Share recipient can modify a share's expiration date



TIMELINE

icewater submitted a report to Nextcloud.

Nov 20th (4 ye

Vulnerable URL

http://[server]/nextcloud/ocs/v2.php/apps/files_sharing/api/v1/shares/[share ID number]

Summary

Nextcloud users can set expiration dates on documents they share with others. However, the function to update a share does not appear to properly validate the requester is the owner when changing a share's expiration date. A user could exploit the vulnerability to extend the expiration date of a file shared with them.

 $The \, vulnerable \, parameter \, appears \, to \, be \, the \, share \, ID \, number \, at \, the \, end \, of \, the \, request \, URL. \, Sample \, request: \, and \, continuous \, continuou$

 $PUT / next cloud/ocs/v2.php/apps/files_sharing/api/v1/shares/74 \ HTTP/1.1$

OCS-APIREQUEST: true

Authorization: Basic

User-Agent: Mozilla/5.0 (Android) ownCloud-android/3.3.2

Host: 192.168.1.22

 $Cookie: nc_sameSiteCookielax = true; nc_sameSiteCookiestrict = true;$

 $oc_session Passphrase=O5dbusaO3KwFs6e2P4ew7oE99UIUYbbpGa8ZwH01u6gHsvVjPiXfj362cyMkq4XNIIbYCqHESynLeG9VCWUDHHM%2B%2FHeitr910brhTc5NnBy7g0JoY1uj1aY9KRQf7; oc0xkd23iidt=fc7vbute5s5efftqf2k9af9op0$

Content-Length: 21

Content-Type: application/x-www-form-urlencoded; charset=UTF-8

Connection: close

expireDate=2018-11-25

Reproduction

Pre-requisites: a Nextcloud server with a couple of test users, a browser setup to go through a proxy like Burp.

- Go to Burp, click the "Proxy" tab, click the "Intercept" subtab, and click "Intercept is On" to toggle interception off (if it's not already off)
- Login to Nextcloud with a test user
- Share a file with another user. Set an expiration date, for example 17-05-2019
- Go to Burp, click the "Proxy" tab, click the "HTTP history" subtab, scroll down the list and find the call to the vulnerable URL. Note the value for the share ID (the integer at the end of the URL)
- · Logout of Nextcloud
- Login to Nextcloud as the user you just shared the file with

At this point, we need to submit the vulnerable request as this second user. However, the vulnerable URL uses the PUT method so copy/pasting into a browser isn really feasible. One way is to use a legitimate request as a "template" and insert the share ID of the file shared with us.

- As the second user, open a file's sharing dialog and share it with any user
- Go to Burp -> Proxy -> Intercept and toggle interception on
- Go back to the browser and set an expiration date such as 17-05-2020 $\,$
- Burp should stall the request for viewing. The request should be to the vulnerable URL; if it isn't, click "Forward" until the vulnerable URL appears
- At the end of the URL, change the share ID number to the share ID noted earlier (the share ID of the file shared with the current user by the first user)
- Forward the request (or toggle interception off, either works)
- Logout and log back in as the first user. Navigate to the shared file and look at the expiration date. It should be 17-05-2020, demonstrating the share recipient extended their access to the file by a year.

Screenshots

1_request - vulnerable request as seen in Burp.

Impact

Impact/Notes

If someone shares a static file with another user, the vulnerability is less of an issue. The user granted access could download an offline copy and refer to it after sh access expires.

Where this issue becomes more concerning is with "living" files that an individual might frequently edit, like a spreadsheet. A share recipient could extend their acc and continue to view updated file contents until someone noticed the share instance was still in place.

This does not appear to affect groups; i.e. if a group is the recipient of a share I have not been able to successfully invoke this vulnerability as a group member.

 $If I \ can \ provide \ any \ further \ information \ or \ help \ with \ proof \ of \ concept \ please \ let \ me \ know. \ Thanks!$

1 attachment: F378094: 1_request.png



Jan 31st (3 ye

you to not alsolose this issue to any other party. llzer posted a comment. Hi @icewater, Nov 20th (4 ye Thanks for your report. I'll try to reproduce this and get back to you. Cheers. --Roeland zer changed the status to - Triaged. Nov 20th (4 ye I could reproduce this. A fix is on the way. --Roeland icewater posted a comment. Nov 22nd (4 ye Awesome, thanks for the quick reply! O-rullzer updated the severity from Low to Medium (4.3). Nov 29th (4 ye ullzer posted a comment. Dec 4th (4 ye This is fixed in https://github.com/nextcloud/server/pull/12544 It is already shipped in the latest maintenance releases. Could you verify this? --Roeland icewater posted a comment. Dec 4th (4 ye Hi Roeland, I updated my test instance and can no longer reproduce this issue. Ilzer posted a comment. Dec 18th (4 ye Perfect. Thanks for testing. I'll soonish (probably in the new year) publish the advisories. extcloud rewarded icewater with a \$100 bounty. extcloud rewarded icewater with a \$100 bounty.

Congratulations! We have determined this to be eligible for a reward of \$100. Thanks a lot for making the internet a safer place and keep hacking. Please keep in mind that we didn't release the advisories yet, so please do not share this information with any third-parties. icewater posted a comment. Dec 23rd (4 ve Sounds good, thanks for the update O-rullzer added weakness "Improper Access Control - Generic" and removed weakness "Insecure Direct Object Reference (IDOR)". Jan 8th (4 ye lizer closed the report and changed the status to \circ Resolved.

This has been resolved in our latest maintenance releases and we're working on the advisories at the moment. lizer closed the report and changed the status to • Resolved. Jan 8th (4 ye $Please \ let \ us \ know \ how \ you'd \ like \ to \ be \ credited \ in \ our \ official \ advisory. \ We \ require \ the \ following \ information:$ Name / Pseudonym · Email address (optional) Website (optional) • Company (optional) icewater posted a comment. Jan 10th (4 ve Thanks! I can be credited as: Website: cp270.wordpress.com lzer posted a comment. Apr 11th (4 ve Uniter posted a comment.

Sorry for the delay here. I just wrote the advisory and a CVE will be requested. This will be disclosed ASAP icewater posted a comment. No worries, thanks for following up

O-nickvergessen (Nextcloud staff) requested to disclose this report.

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