Advisory ID: usd-2020-0048
CVE Number: CVE-2020-24708
Affected Product: Gophish
Affected Version: v0.10.1
Vulnerability Type: Stored Cross-Site S
Security Risk: Medium
Vendor URL: https://getgophish.com/
Vendor Status: Fixed

Description

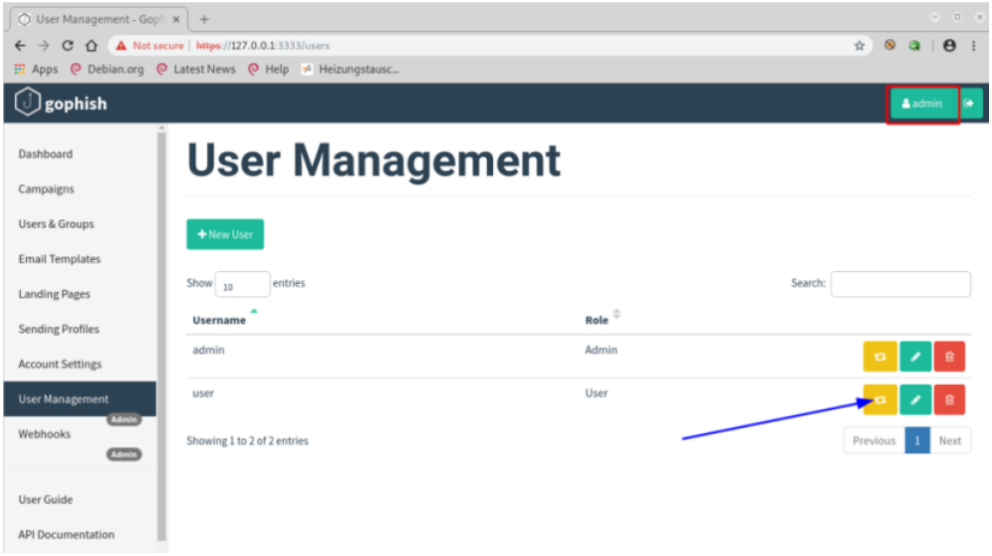
Gophish is vulnerable to stored self-XSS. In v0.10.1 Gophish introduced an impersonation button, which allows normal users to exploit administrative users.

The new sending profile form's "Host" input field is vulnerable to XSS. The payload executes when sending a test email. The XSS gets stored when saving the profile. A rogue user could exploit an admin by asking him to impersonate him and test his broken sending profile.

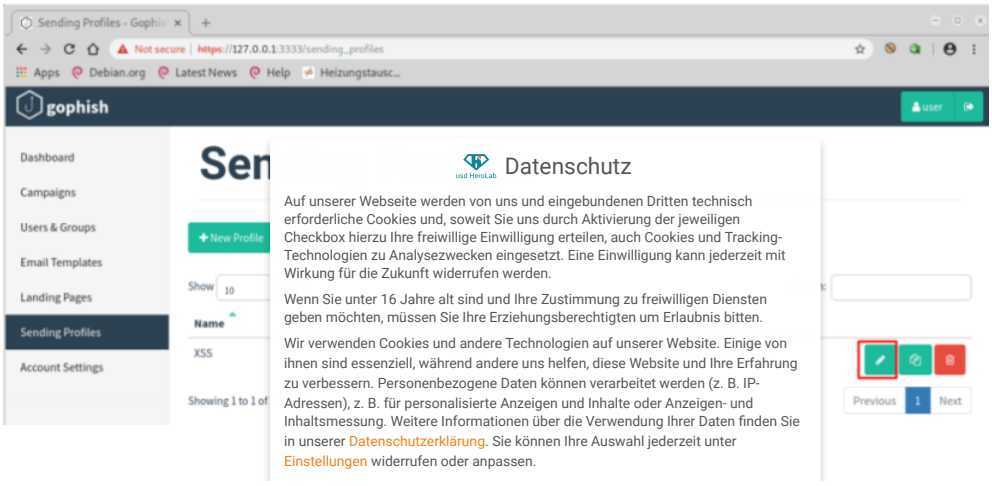
Proof of Concept (PoC)

