



Configuring an email notification

SnapManager Oracle

NetApp
April 15, 2021

Table of Contents

- Configuring an email notification 1
- Configuring a mail server for a repository 2
- Configuring email notification for a new profile 3
- Configuring email notification for an existing profile 5
- Configuring summary email notification for multiple profiles 5
- Adding a new profile to summary email notifications 7
- Disabling email notification for multiple profiles 7

Configuring an email notification

SnapManager enables you to receive an email notification about the completion status of the profile-executed database operations. SnapManager generates the email and helps you to take appropriate action based on the database operation completion status. Configuring email notification is an optional parameter.

You can configure an email notification for an individual profile as a profile notification and for multiple profiles on a repository database as a summary notification.

Profile notification

For an individual profile, you can receive an email for either or both the successful and failed database operations.



By default, email notification is enabled for failed database operations.

Summary notification

Summary notification enables you to receive a summary email about database operations performed using multiple profiles. You can enable hourly, daily, weekly, or monthly notifications.



From SnapManager 3.3, summary notifications are sent only if you specify the host server that has to send the notification. If you upgrade SnapManager from a version earlier than 3.3, the summary notifications might not be sent if you had not specified the host server in the summary notifications configuration.



If you create a repository in one node of a database that is on a Real Application Clusters (RAC) environment and enable summary notification, later when you add the same repository to another node of the database, the summary notification email is sent twice.

You can use either profile-level notification or summary notification at a time.

SnapManager enables email notification for the following profile-executed database operations:

- Create backup on primary storage
- Restore backups
- Create clones
- Verify backups

After you create or update profiles with the email notification enabled, you can disable it. If you disable the email notification, you no longer receive email alerts for those profile-executed database operations.

The email that you receive contains the following details:

- Name of the database operation, for example, backup, restore, or clone
- Profile name used for the database operation
- Name of the host server
- System identifier of the database

- Start and end time of the database operation
- Status of the database operation
- Error message, if any
- Warning messages, if any

You can configure the following:

- Mail server for a repository
- Email notification for a new profile
- Email notification for an existing profile
- Summary email notification for multiple profiles under a repository



You can configure email notification from both the command-line interface (CLI) and the graphical user interface (GUI).

Configuring a mail server for a repository

SnapManager enables you to specify the mail server details from which the email alerts are sent.

SnapManager enables you to specify the sender's email server host name or IP address, and the email server port number for a repository database name that requires email notification. You can configure the mail server port number in a range from 0 through 65535; the default value is 25. If you require authentication for the email address, you can specify the user name and password.

You must specify name or IP address of the host server that handles the email notification.

1. To configure the mail server to send email alerts, enter the following command: `smo notification set -sender -email_email_address-mailhostmailhost-mailportmailport [-authentication-usernameusername-passwordpassword] -repository-portrepo_port-dbnamerepo_service_name-hostrepo_host-login -usernamerepo_username`

Other options for this command are as follows:

`[-force]`

To do the following...	Then...
To specify the sender's email address.	Specify the <code>-sender-email</code> option. From SnapManager 3.2 for Oracle, you can include hyphen (-) while specifying the domain name of the email address. For example, you can specify the sender email address as <code>-sender-emailuser@org-corp.com</code> .
To specify the sender's email server host name or IP address.	Specify the <code>-mailhost</code> option.

<p>To specify the email server port number for a repository database name that requires email notification. You can configure the mail server port number in a range from zero through 65535; the default value is 25.</p>	<p>Specify the -mailport option.</p>
<p>Specify the user name and password if you require authentication for the email address.</p>	<p>Specify -authentication option followed by the user name and password.</p>

The following example configures the mail server.

```
smo notification set -sender-email admin1@org.com -mailhost
hostname.org.com -mailport 25 authentication -username admin1 -password
admin1 -repository -port 1521 -dbname SMOREPO -host hotspur -login
-username grabal21 -verbose
```

Configuring email notification for a new profile

When you are creating a new profile, you can configure to receive an email notification on completion of the database operation.

- You must configure the email address from which the alerts are sent.
- You must use a comma-separated list for multiple email addresses.

You must ensure that there is no space between the comma and the next email address.



You must ensure you enter the set of email addresses within double quotation marks.

1. Enter the following command: `smo profile create -profileprofile [-profile-passwordprofile_password] -repository-dbnamerepo_service_name-hostrepo_host-portrepo_port-login-usernamerepo_username -database-dbnamedb_dbname-hostdb_host [-siddb_sid] [-login-username- passworddb_password-portdb_port] [-rman {controlfile | {-login-username- rman_username- passwordrman_password-tnsnamerman_tnsname} }] [-retain [-hourly [-countn] [-durationm]] [-daily [-countn] [-durationm]] [-weekly [-countn] [-durationm]] [-monthly [-countn] [-durationm]]] [-commentcomment][[-snapname-patternpattern][[-protect []][[-notification [-success- email_email_address1,email_address2-subjectsubject_pattern] [-failure- email_email_address1,email_address2-subjectsubject_pattern]]]`

Other options for this command are as follows:

`[-force]`



SnapManager supports up to 1000 characters for email addresses.

