

Contact Quest Software

Email	info@quest.com
Mail	Quest Software, Inc. World Headquarters 5 Polaris Way Aliso Viejo, CA 92656 USA
Web site	www.quest.com

See our web site for regional and international office information.

About Quest Software

Established in 1987, Quest Software (Nasdaq: QSFT) provides simple and innovative IT management solutions that enable more than 100,000 global customers to save time and money across physical and virtual environments. Quest products solve complex IT challenges ranging from database management, data protection, identity and access management, monitoring, user workspace management to Windows management. For more information, visit www.quest.com.

Copyright

contact:

Quest Software World Headquarters
LEGAL Dept
5 Polaris Way
Aliso Viejo, CA 92656
email: legal@quest.com

Refer to our Web site (www.quest.com) for regional and international office information.

Patents

Toad for Cloud Databases contains patent pending technology.

Trademarks

Quest, Quest Software, the Quest Software logo, Benchmark Factory, LiteSpeed, SQL LiteSpeed, Simplicity at Work, Toad, TOAD, T.O.A.D., TOAD WORLD, and vToad are trademarks and registered trademarks of Quest Software, Inc. For a complete list of Quest Software's trademarks, see http://www.quest.com/legal/trademark-information.aspx. Other trademarks and registered trademarks used in this guide are property of their respective owners.

August 13, 2012

Legal Notices

Quest Backup Reporter contains some third-party components whose authors require attribution. These components are listed in the following table, and the licenses may be found on our web site at http://www.quest.com/legal/third-party-licenses.aspx.

Component	License or Acknowledgement
Windows Installer XML toolset (WIX) 3.5.1811.0	Common Public License 1.0
PuTTY .60	The license is available on Quest's website: http://www.quest.com/legal/third-party-licenses.aspx
ezxml	Copyright 2004-2006 Aaron Voisine <aaron@voisine.org> Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL