Virtualmin and Syncthing for automated offsite backups

Virtualmin backups have many features, and here are the current destination options:

- Local folder
- FTP
- SSH
- Webmin
- Amazon S3
- Rackpace
- Download link

If Virtualmin supported Syncthing (not in the roadmap), it would permit things that none of the current options can do.

Criteria	local folder	FTP	SSH	Webmin	Amazon S3	Rackpace	Download link	Syncthing (partially developed already)
Full data control (does not require external service)	yes	yes	yes	yes	no	no	yes	yes
Automatic / Unattended	yes	yes	yes	yes	yes	yes	no	yes
Off-server	no	yes	yes	yes	yes	yes	yes	yes
Devices can be behind the firewall, and without a fixed IP address	n/a	no	no	no	n/a	n/a	yes, manually	yes, to your laptop or an Android
P2P / multiple (each node can sync with the others, which is different than setting up multiple destinations)	no	no	no	no	depends on provider	depends on provider	no	yes
Only send new or modified files	n/a	no	no (unless rsync)	?	?	?	n/a	yes
Cold storage / asynchronous (machine can be turned on/off anytime, and it just gets data when machine is online)	n/a	no	no	?	n/a	n/a	n/a	yes

Data is encrypted in transport	n/ a	If FTPS	yes	yes?	yes?	yes?	yes, with Virtualmin HTTPS	yes
Throttling: Can set Incoming and Outgoing Rate Limit (KiB/s)	n/ a	?	?	?	?	?	no	yes

To be added to the chart

- Syncthing (if configured that way) can also receive data. So it can be a way to send back a backup or other data.
- Protection against crypto-locker attack, as explained here
- Syncthing can sync data with an untrusted node by encrypting the data. So one of the nodes can be a rented server with a lof of disk space.

Status as of 2023-03-07

- Within the WikiSuite installer, a Syncthing installer is provided.
- Once Syncthing is installed for a Virtual Server, you need to set up automated backups to a directory and use that directory for Syncthing

This all works but we want to make it easier

1. Spin out a Syncthing for Virtualmin app that is totally independant from WikiSuite. So you can install on any Virtualmin instance
2. When the app is installed, add Syncthing as an option directly along SSH, FTP, Amazon S3, etc.

Related

- https://forum.virtualmin.com/t/planning-to-create-a-syncthing-app-for-virtualmin/119604
- https://forum.syncthing.net/t/planning-to-create-a-syncthing-app-for-virtualmin/19896
- Tiki Manager and Syncthing for automated offsite backups
- Syncthing in WikiSuite