

Metrics:

Total lines of code: 880462
Total lines skipped (#nosec): 7

hardcoded_bind_all_interfaces: Possible binding to all interfaces.

Test ID: B104

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-605](#)

File: [./venv/lib/python3.9/site-packages/anyio/_core/_sockets.py](#)

Line number: 490

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b104_hardcoded_bind_all_interfaces.html

```
489         else:
490             local_address = ("0.0.0.0", 0)
491
```

django_extra_used: Use of extra potential SQL attack vector.

Test ID: B610

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-89](#)

File: [./venv/lib/python3.9/site-packages/anyio/streams/tls.py](#)

Line number: 247

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b610_django_extra_used.html

```
246         async def send_eof(self) -> None:
247             tls_version = self.extra(TLSAttribute.tls_version)
248             match = re.match(r"TLSv(\d+)(?:\.(\\d+))?", tls_version)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/anyio/to_interpreter.py](#)

Line number: 123

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
122             if fmt == FMT_PICKLED:
123                 res = pickle.loads(res)
124
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/anyio/to_process.py](#)

Line number: 86

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
85
86         retval = pickle.loads(pickled_response)
87         if status == b"EXCEPTION":
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/anyio/to_process.py](#)

Line number: 210

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
209         try:
210             command, *args = pickle.load(stdin.buffer)
211         except EOFError:
```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/attr/_make.py](#)

Line number: 227

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
226         bytecode = compile(script, filename, "exec")
227         eval(bytecode, globs, locs)
228
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.

Test ID: B303

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/authlib/jose/rfc7518/jwe_algs.py](#)

Line number: 329

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
328         "RSAES OAEP using default parameters",
329         padding.OAEP(padding.MGF1(hashes.SHA1()), hashes.SHA1(), None),
330     ),
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.

Test ID: B303

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/authlib/jose/rfc7518/jwe_algs.py](#)

Line number: 329

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
328         "RSAES OAEP using default parameters",
329         padding.OAEP(padding.MGF1(hashes.SHA1()), hashes.SHA1(), None),
330     ),
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/authlib/oauth1/rfc5849/client_auth.py](#)

Line number: 150

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
149         if body and headers.get("Content-Type") != CONTENT_TYPE_FORM_URL_ENCODED:
150             oauth_body_hash = base64.b64encode(hashlib.sha1(body).digest())
151             oauth_params.append(("oauth_body_hash", oauth_body_hash.decode("utf-8")))
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.

Test ID: B303

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/authlib/oauth1/rfc5849/rsa.py](#)

Line number: 15

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
14         )
15         return key.sign(msg, padding.PKCS1v15(), hashes.SHA1())
16
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.

Test ID: B303

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/authlib/oauth1/rfc5849/rsa.py](#)

Line number: 21

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
20         try:
21             key.verify(sig, msg, padding.PKCS1v15(), hashes.SHA1())
22             return True
```

trojansource: A Python source file contains bidirectional control characters ('\u202e').

Test ID: B613

Severity: HIGH

Confidence: MEDIUM

CWE: [CWE-838](#)

File: [./venv/lib/python3.9/site-packages/bandit/plugins/trojansource.py](#)

Line number: 22

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b613_trojansource.html

```
21         3         access_level = "user"
22         4         if access_level != 'none' and access_level != 'user': # Check if admin
23         5         print("You are an admin.\n")
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-377](#)

File: [./venv/lib/python3.9/site-packages/boltions/fileutils.py](#)

Line number: 703

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
702     if __name__ == '__main__':
703         with atomic_save('/tmp/final.txt') as f:
704             f.write('rofl')
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/boltions/funcutils.py](#)

Line number: 1035

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
1034         code = compile(src, filename, 'single')
1035         exec(code, execdct)
1036     except Exception:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/boltions/namedutils.py](#)

Line number: 64

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
63     def exec_(code, global_env):
64         exec("exec code in global_env")
65     except NameError:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/boltions/namedutils.py](#)

Line number: 68

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
67     def exec_(code, global_env):
68         exec(code, global_env)
69
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/cffi/recompiler.py](#)

