NAME

cyrus2dovecot – convert Cyrus folders to Dovecot

SYNOPSIS

cyrus2dovecot [**–cdmq**] [**–C** *cyrus-inbox*] [**–D** *dovecot-inbox*] [**–E** *edit-foldernames*] [**–F** *dovecot-uidlist-format*] [**–H** *dovecot-host*] [**–N** *default-quota*] [**–O** *cyrus-quota-format*] [**–Q** *cyrus-quota*] [**–S** *cyrus-seen*] [**–U** *cyrus-sub*] [*user ...*]

cyrus2dovecot –h │ **–v**

DESCRIPTION

cyrus2dovecot converts the e–mails of one or more *user*s from Cyrus format to Dovecot Maildir++ folders. If no *user* is specified, the *user* names are read from the standard input, one per line. Message UIDs, INTERNALDATEs, IMAP folder subscriptions, the UIDVALIDITY and UIDNEXT values for each folder, as well as all IMAP flags (including the first 26 user-defined keywords) are preserved during the conversion. The generated e–mail filenames include the Maildir++ extensions S=<size> and W=<vsize> (which are used by Dovecot for better performance). Optionally, Maildir++ *maildirsize* files are created.

OPTIONS

Within the specified *PATH*s, any occurrence of %u will be replaced by the current *user* name, any occurrence of %*n*u will be replaced by the *n*'th character of that *user* name, any occurrence of %h will be replaced by Cyrus' directory "hash" character for that *user* name (i.e., %h is equivalent to %1u if the first character of the *user* name is a lowercase letter), and any occurrence of %x will be replaced by Cyrus' "fulldirhash" character for that *user* name. However, within the specified **––cyrus–quota** *PATH* (if any), these replacements will only be done if the **––cyrus–quota–format** *VERSION* is set to 1.

The default settings can be found (and modified) at the top of the **cyrus2dovecot** script.

–C, **––cyrus–inbox=***PATH*
> Use this *PATH* to the *user*'s INBOX folder in Cyrus.

–c, **––dovecot–crlf**
> Store e–mails with CR+LF instead of plain LF. This flag should be specified if the mail_save_crlf option is set to yes in the Dovecot configuration.

–D, **––dovecot–inbox=***PATH*
> Use this *PATH* to the *user*'s INBOX folder in Dovecot.

–d, **––debug**
> Print information which is usually only useful for debugging to the standard output.

–E, **––edit–foldernames=***SUBSTITUTION*
> Apply the specified *SUBSTITUTION* to the name of each Maildir++ folder and subscription using Perl code such as eval('$name=~'.$substitution), where $name holds either the string *INBOX* (which denotes the main Maildir) or the full Maildir++ folder name (e.g., *.sub.folder*), and $substitution holds the specified *SUBSTITUTION*. The resulting $name will be used as the Maildir++ folder's name. This option may be specified multiple times, in which case each of the *SUBSTITUTION*s will be applied to each Maildir++ folder name in the order specified on the command line. Note that while Dovecot stores the subscribed folder names without the leading "." of Maildir++ subfolders, **cyrus2dovecot** adds a leading "." to each subscribed subfolder name before applying the specified *SUBSTITUTION*(s) and removes it afterwards (if it still exists) in order to simplify the matching.

–F, **––dovecot–uidlist–format=***VERSION*
> Create the *dovecot-uidlist* files using this format *VERSION*. For Dovecot releases older than 1.0.2, *VERSION* 1 must be specified; otherwise, *VERSION* 3 can be used.

–H, **--dovecot–host=**_NAME_
>   Use this host _NAME_ for the Maildir++ e–mail file's basename.

–h, **--help**
>   Print usage information to the standard output and exit.

–m, **--dump–meta**
>   Print a dump of the data structure which holds the metadata gathered from scanning the Cyrus folders of a user to the standard output.

–N, **--default–quota=**_BYTES_
>   Create a Maildir++ _maildirsize_ file for each _user_, and set the quota limit to the specified number of _BYTES_ unless **--cyrus–quota** is also specified, in which case a _user_–specific quota would override the **--default–quota** limit. Specifying 0 _BYTES_ disables the creation of _maildirsize_ files unless **--cyrus–quota** is also specified.

–O, **--cyrus–quota–format=**_VERSION_
>   Expect the quota database file specified via **--cyrus–quota** to be present in this format _VERSION_, where _VERSION_ 1 denotes the "quotalegacy" format and _VERSION_ 2 denotes the "skiplist" or the "flat" text format (**cyrus2dovecot** will autodetect which of those two formats is used if _VERSION_ 2 is specified). This option is ignored if **--cyrus–quota** is not specified.

–Q, **--cyrus–quota=**_PATH_
>   Use this _PATH_ to the quota database file in Cyrus, and create a Maildir++ _maildirsize_ file for each _user_ whose quota limit is found in that file.

–q, **--quiet**
>   Suppress the line usually printed to the standard output for each _user_ whose e–mails were successfully converted. Error messages, if any, will still be printed to the standard error output.

–S, **--cyrus–seen=**_PATH_
>   Use this _PATH_ to the _user_'s seen database file in Cyrus. If _cyrus.seen_ is specified as the _PATH_, **cyrus2dovecot** expects an old-style _cyrus.seen_ file in every Cyrus folder.

–U, **--cyrus–sub=**_PATH_
>   Use this _PATH_ to the _user_'s subscription database file in Cyrus.

–v, **--version**
>   Print version information to the standard output and exit.

RETURN VALUE
>   **cyrus2dovecot** exits 0 on success. If a non-fatal error occurs, **cyrus2dovecot** prints a message to the standard error output and then tries to convert the e–mails of the remaining _user_s (if any), but it exits >0 regardless of whether or not those conversions succeed. If a fatal error occurs, **cyrus2dovecot** exits >0 immediately.

