

## Task – 8

### Nessus Scanning Report :-

#### Vulnerability Name :-

SSH Weak Key Exchange Algorithms Enabled

#### CWE (Common weakness enumeraΘon) :-

CWE-326: Inadequate EncrypΘon Strength

OWASP (open worldwide applicaΘon security

project) :- Use Strong EncrypΘon Algorithms:

Secure Key Management:

Secure Transport Layer:

Data ClassificaΘon:

Secure Defaults:

Third-Party Libraries:

#### DescripΘon :-

The remote SSH server is configured to allow key exchange algorithms which are considered weak.

This is based on the IETF draŦ document Key Exchange (KEX) Method Updates and RecommendaΘons for Secure Shell (SSH) draŦ-ien-curdle-ssh-kex-sha2-20. SecΘon 4 lists guidance on key exchange algorithms that SHOULD NOT and MUST NOT be enabled.

This includes:

diffie-hellman-group-exchange-sha1

diffie-hellman-group1-sha1  
gss-gex-sha1-\*

gss-group1-sha1-\*

gss-group14-sha1-\*

rsa1024-sha1

Note that this plugin only checks for the options of the SSH server, and it does not check for vulnerable software versions.

## **Business Impact :-**

Data Breaches and Unauthorized Access

Loss of Confidential Information

Financial Loss

Operational Disruption

Reputation Damage

Regulatory Non-Compliance

Loss of Competitive Advantage

Long-Term Repercussions

Resource Drain

Customer and Employee Trust

Affected URL :- <https://vitap.ac.in/>

POC (Proof of Concept) :-



## Remediation :-

Identify Weak

Algorithms Update

SSH Software

Configuration Settings

Preferred Algorithms

Key Lengths

Host Key Algorithms

Testing and Validation

Logging and Monitoring

Documentation and

Training Regular Updates

Compliance Checks

Consider SSH Hardening Guides