مجلس الأمن السيبراني
CYBER SECURITY COUNCIL
United Arab Emirates

Critical Vulnerability in AWS Amplify Studio

Tracking #:432317227

Date:07-05-2025

EXECUTIVE SUMMARY:

The UAE Cyber Security Council has observed a critical vulnerability in AWS Amplify Studio that could be exploited to execute malicious code, potentially leading to unauthorized access, data theft, or complete compromise of affected systems.

TECHNICAL DETAILS:

Vulnerability Details:

- **CVE-2025-4318**
- CVSS Score: 9.5 Critical
- A critical input validation vulnerability exists in the AWS Amplify Studio amplify-codegen-ui package. This flaw allows authenticated users to execute arbitrary JavaScript code during the component rendering and build process, potentially leading to full compromise of the application's front-end.
- The vulnerability exists due to insufficient validation of component schema properties when importing a component schema using the create-component command. The expression-binding function fails to validate these properties before converting them to expressions, enabling malicious actors with component creation or modification privileges to inject and execute arbitrary JavaScript code.
- Exploitation of this vulnerability can lead to:
    - Unauthorized access to application data
    - Data theft or manipulation
    - Full compromise of the application's front-end
    - Potential lateral movement within the application environment

Affected Versions:

- Amplify Studio aws-amplify/amplify-codegen-ui 2.20.2 and earlier

Fixed versions:

- Amplify Studio aws-amplify/amplify-codegen-ui version 2.20.3 and later

RECOMMENDATIONS:

The UAE Cyber Security Council recommends updating the affected versions to the fixed or latest versions released by AWS.

Kindly circulate this information to your subsidiaries and partners as well as share with us any relevant information and findings.

The UAE Cyber Security Council extends its appreciation for the continued collaboration.

REFERENCES:

- https://nvd.nist.gov/vuln/detail/CVE-2025-4318