Line number: 78

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
77     def as_python_expr(self):
78         flags = eval(self.flags, G_FLAGS)
79         fields_expr = [c_field.as_field_python_expr()
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/cffi/setuptools_ext.py](#)

Line number: 26

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
25         code = compile(src, filename, 'exec')
26         exec(code, glob, glob)
27
```

subprocess_popen_with_shell_equals_true: subprocess call with shell=True identified, security issue.

Test ID: B602

Severity: HIGH

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/click/_termui_impl.py](#)

Line number: 429

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b602_subprocess_popen_with_shell_equals_true.html

```
428         [cmd_absolute],
429         shell=True,
430         stdin=subprocess.PIPE,
431         env=env,
432         errors="replace",
433         text=True,
434     )
435     assert c.stdin is not None
436     try:
437         for text in generator:
```

subprocess_popen_with_shell_equals_true: subprocess call with shell=True identified, security issue.

Test ID: B602

Severity: HIGH

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/click/_termui_impl.py](#)

Line number: 552

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b602_subprocess_popen_with_shell_equals_true.html

```
551         try:
552             c = subprocess.Popen(f'{editor} "{filename}"', env=envIRON, shell=True)
553             exit_code = c.wait()
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.

Test ID: B303

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/cryptography/hazmat/_oid.py](#)

Line number: 128

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
127     _SIG_OIDS_TO_HASH: dict[ObjectIdentifier, hashes.HashAlgorithm | None] = {
128         SignatureAlgorithmOID.RSA_WITH_MD5: hashes.MD5(),
129         SignatureAlgorithmOID.RSA_WITH_SHA1: hashes.SHA1(),
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.

Test ID: B303

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/cryptography/hazmat/_oid.py](#)

Line number: 129

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
128         SignatureAlgorithmOID.RSA_WITH_MD5: hashes.MD5(),
129         SignatureAlgorithmOID.RSA_WITH_SHA1: hashes.SHA1(),
130         SignatureAlgorithmOID._RSA_WITH_SHA1: hashes.SHA1(),
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.

Test ID: B303

Severity: MEDIUM

Confidence: HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/cryptography/hazmat/_oid.py](#)**Line number:** 130**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
129         SignatureAlgorithmOID.RSA_WITH_SHA1: hashes.SHA1(),
130         SignatureAlgorithmOID._RSA_WITH_SHA1: hashes.SHA1(),
131         SignatureAlgorithmOID.RSA_WITH_SHA224: hashes.SHA224(),
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.**Test ID:** B303**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/cryptography/hazmat/_oid.py](#)**Line number:** 139**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
138         SignatureAlgorithmOID.RSA_WITH_SHA3_512: hashes.SHA3_512(),
139         SignatureAlgorithmOID.ECDSA_WITH_SHA1: hashes.SHA1(),
140         SignatureAlgorithmOID.ECDSA_WITH_SHA224: hashes.SHA224(),
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.**Test ID:** B303**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/cryptography/hazmat/_oid.py](#)**Line number:** 148**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
147         SignatureAlgorithmOID.ECDSA_WITH_SHA3_512: hashes.SHA3_512(),
148         SignatureAlgorithmOID.DSA_WITH_SHA1: hashes.SHA1(),
149         SignatureAlgorithmOID.DSA_WITH_SHA224: hashes.SHA224(),
```

blacklist: Use of insecure cipher mode cryptography.hazmat.primitives.ciphers.modes.ECB.**Test ID:** B305**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/cryptography/hazmat/primitives/keywrap.py](#)**Line number:** 21**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b304-b305-ciphers-and-modes

```
20         # RFC 3394 Key Wrap - 2.2.1 (index method)
21         encryptor = Cipher(AES(wrapping_key), ECB()).encryptor()
22         n = len(r)
```

blacklist: Use of insecure cipher mode cryptography.hazmat.primitives.ciphers.modes.ECB.**Test ID:** B305**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/cryptography/hazmat/primitives/keywrap.py](#)**Line number:** 64**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b304-b305-ciphers-and-modes