When you create a backup of data files and archive log files together using the profile (for creating separate archive log backups), and the data file backup creation fails, the email notification is sent with the data backup as the operation name instead of data backup and archive logs backup. When the data file and archive log file backup operation is successful, you see the output as follows:

```

Profile Name      : PROF_31
Operation Name   : Data Backup and Archive Logs Backup
Database SID     : TENDB1
Database Host    : rep01.rtp.org.com
Start Date      : Fri Sep 23 13:37:21 EDT 2011
End Date        : Fri Sep 23 13:45:24 EDT 2011
Status          : SUCCESS
Error messages   :

```

Customizing the email subject for a new profile

You can customize the email subject for the new profile when you create it.

You can customize the email subject by using the {profile}_{operation-name}_{db-sid}_{db-host}_{start-date}_{end-date}_{status} pattern or enter your own text.

Variable name	Description	Example value
profile	Profile name used for the database operation	PROF1
operation-name	Database operation name	Backup, Data Backup, Data and Archive Logs Backup
db-sid	SID of the database	DB1
db-host	Name of the host server	hostA
start-date	Start time of the database operation in the mmdd:hh:ss yyyy format	April 27 21:00:45 PST 2012
end-date	End time of the database operation in the mmdd:hh:ss yyyy format	April 27 21:10:45 PST 2012
status	Database operation status	Success

If you do not provide any value for the variables, then SnapManager displays the following error message: Missing value(s) -subject.

1. Enter the following command: `smo profile create -profileprofile [-profile-passwordprofile_password] -repository-dbnamerepo_service_name-hostrepo_host-portrepo_port-login-usernamerepo_username -database-dbnamedb_dbname-hostdb_host [-siddb_sid] [-login-username-usernamepassworddb_password-portdb_port] [-rman {-controlfile | {-login-username-username-passwordrman_password-tnsname-tnsname} }] [-retain [-hourly [-countn] [-durationm]] [-daily [-countn] [-durationm]] [-weekly [-countn] [-durationm]] [-monthly [-countn] [-durationm]]] [-commentcomment][[-snapname-patternpattern][[]] [-notification [-success-`

email_email_address1,email_address2-subjectsubject_pattern]
email_email_address1,email_address2-subjectsubject_pattern]]

[-failure-

Configuring email notification for an existing profile

When you are updating an profile, you can configure to receive an email notification on completion of the database operation.

- You must configure the email address from which the alerts are sent.
- You must enter a single email address or multiple email addresses to which alerts will be sent.

You can use a comma-separated list for multiple addresses. You must ensure that there is no space between the comma and the next email address. Optionally, you can add a subject to the email as well.



You must ensure that you enter the set of multiple email addresses within double quotation marks.

1. Enter the following command:
`smo profile update -profileprofile [-profile-passwordprofile_password][-database-dbnamedb_dbname-host db_host [-siddb_sid] [-login -usernameusername-password db_password-port db_port]] [{-rman{-controlfile | {-login -usernameusername-password rman_password-tnsname rman_tnsname}}}] | -remove-rman [-retain [-hourly [-countn] [-durationm]] [-daily [-countn] [-durationm]] [-weekly [-countn] [-durationm]] [-monthly [-countn] [-durationm]]] [-commentcomment][-snapname-patternpattern][[[]]] [[]] [-notification [-success-email_email_address1,email_address2-subjectsubject_pattern] [-failure-email_email_address1,email_address2-subjectsubject_pattern]]`

You can use the success option to receive a notification only for successful database operations and the failure option to receive a notification only for failed database operations.

Customizing the email subject for an existing profile

SnapManager enables you to customize the email subject pattern for an existing profile by updating that profile. This customized subject pattern is applicable only for the updated profile.

1. Enter the following command:
`smo profile update -profileprofile [-profile-passwordprofile_password][-database-dbnamedb_dbname-host db_host [-siddb_sid] [-login -usernameusername-password db_password-port db_port]] [{-rman{-controlfile | {-login -usernameusername-password rman_password-tnsname rman_tnsname}}}] | -remove-rman [-retain [-hourly [-countn] [-durationm]] [-daily [-countn] [-durationm]] [-weekly [-countn] [-durationm]] [-monthly [-countn] [-durationm]]] [-commentcomment][-snapname-patternpattern][[-protect [-protection-policypolicy_name]]] [[-noproduct]] [-notification [-success-email_email_address1,email_address2-subjectsubject_pattern] [-failure-email_email_address1,email_address2-subjectsubject_pattern]]`

Configuring summary email notification for multiple profiles

SnapManager enables you to configure a summary email notification for multiple profiles under a repository database.

