

## FreeNAS - Feature #26924

### Add file-level encryption to Cloud Sync

11/29/2017 10:42 AM - Steve Wong

<b>Status:</b> Done	<b>Estimated time:</b> 0.00 hour
<b>Priority:</b> Important	
<b>Assignee:</b> Vladimir Vinogradenko	
<b>Category:</b> GUI (new)	
<b>Target version:</b> 11.2-BETA1	
<b>Severity:</b> New	<b>Needs Merging:</b> No
<b>Reason for Closing:</b>	<b>Needs Automation:</b> No
<b>Reason for Blocked:</b>	<b>Support Suite Ticket:</b> n/a
<b>Needs QA:</b> No	<b>Hardware Configuration:</b>
<b>Needs Doc:</b> No	

**Description**

A customer wants the ability to have files automatically encrypted using a common key before they are pushed up to a public cloud like Amazon or Backblaze. That way when the files arrive at the cloud provider, they will be encrypted and remain that way. Conversely, when files are pulled back down to the TrueNAS, the files are automatically unencrypted using the same common key.

The reasoning for this RFE is that the customer has sensitive student files that they want to push to the cloud for DR purposes but they do not want those files to be unencrypted. I suspect this will be a feature most customers would want.

There also needs to be some way to back up the common keys and to share them with other TrueNAS systems.

**Related issues:**

Related to FreeNAS - Umbrella #28496: Add Cloud Sync encryption support	<b>Done</b>
Related to FreeNAS - Bug #34954: Make encryption_salt non-required field for ...	<b>Done</b>
Copied to FreeNAS - Feature #33261: Add file-level encryption to Cloud Sync	<b>Done</b>

#### Associated revisions

##### Revision 1862fbbb - 11/30/2017 05:59 AM - Vladimir Vinogradenko

feat(backup): Add file level encryption to the cloud sync feature

Ticket: #26924

##### Revision 44ff1b71 - 12/01/2017 04:13 AM - Vladimir Vinogradenko

fix(backup): Encrypt passwords in database

Ticket: #26924

##### Revision 0e3f813b - 05/08/2018 10:21 AM - Dru Lavigne

Mention new Cloud Sync fields in intro.

Ticket: #26924

##### Revision 575a875f - 06/13/2018 11:18 AM - Dru Lavigne

Define new cloud sync fields and tighten up intro to this section.

Ticket: #26924

**Revision df88c147 - 06/21/2018 07:56 AM - Dru Lavigne**

Update legacy UI for new cloud sync fields.  
Ticket: #26924

**Revision 6ad10cbb - 06/22/2018 01:02 PM - Dru Lavigne**

Add updated screenshot for cloud sync.  
Ticket: #26924

**History**

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**#1 - 11/29/2017 11:01 AM - Kris Moore**

- Status changed from *Untriaged* to *Unscreened*
- Assignee changed from *Kris Moore* to *Vladimir Vinogradenko*

This sounds doable. Vladimir, can you add this to the middleware for cloud-sync? Once thats done we can do it in new UI next. I'm thinking we can use the crypt function of rclone here pretty easily.

<https://rclone.org/crypt/>

**#2 - 11/29/2017 11:38 AM - Dru Lavigne**

- Private changed from *No* to *Yes*

**#3 - 11/30/2017 06:01 AM - Vladimir Vinogradenko**

- Status changed from *Unscreened* to *Needs Developer Review*
- Assignee changed from *Vladimir Vinogradenko* to *William Grzybowski*

**#4 - 12/01/2017 07:06 AM - Vladimir Vinogradenko**

- Status changed from *Needs Developer Review* to *Reviewed by Developer*
- Assignee changed from *William Grzybowski* to *Vladimir Vinogradenko*

**#5 - 12/06/2017 10:33 AM - Vladimir Vinogradenko**

- Status changed from *Reviewed by Developer* to *Ready For Release*

**#6 - 12/12/2017 08:33 AM - Dru Lavigne**

- Description updated
- Private changed from *Yes* to *No*

**#7 - 01/25/2018 07:48 AM - Ben Gadd**

- Status changed from *Ready For Release* to *Done*

**#8 - 01/25/2018 08:11 AM - Dru Lavigne**

- Subject changed from *Add file level encryption to the cloud sync feature* to *Add file-level encryption to Cloud Sync*
- Needs Merging changed from *Yes* to *No*

**#9 - 05/02/2018 05:39 AM - Dru Lavigne**

- Status changed from *Done* to *Ready for Testing*

**#10 - 05/08/2018 10:19 AM - Dru Lavigne**

- Copied to Feature #33261: *Add file-level encryption to Cloud Sync* added

**#11 - 05/08/2018 10:20 AM - Dru Lavigne**

- Status changed from Ready for Testing to Blocked
- Severity set to New
- Reason for Blocked set to Dependent on a related task to be completed

This needs to make it into the new UI (copied ticket) for doc/QA purposes.

**#12 - 05/08/2018 10:22 AM - Dru Lavigne**

Initial doc commit: <https://github.com/freenas/freenas-docs/commit/0e3f813b9277497e67ad9efb67bab2fbb76a7e88>. More to come once fields are added to new UI.

**#13 - 05/11/2018 09:40 AM - William Grzybowski**

Should this one be marked as Done then? Since we have a new one for UI.

**#14 - 05/21/2018 12:48 PM - Dru Lavigne**

- Status changed from Blocked to Ready for Testing

**#15 - 05/21/2018 12:49 PM - Dru Lavigne**

- Reason for Blocked deleted (Dependent on a related task to be completed)

**#16 - 06/01/2018 11:26 AM - Dru Lavigne**

- Related to Umbrella #28496: Add Cloud Sync encryption support added

**#17 - 06/13/2018 11:24 AM - Dru Lavigne**

New UI doc commit: <https://github.com/freenas/freenas-docs/commit/575a875fef05fe505cd217f433642aedecd2878e>

Warren will create PRs to improve the existing tooltips and add the missing ones.

**#18 - 06/13/2018 12:46 PM - Warren Block**

Updated tooltips.

<https://github.com/freenas/webui/pull/881>

**#19 - 06/13/2018 02:48 PM - Dru Lavigne**

- Related to Bug #34954: Make encryption\_salt non-required field for Cloud Sync Task added

**#20 - 06/14/2018 09:23 AM - Zackary Welch**

- Needs QA changed from Yes to No

Tested push/pull with remote encryption to Google Cloud and it appears encrypted in the Cloud and de-encrypted when pulled. The feature is documented and functional.

**#21 - 06/14/2018 06:09 PM - Dru Lavigne**

- Status changed from Ready for Testing to Passed Testing

**#22 - 06/18/2018 11:37 AM - Dru Lavigne**

Still need to port doc changes to master before this can be considered done.

**#23 - 06/19/2018 09:30 AM - Dru Lavigne**

- Related to Bug #34951: Separate S.M.A.R.T. email addresses with spaces added

**#24 - 06/21/2018 07:58 AM - Dru Lavigne**

- Related to deleted (Bug #34951: Separate S.M.A.R.T. email addresses with spaces)

**#25 - 06/21/2018 07:59 AM - Dru Lavigne**

- Status changed from *Passed Testing* to *Done*

- Needs Doc changed from *Yes* to *No*

Legacy UI doc commit: <https://github.com/freenas/freenas-docs/commit/df88c14763cd2ca1a8dd15ace21c4fe9627c65bb>

**#26 - 06/22/2018 01:04 PM - Dru Lavigne**

Updated screenshot: <https://github.com/freenas/freenas-docs/commit/6ad10cbb9fb7034110a441b9387337cdebd95e95>