EXAMPLES
>   Given that the default settings specified at the top of the **cyrus2dovecot** script are correct and that _/tmp/users_ holds the names of all _user_s whose e–mails should be converted (one per line), the following command would convert all e-mails of those _user_s from Cyrus to Dovecot:

>   cyrus2dovecot < /tmp/users

>   Given that the path to the INBOX in Cyrus is _/var/spool/imap/user/%u_ (where %u denotes the _user_ name), that Cyrus stores the seen and subscription databases within the directory _/var/imap/user/%h_, and that Cyrus stores "quotalegacy" files within the directory _/var/imap/quota/%h_ (where %h denotes Cyrus' directory "hash" character for that _user_ name, respectively), the following command would convert all e–mails of the _user_s "bill" and "george" from Cyrus to Dovecot, and the result would be stored below _/tmp/dovecot_

(including *maildirsize* files for both users if their quota limits are found):

```
cyrus2dovecot --cyrus-inbox /var/spool/imap/user/%u      \
              --cyrus-seen /var/imap/user/%h/%u.seen      \
              --cyrus-sub /var/imap/user/%h/%u.sub        \
              --cyrus-quota /var/imap/quota/%h/user.%u  \
              --cyrus-quota-format 1                       \
              --dovecot-inbox /tmp/dovecot/%u/Maildir   \
              bill george
```

A script such as the following could be used in order to convert all e–mails of all *user*s (of course, the pathnames and the desired quota limit may have to be adjusted, and if the hashimapspool option is enabled in the Cyrus configuration, /? must be appended to the $in path):

```
#!/bin/sh

in=/var/spool/imap/user        # Cyrus INBOXes.
db=/var/imap/user/?            # Cyrus seen/subscription files.
out=/tmp/dovecot               # Dovecot Maildirs.
log=/tmp/conversion.log        # Log of successful conversions.
err=/tmp/error.log             # Log of conversion errors.
quota=2147483648               # 2 GiB quota (for maildirsize).

for u in `find $in/. \! -name . -prune -exec basename \{\} \;`
do
        cyrus2dovecot --cyrus-inbox $in/$u                 \
                      --cyrus-seen $db/$u.seen             \
                      --cyrus-sub $db/$u.sub               \
                      --default-quota $quota               \
                      --dovecot-inbox $out/$u/Maildir    \
                      $u 2>&1 >>$log | tee -a $err >&2
done
```

In order to create all folders (except for the INBOX) as subfolders of the INBOX in Dovecot, the following argument could be added to the **cyrus2dovecot** command line:

```
--edit-foldernames 's/^\./.INBOX./'
```

Cyrus transparently replaces any "." character in folder names with a """ character. Dovecot supports "." characters in Maildir++ folder names if the "listescape" plugin is used, which replaces any "." character in folder names with the string "\2e". The following argument could be added to the **cyrus2dovecot** command line in order to replace any """ character in Cyrus folder names with "\2e" for the Maildir++ folder name:

```
--edit-foldernames 's/\^/\\2e/g'
```

Dovecot 1.1 and newer support using folders such as *Maildir/sub/folder* (as opposed to *Maildir/.sub.folder*) if :LAYOUT=fs was added to the mail_location in the Dovecot configuration. The following **cyrus2dovecot** arguments could be specified in order to create such folders by removing the leading dot from Maildir++ subfolder names and then substituting any following dots with slashes:

```
--edit-foldernames 's/^\.//'     \
--edit-foldernames 's/\./\//g'
```

If the seen states, subscriptions, or quotas are stored in Berkeley databases, they must first be converted for **cyrus2dovecot** using a command such as the following:

```
cvt_cyrusdb /var/imap/user/b/bill.seen berkeley \
            /tmp/imap/user/b/bill.seen skiplist
```

CAVEATS

> **cyrus2dovecot** assumes that the user has no e−mails in Dovecot yet and that neither his Cyrus folders nor his Dovecot folders will be accessed by another process during the conversion.

> If %nu is specified within any *PATH* on the command line, all *user* names must have a length of at least *n* characters. Otherwise, **cyrus2dovecot** will die with an exception.

> If folder name substitutions are specified via **−−edit−foldernames**, the resulting Maildir++ folder names must be unique.

RESTRICTIONS

> Cyrus' seen and subscription databases must be present either in the "skiplist" format or in the "flat" text format, and Cyrus' quota database(s) (if any) must be present either in one of those formats or in the "quotalegacy" format, as **cyrus2dovecot** doesn't support Berkeley databases. However, Berkeley databases can be converted to one of the supported formats using *cvt_cyrusdb* (8), see the "EXAMPLES".

> In *maildirsize* files created by **cyrus2dovecot**, no limit for the number of messages is specified (as such a limit does not seem useful).

> Cyrus' ACL settings are not converted.

COMPATIBILITY

> **cyrus2dovecot** is supposed to work with all Cyrus releases up to (at least) version 2.3.x. So far, it has been tested with Cyrus 1.4, 2.1.18, 2.2.12, and 2.3.12p2.

SEE ALSO

> Other tools for converting e−mails from Cyrus to Dovecot can be found at <http://wiki.dovecot.org/Migration/Cyrus>.

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HISTORY

```
$Log: cyrus2dovecot,v $
Revision 1.2  2008/09/24 09:52:33  holger
Message seen states are now parsed more efficiently with regard
to performance and memory usage.  Apart from that, minor code
cleanups have been applied.

Revision 1.1  2008/09/22 08:36:44  holger
Initial release.
```