



مجلس الأمن السيبراني  
CYBER SECURITY COUNCIL



**Critical Vulnerabilities in pgAdmin 4**  
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## EXECUTIVE SUMMARY:

The UAE Cyber Security Council has observed two critical vulnerabilities (CVE-2025-2945 and CVE-2025-2946) in pgAdmin 4, a widely used PostgreSQL administration tool, expose systems to remote code execution (RCE) and cross-site scripting (XSS) attacks.

## TECHNICAL DETAILS:

Two critical vulnerabilities (CVE-2025-2945 and CVE-2025-2946) in pgAdmin 4, a widely used PostgreSQL administration tool, expose systems to remote code execution (RCE) and cross-site scripting (XSS) attacks.

### Vulnerability Details:

1. **CVE-2025-2945** (CVSS 9.9, **CRITICAL**): Remote Code Execution
  - Affected Components: Query Tool and Cloud Deployment modules.
  - Exploitation: Malicious actors can inject arbitrary code via the `query_committed` and `high_availability` parameters in POST requests to vulnerable endpoints. These parameters are passed unsanitized to Python's `eval()` function, enabling RCE.
  - Impact: Full server compromise, including unauthorized data access, lateral movement, and persistence.
2. **CVE-2025-2946** (CVSS 9.1, **CRITICAL**): Cross-Site Scripting
  - Affected Components: Query result rendering engine.
  - Exploitation: Malicious SQL queries containing HTML/JavaScript payloads execute automatically when results are displayed in the pgAdmin interface.
  - Impact: Session hijacking, credential theft, and client-side attacks via browser-based payload execution.

### Fixed Version:

- pgAdmin 4 version 9.2 or later

## RECOMMENDATIONS:

The UAE Cyber Security Council recommends immediately upgrade pgAdmin 4 to the fixed version.

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://github.com/pgadmin-org/pgadmin4/issues/8602>