```
63         # Implement RFC 3394 Key Unwrap - 2.2.2 (index method)
64         decryptor = Cipher(AES(wrapping_key), ECB()).decryptor()
65         n = len(r)
```

blacklist: Use of insecure cipher mode cryptography.hazmat.primitives.ciphers.modes.ECB.**Test ID:** B305**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/cryptography/hazmat/primitives/keywrap.py](#)**Line number:** 97**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b304-b305-ciphers-and-modes

```
96         # RFC 5649 - 4.1 - exactly 8 octets after padding
97         encryptor = Cipher(AES(wrapping_key), ECB()).encryptor()
98         b = encryptor.update(aiv + key_to_wrap)
```

blacklist: Use of insecure cipher mode cryptography.hazmat.primitives.ciphers.modes.ECB.

Test ID: B305

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/cryptography/hazmat/primitives/keywrap.py](#)

Line number: 119

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b304-b305-ciphers-and-modes

```
118             # RFC 5649 - 4.2 - exactly two 64-bit blocks
119             decryptor = Cipher(AES(wrapping_key), ECB()).decryptor()
120             out = decryptor.update(wrapped_key)
```

blacklist: Use of insecure MD2, MD4, MD5, or SHA1 hash function.

Test ID: B303

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/cryptography/hazmat/primitives/serialization/ssh.py](#)

Line number: 1007

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b303-md5

```
1006             if self._inner_sig_type == _SSH_RSA:
1007                 hash_alg = hashes.SHA1()
1008             elif self._inner_sig_type == _SSH_RSA_SHA256:
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/cryptography/x509/extensions.py](#)

Line number: 72

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
71
72         return hashlib.sha1(data).digest()
73
```

blacklist: Using xmlrpc to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpc and mitigate XML vulnerabilities.

Test ID: B411

Severity: HIGH

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/defusedxml/_init_.py](#)

Line number: 37

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpc

```
36         from . import expatreader
37         from . import xmlrpc
38
```

blacklist: Using xml.dom.pulldom.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.dom.pulldom.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B319

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/defusedxml/pulldom.py](#)

Line number: 30

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-pulldom

```
29         parser.forbid_external = forbid_external
30         return _parse(stream_or_string, parser, bufsize)
31
```

blacklist: Using xml.dom.pulldom.parseString to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.dom.pulldom.parseString with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B319

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/defusedxml/pulldom.py](#)

Line number: 41

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-pulldom

```
40         parser.forbid_external = forbid_external
41     return _parseString(string, parser)
```

blacklist: Using ExpatParser to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411

Severity: HIGH

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/defusedxml/xmlrpc.py](#)

Line number: 18

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
17         __origin__ = "xmlrpc.client"
18     from xmlrpc.client import ExpatParser
19     from xmlrpc import client as xmlrpc_client
```

blacklist: Using client to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411

Severity: HIGH

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/defusedxml/xmlrpc.py](#)

Line number: 19

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
18     from xmlrpc.client import ExpatParser
19     from xmlrpc import client as xmlrpc_client
20     from xmlrpc import server as xmlrpc_server
```

blacklist: Using server to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411

Severity: HIGH

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/defusedxml/xmlrpc.py](#)

Line number: 20

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
19     from xmlrpc import client as xmlrpc_client
20     from xmlrpc import server as xmlrpc_server
21     from xmlrpc.client import gzip_decode as _orig_gzip_decode
```

blacklist: Using gzip_decode to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411

Severity: HIGH

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/defusedxml/xmlrpc.py](#)

Line number: 21

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
20     from xmlrpc import server as xmlrpc_server
21     from xmlrpc.client import gzip_decode as _orig_gzip_decode
22     from xmlrpc.client import GzipDecodedResponse as _OrigGzipDecodedResponse
```

blacklist: Using GzipDecodedResponse to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411

Severity: HIGH

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/defusedxml/xmlrpc.py](#)

Line number: 22

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
21     from xmlrpc.client import gzip_decode as _orig_gzip_decode
22     from xmlrpc.client import GzipDecodedResponse as _OrigGzipDecodedResponse
23     else:
```

blacklist: Using ExpatParser to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411