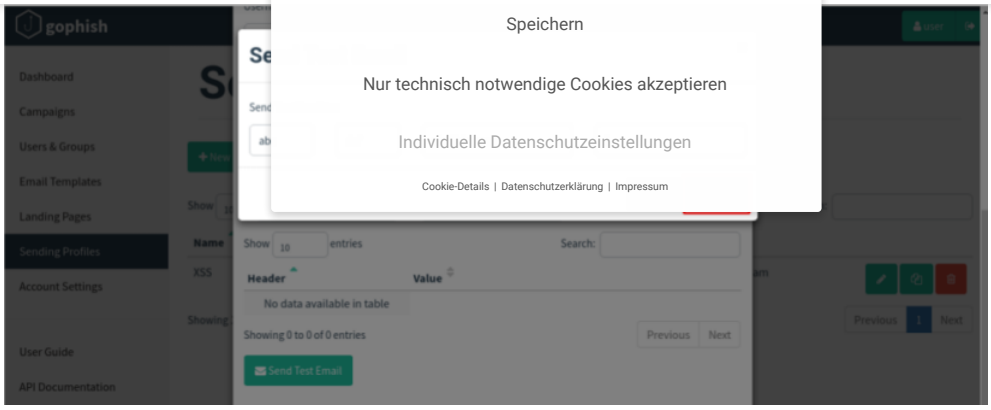
The rogue user injects an XSS payload into a new Sending Profile (/sending_profiles). By saving the Sending Profile, also the injected XSS payload gets stored. The rogue user then requests assistance from an admin user to check out his "broken" sending profile.

The admin user impersonates the user that he wants to assist

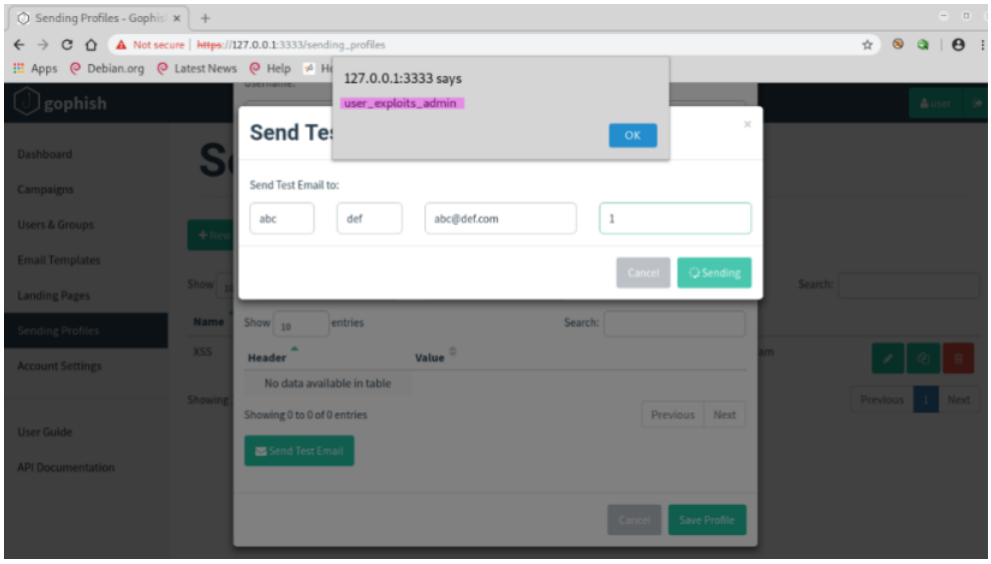


The admin user edits the user's Sending Profile





The XSS payload executes in the admin user's browser



Fix

It is recommended to treat all input on the website as potentially dangerous. Hence, all output that is dynamically generated based on user-controlled data should be encoded according to its context. The majority of programming languages support standard procedures for encoding meta characters. For example, PHP has the built-in function htmlspecialchars().
Additionally, all input should be validated on the server-side. Where possible, whitelist filters should be used. The more restrictive a filter can be specified, the better the protection it provides. Whitelisting is especially recommended if input values have a well defined format or a list of valid input values exists. Invalid values should not be sanitized and forwarded to the application. Instead, requests with invalid values should be rejected.

Timeline

- 2020-06-18 First contact request via security@getgophish.com
- 2020-06-22 Vendor responds to initial contact
- 2020-08-07 Vendor publishes a fix on https://github.com/gophish/gophish/commit/90fed5a575628b89eaf941e1627b49e0f3693812
- 2020-09-29 Security advisory released

Credits

This security vulnerabilities were found

In order to protect businesses against hackers and criminals, we always have to keep our skills and knowledge up to date. Thus, security research is just as important for our work as is building up a security community to promote the exchange of knowledge. After all, more security can only be achieved if many individuals take on the task.

Our CST Academy and our usd HeroLab are essential parts of our security mission. We share the knowledge we gain in our practical work and our research through training courses and publications. In this context, the usd HeroLab publishes a series of papers on new vulnerabilities and current security issues.

Always for the sake of our mission: „more security."

to usd AG

In accordance with usd AG's Responsible Disclosure Policy, all vendors have been notified of the existence of these vulnerabilities.

Disclaimer

The information provided in this security advisory is provided „as is" and without warranty of any kind. Details of this security advisory may be updated in order to provide as accurate information as possible.