You can set the SnapManager server host as a notification host from which the summary notification email is

sent to the recipients. If the SnapManager server host name or IP address is changed, then the notification host can also be updated.

You can select any one of the schedule times at which you require an email notification:

- Hourly: To receive an email notification every hour
- Daily: To receive an email notification daily
- Weekly: To receive an email notification weekly
- Monthly: To receive an email notification monthly

You need to enter a single email address or a comma-separated list of email addresses to receive notifications for operations performed using those profiles. You must ensure that there is no space between the comma and the next email address when you enter multiple email addresses.



You must ensure that you enter the set of multiple email addresses within double quotation marks.

SnapManager allows you to add a customized email subject using the following variables:

- Profile name used for the database operation.
- Database name
- SID of the database
- Name of the host server
- Start time of the database operation in the `yyyymmdd:hh:ss` format
- End time of the database operation in the `yyyymmdd:hh:ss` format
- Database operation status

If you select not to add a customized subject, SnapManager displays an error message: `Missing value -subject`.

1. Enter the following command: `smo notification update-summary-notification -repository-portrepo_port -dbnamerepo_service_name-hostrepo_host-login-usernamerepo_username -emailaddress1,email_address2-subjectsubject-pattern-frequency {-daily-timedaily_time | -hourly -timehourly_time | -monthly-timemonthly_time-date {1|2...|31} | -weekly-timeweekly_time-day {1|2|3|4|5|6|7}} -profilesprofile1profile2-notification-hostnotification-host`

Other options for this command are as follows:

`[-force] [-noprompt]`

```
smo notification update-summary-notification -repository -port 1521
-dbname repo2 -host 10.72.197.133 -login -username oba5 -email-address
admin@org.com -subject success -frequency -daily -time 19:30:45
-profiles sales1 -notification-host wales
```


Adding a new profile to summary email notifications

After you configure a summary email notification for the repository database, you can add a new profile to summary notification by using the summary notification command.

1. Enter the following command: `smo profile create -profileprofile_name [-profile-passwordprofile_password] -repository-dbnamerepo_service_name-hostrepo_host-portrepo_port-login-usernamerepo_username -database-dbnamedb_dbname-hostdb_host [-siddb_sid] [-login-usernamepdb_username-passwordddb_password-portdb_port] [-rman {-controlfile | {-login-usernamepman_username-passwordrman_password-tnsnamerman_tnsname} }] [-retain [-hourly-countn] [-durationm]] [-daily-countn] [-durationm]] [-weekly-countn] [-durationm]] [-monthly-countn] [-durationm]] [-commentcomment][[-snapname-patternpattern][[]] [-summary-notification]`

Other options for this command are as follows:

`[-force]`

= Adding an existing profile to summary email notifications :icons: font

SnapManager enables you to add an existing profile to a summary email notification while updating that profile.

1. Enter the following command: `smo profile update -profileprofile_name [-profile-passwordprofile_password] -repository-dbnamerepo_service_name-hostrepo_host-portrepo_port-login-usernamerepo_username -database-dbnamedb_dbname-hostdb_host [-siddb_sid] [-login-usernamepdb_username-passwordddb_password-portdb_port] [-rman {-controlfile | {-login-usernamepman_username-passwordrman_password-tnsnamerman_tnsname} }] [-retain [-hourly-countn] [-durationm]] [-daily-countn] [-durationm]] [-weekly-countn] [-durationm]] [-monthly-countn] [-durationm]] [-commentcomment][[-snapname-patternpattern][[]] [-summary-notification]`

Disabling email notification for multiple profiles

After you enable the summary email notification for multiple profiles, you can disable them to no longer receive email alerts.

SnapManager enables you to disable the summary email notification for those profile-executed database operations. From the SnapManager CLI, enter the notification `remove-summary-notification` command to disable the summary email notification for multiple profiles and the name of the repository database for which you do not require email notification.

1. To disable summary notification for multiple profiles on a repository database, enter the following command: `smo notification remove-summary-notification -repository-portrepo_port -dbnamerepo_service_name-hostrepo_host-login-usernamerepo_username`

The following example shows summary notification being disabled for multiple profiles on a repository database:

```
smo notification remove-summary-notification -repository -port 1521
-dbname repo2 -host 10.72.197.133 -login -username oba5
```

Copyright Information

Copyright © 2021 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system- without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

Trademark Information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.