Severity: HIGH
Confidence: HIGH
CWE: [CWE-20](#)
File: [./venv/lib/python3.9/site-packages/defusedxml/xmlrpc.py](#)
Line number: 25
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpccli

```
24         __origin__ = "xmlrpclib"
25         from xmlrpclib import ExpatParser
26         import xmlrpclib as xmlrpc_client
```

blacklist: Using xmlrpclib to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411
Severity: HIGH
Confidence: HIGH
CWE: [CWE-20](#)
File: [./venv/lib/python3.9/site-packages/defusedxml/xmlrpc.py](#)
Line number: 26
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpccli

```
25         from xmlrpclib import ExpatParser
26         import xmlrpclib as xmlrpc_client
27
```

blacklist: Using gzip_decode to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411
Severity: HIGH
Confidence: HIGH
CWE: [CWE-20](#)
File: [./venv/lib/python3.9/site-packages/defusedxml/xmlrpc.py](#)
Line number: 29
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpccli

```
28         xmlrpc_server = None
29         from xmlrpclib import gzip_decode as _orig_gzip_decode
30         from xmlrpclib import GzipDecodedResponse as _OrigGzipDecodedResponse
```

blacklist: Using GzipDecodedResponse to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411
Severity: HIGH
Confidence: HIGH
CWE: [CWE-20](#)
File: [./venv/lib/python3.9/site-packages/defusedxml/xmlrpc.py](#)
Line number: 30
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpccli

```
29         from xmlrpclib import gzip_decode as _orig_gzip_decode
30         from xmlrpclib import GzipDecodedResponse as _OrigGzipDecodedResponse
31
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False

Test ID: B324
Severity: HIGH
Confidence: HIGH
CWE: [CWE-327](#)
File: [./venv/lib/python3.9/site-packages/face/sinter.py](#)
Line number: 139
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
138     def compile_code(code_str, name, env=None, verbose=_VERBOSE):
139         code_hash = hashlib.sha1(code_str.encode('utf8')).hexdigest()[:16]
140         unique_filename = "<sinter generated %s %s>" % (name, code_hash)
```

exec_used: Use of exec detected.

Test ID: B102
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-78](#)
File: [./venv/lib/python3.9/site-packages/face/sinter.py](#)
Line number: 145
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
144         if PY3:
145             exec(code, env)
```



```
146         else:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/face/sinter.py](#)

Line number: 147

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
146         else:
147             exec("exec code in env")
148
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/glom/cli.py](#)

Line number: 222

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
221         if PY3:
222             exec(code, env)
223         else:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/glom/cli.py](#)

Line number: 224

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
223         else:
224             exec("exec code in env")
225
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/glom/test/test_basic.py](#)

Line number: 251

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
250             ).star(args='args2', kwargs='kwargs')
251             assert repr(eval(repr(repr_spec), locals(), globals())) == repr(repr_spec)
252
```

blacklist: Using xml.etree.cElementTree.fromstring to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.cElementTree.fromstring with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B313

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/glom/test/test_basic.py](#)

Line number: 414

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-celementtree

```
413         etree2tuples = Fill(Ref('ElementTree', (T.tag, Iter(Ref('ElementTree')).all()))))
414         etree = ElementTree.fromstring(''
415         <html>
416         <head>
417             <title>the title</title>
418         </head>
419         <body id="the-body">
420             <p>A paragraph</p>
421         </body>
422         </html>'')
423         glom(etree, etree2dicts)
```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/glom/test/test_match.py](#)

Line number: 235

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
234         assert repr(And(M == 1, float)) == "(M == 1) & float"
235         assert repr(eval(repr(And(M == 1, float)))) == "(M == 1) & float"
236
```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/glom/test/test_mutation.py](#)

Line number: 36

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
35         assert repr(assign_spec) == "Assign(T.a, 1, missing=dict)"
36         assert repr(assign_spec) == repr(eval(repr(assign_spec)))
37
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/glom/test/test_path_and_t.py](#)

Line number: 98

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
97
98         rt_spec = pickle.loads(pickle.dumps(spec))
99         assert repr(spec) == repr(rt_spec)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/glom/test/test_path_and_t.py](#)

Line number: 104

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
103         s_spec = S.attribute
104         assert repr(s_spec) == repr(pickle.loads(pickle.dumps(s_spec)))
105
```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/glom/test/test_snippets.py](#)

Line number: 58

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
57         return # maybe in the future
58         eval(code, SNIPPETS_GLOBALS)
59
```

hashlib: Use of weak SHA1 hash for security. Consider `usedforsecurity=False`

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/google/protobuf/proto_builder.py](#)

Line number: 68

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
67         # proto files.
68         fields_hash = hashlib.sha1()
```

```
69         for f_name, f_type in field_items:
```

django_extra_used: Use of extra potential SQL attack vector.

Test ID: B610

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-89](#)

File: [./venv/lib/python3.9/site-packages/httpcore/_backends/anyio.py](#)

Line number: 84

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b610_django_extra_used.html

```
83             if info == "ssl_object":
84                 return self._stream.extra(anyio.streams.tls.TLSAttribute.ssl_object, None)
85             if info == "client_addr":
```

django_extra_used: Use of extra potential SQL attack vector.

Test ID: B610

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-89](#)

File: [./venv/lib/python3.9/site-packages/httpcore/_backends/anyio.py](#)

Line number: 86

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b610_django_extra_used.html

```
85             if info == "client_addr":
86                 return self._stream.extra(anyio.abc.SocketAttribute.local_address, None)
87             if info == "server_addr":
```

django_extra_used: Use of extra potential SQL attack vector.

Test ID: B610

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-89](#)

File: [./venv/lib/python3.9/site-packages/httpcore/_backends/anyio.py](#)

Line number: 88

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b610_django_extra_used.html

```
87             if info == "server_addr":
88                 return self._stream.extra(anyio.abc.SocketAttribute.remote_address, None)
89             if info == "socket":
```

django_extra_used: Use of extra potential SQL attack vector.

Test ID: B610

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-89](#)

File: [./venv/lib/python3.9/site-packages/httpcore/_backends/anyio.py](#)

Line number: 90

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b610_django_extra_used.html

```
89             if info == "socket":
90                 return self._stream.extra(anyio.abc.SocketAttribute.raw_socket, None)
91             if info == "is_readable":
```

django_extra_used: Use of extra potential SQL attack vector.

Test ID: B610

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-89](#)

File: [./venv/lib/python3.9/site-packages/httpcore/_backends/anyio.py](#)

Line number: 92

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b610_django_extra_used.html

```
91             if info == "is_readable":
92                 sock = self._stream.extra(anyio.abc.SocketAttribute.raw_socket, None)
93                 return is_socket_readable(sock)
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/httpx/_auth.py](#)

Line number: 309

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
308
309         return hashlib.sha1(s).hexdigest()[:16].encode()
310
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/jinja2/bccache.py](#)

Line number: 73

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
72         # the source code of the file changed, we need to reload
73         checksum = pickle.load(f)
74         if self.checksum != checksum:
```

blacklist: Deserialization with the marshal module is possibly dangerous.

Test ID: B302

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/jinja2/bccache.py](#)

Line number: 79

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b302-marshal

```
78         try:
79             self.code = marshal.load(f)
80         except (EOFError, ValueError, TypeError):
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/jinja2/bccache.py](#)

Line number: 156

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
155         """Returns the unique hash key for this template name."""
156         hash = sha1(name.encode("utf-8"))
157
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/jinja2/bccache.py](#)

Line number: 165

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
164         """Returns a checksum for the source."""
165         return sha1(source.encode("utf-8")).hexdigest()
166
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/jinja2/debug.py](#)

Line number: 145

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
144         try:
145             exec(code, globals, locals)
146         except BaseException:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/jinja2/environment.py](#)

Line number: 1228**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
1227         namespace = {"environment": environment, "__file__": code.co_filename}
1228         exec(code, namespace)
1229         rv = cls._from_namespace(environment, namespace, globals)
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.**Test ID:** B704**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-79](#)**File:** [./venv/lib/python3.9/site-packages/jinja2/environment.py](#)**Line number:** 1544**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
1543         def __html__(self) -> Markup:
1544             return Markup(concat(self._body_stream))
1545
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.**Test ID:** B704**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-79](#)**File:** [./venv/lib/python3.9/site-packages/jinja2/ext.py](#)**Line number:** 176**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
175         if __context.eval_ctx.autoescape:
176             rv = Markup(rv)
177         # Always treat as a format string, even if there are no
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.**Test ID:** B704**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-79](#)**File:** [./venv/lib/python3.9/site-packages/jinja2/ext.py](#)**Line number:** 197**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
196         if __context.eval_ctx.autoescape:
197             rv = Markup(rv)
198         # Always treat as a format string, see gettext comment above.
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.**Test ID:** B704**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-79](#)**File:** [./venv/lib/python3.9/site-packages/jinja2/ext.py](#)**Line number:** 213**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
212         if __context.eval_ctx.autoescape:
213             rv = Markup(rv)
214
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.**Test ID:** B704**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-79](#)**File:** [./venv/lib/python3.9/site-packages/jinja2/ext.py](#)**Line number:** 238**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
237         if __context.eval_ctx.autoescape:
238             rv = Markup(rv)
239
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.**Test ID:** B704**Severity:** MEDIUM**Confidence:** HIGH

CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/filters.py](#)
Line number: 316
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
315         if eval_ctx.autoescape:
316             rv = Markup(rv)
317
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.

Test ID: B704

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-79](#)

File: [./venv/lib/python3.9/site-packages/jinja2/filters.py](#)

Line number: 820

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
819         if eval_ctx.autoescape:
820             rv = Markup(rv)
821
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.

Test ID: B704

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-79](#)

File: [./venv/lib/python3.9/site-packages/jinja2/filters.py](#)

Line number: 851

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
850         if isinstance(s, Markup):
851             indention = Markup(indention)
852             newline = Markup(newline)
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.

Test ID: B704

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-79](#)

File: [./venv/lib/python3.9/site-packages/jinja2/filters.py](#)

Line number: 852

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
851             indention = Markup(indention)
852             newline = Markup(newline)
853
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.

Test ID: B704

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-79](#)

File: [./venv/lib/python3.9/site-packages/jinja2/filters.py](#)

Line number: 1056

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
1055
1056         return Markup(str(value)).striptags()
1057
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.

Test ID: B704

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-79](#)

File: [./venv/lib/python3.9/site-packages/jinja2/filters.py](#)

Line number: 1377

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
1376         """
1377         return Markup(value)
1378
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH
Confidence: HIGH
CWE: [CWE-327](#)
File: [./venv/lib/python3.9/site-packages/jinja2/loaders.py](#)
Line number: 661
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
660         def get_template_key(name: str) -> str:
661             return "tmpl_" + sha1(name.encode("utf-8")).hexdigest()
662
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.
Test ID: B704
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/nodes.py](#)
Line number: 619
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
618         if eval_ctx.autoescape:
619             return Markup(self.data)
620         return self.data
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.
Test ID: B704
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/nodes.py](#)
Line number: 1091
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
1090         eval_ctx = get_eval_context(self, eval_ctx)
1091         return Markup(self.expr.as_const(eval_ctx))
1092
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.
Test ID: B704
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/nodes.py](#)
Line number: 1112
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
1111         if eval_ctx.autoescape:
1112             return Markup(expr)
1113         return expr
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.
Test ID: B704
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/runtime.py](#)
Line number: 375
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
374         if self._context.eval_ctx.autoescape:
375             return Markup(rv)
376
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.
Test ID: B704
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/runtime.py](#)
Line number: 389
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
388         if self._context.eval_ctx.autoescape:
389             return Markup(rv)
390
```


markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.
Test ID: B704
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/runtime.py](#)
Line number: 776
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
775         if autoescape:
776             return Markup(rv)
777
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.
Test ID: B704
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/runtime.py](#)
Line number: 787
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
786         if autoescape:
787             rv = Markup(rv)
788
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.
Test ID: B704
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/utils.py](#)
Line number: 403
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
402         return "\n\n".join(result)
403     return markupsafe.Markup(
404         "\n".join("<p>{markupsafe.escape(x)}</p>" for x in result)
405     )
406
```

markupsafe_markup_xss: Potential XSS with ``markupsafe.Markup`` detected. Do not use ``Markup`` on untrusted data.
Test ID: B704
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-79](#)
File: [./venv/lib/python3.9/site-packages/jinja2/utils.py](#)
Line number: 668
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b704_markupsafe_markup_xss.html

```
667
668     return markupsafe.Markup(
669         dumps(obj, **kwargs)
670         .replace("<", "\\u003c")
671         .replace(">", "\\u003e")
672         .replace("&", "\\u0026")
673         .replace("'", "\\u0027")
674     )
675
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM
CWE: [CWE-377](#)
File: [./venv/lib/python3.9/site-packages/joblib/_memmapping_reducer.py](#)
Line number: 40
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
39     # as the default folder to dump big arrays to share with subprocesses.
40     SYSTEM_SHARED_MEM_FS = "/dev/shm"
41
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.
Test ID: B301

Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-502](#)
File: [./venv/lib/python3.9/site-packages/joblib/externals/loky/backend/popen_loky_posix.py](#)
Line number: 174
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
173         try:
174             prep_data = pickle.load(from_parent)
175             spawn.prepare(prepare_data)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.
Test ID: B301

Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-502](#)
File: [./venv/lib/python3.9/site-packages/joblib/externals/loky/backend/popen_loky_posix.py](#)
Line number: 176
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
175             spawn.prepare(prepare_data)
176             process_obj = pickle.load(from_parent)
177         finally:
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.
Test ID: B301

Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-502](#)
File: [./venv/lib/python3.9/site-packages/joblib/externals/loky/backend/popen_loky_win32.py](#)
Line number: 166
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
165         try:
166             preparation_data = load(from_parent)
167             spawn.prepare(preparation_data, parent_sentinel)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.
Test ID: B301

Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-502](#)
File: [./venv/lib/python3.9/site-packages/joblib/externals/loky/backend/popen_loky_win32.py](#)
Line number: 168
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
167             spawn.prepare(preparation_data, parent_sentinel)
168             self = load(from_parent)
169         finally:
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.
Test ID: B301

Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-502](#)
File: [./venv/lib/python3.9/site-packages/joblib/externals/loky/backend/popen_loky_win32.py](#)
Line number: 175
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
174         # The array contained Python objects. We need to unpickle the data.
175         array = pickle.load(unpickler.file_handle)
176     else:
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM
CWE: [CWE-377](#)
File: [./venv/lib/python3.9/site-packages/joblib/test/common.py](#)
Line number: 78
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
77     with_dev_shm = skipif(
78         not os.path.exists("/dev/shm"),
79         reason="This test requires a large /dev/shm shared memory fs.",
```

hashlib: Use of weak MD5 hash for security. Consider `usedforsecurity=False`

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_hashing.py](#)

Line number: 228

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
227         def md5_hash(x):
228             return hashlib.md5(memoryview(x)).hexdigest()
229
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_hashing.py](#)

Line number: 350

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
349         b = {string: "bar"}
350         c = pickle.loads(pickle.dumps(b))
351         assert hash([a, b]) == hash([a, c])
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_hashing.py](#)

Line number: 370

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
369
370         dt1_roundtripped = pickle.loads(pickle.dumps(dt1))
371         assert dt1 is not dt1_roundtripped
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_hashing.py](#)

Line number: 383

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
382
383         complex_dt1_roundtripped = pickle.loads(pickle.dumps(complex_dt1))
384         assert complex_dt1_roundtripped is not complex_dt1
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-377](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memmapping.py](#)

Line number: 937

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
936         pool_temp_folder = p._temp_folder
937         folder_prefix = "/dev/shm/joblib_memmapping_folder_"
938         assert pool_temp_folder.startswith(folder_prefix)
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-377](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memmapping.py](#)

Line number: 993

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
992         pool_temp_folder = p._temp_folder
993         assert not pool_temp_folder.startswith("/dev/shm")
```

994 finally:

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 164

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
163         my_locals = {}
164         exec(
165             compile(
166                 textwrap.dedent(ipython_cell_source),
167                 filename=ipython_cell_id,
168                 mode="exec",
169             ),
170             # TODO when Python 3.11 is the minimum supported version, use
171             # locals=my_locals instead of passing globals and locals in the
172             # next two lines as positional arguments
173             None,
174             my_locals,
175         )
176         f = my_locals["f"]
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 334

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
333         memory = Memory(location=tmpdir.strpath, verbose=0)
334         a1 = eval("lambda x: x")
335         a1 = memory.cache(a1)
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 336

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
335         a1 = memory.cache(a1)
336         b1 = eval("lambda x: x+1")
337         b1 = memory.cache(b1)
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 368

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
367
368         m = eval("lambda x: x")
369         mm = memory.cache(m)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 598

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
597
598         h = pickle.loads(pickle.dumps(g))
```

599

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 604

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
603         assert output == h.store_backend.load_item([h.func_id, args_id])
604         memory2 = pickle.loads(pickle.dumps(memory))
605         assert memory.store_backend.location == memory2.store_backend.location
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 609

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
608         memory = Memory(location=None, verbose=0)
609         pickle.loads(pickle.dumps(memory))
610         g = memory.cache(f)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 611

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
610         g = memory.cache(f)
611         gp = pickle.loads(pickle.dumps(g))
612         gp(1)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 704

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
703         with open(filename, "rb") as fp:
704             result2 = pickle.load(fp)
705         assert result2.get() == result.get()
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-377](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 1219

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
1218         with raises(TypeError) as excinfo:
1219             Memory(location="/tmp/joblib", backend="unknown")
1220         excinfo.match(r"Unknown location*")
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 1340

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
1339     memorized_result_pickle = pickle.dumps(memorized_result)
1340     memorized_result_loads = pickle.loads(memorized_result_pickle)
1341
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 1374

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
1373
1374     memory_reloaded = pickle.loads(pickle.dumps(memory))
1375
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 1387

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
1386
1387     func_cached_reloaded = pickle.loads(pickle.dumps(func_cached))
1388
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_memory.py](#)

Line number: 1400

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
1399     memorized_result = func_cached.call_and_shelve(1)
1400     memorized_result_reloaded = pickle.loads(pickle.dumps(memorized_result))
1401
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/joblib/test/test_store_backends.py](#)

Line number: 33

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
32         with open(filename, "rb") as f:
33             reloaded = cpickle.load(f)
34         break
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.

Test ID: B310

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/jsonschema/validators.py](#)

Line number: 113

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
112     request = Request(uri, headers=headers) # noqa: S310
113     with urlopen(request) as response: # noqa: S310
114         warnings.warn(
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.

Test ID: B310

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/jsonschema/validators.py](#)

Line number: 1228**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```

1227             # Otherwise, pass off to urllib and assume utf-8
1228             with urlopen(uri) as url: # noqa: S310
1229                 result = json.loads(url.read().decode("utf-8"))

```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.**Test ID:** B301**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-502](#)**File:** [./venv/lib/python3.9/site-packages/nltk/app/chartparser_app.py](#)**Line number:** 815**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```

814         with open(filename, "rb") as infile:
815             chart = pickle.load(infile)
816             name = os.path.basename(filename)

```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.**Test ID:** B301**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-502](#)**File:** [./venv/lib/python3.9/site-packages/nltk/app/chartparser_app.py](#)**Line number:** 2272**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```

2271         with open(filename, "rb") as infile:
2272             chart = pickle.load(infile)
2273             self._chart = chart

```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.**Test ID:** B301**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-502](#)**File:** [./venv/lib/python3.9/site-packages/nltk/app/chartparser_app.py](#)**Line number:** 2310**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```

2309         with open(filename, "rb") as infile:
2310             grammar = pickle.load(infile)
2311         else:

```

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called**Test ID:** B314**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-20](#)**File:** [./venv/lib/python3.9/site-packages/nltk/chunk/named_entity.py](#)**Line number:** 236**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```

235         with open(annfile) as infile:
236             xml = ET.parse(infile).getroot()
237             for entity in xml.findall("document/entity"):

```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/nltk/chunk/named_entity.py](#)**Line number:** 351**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```

350         fmt = self._fmt
351         save_maxent_params(wgt, mpg, lab, aon, tab_dir=f"/tmp/english_ace_{fmt}")
352

```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM

Confidence: MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/nltk/classify/maxent.py](#)**Line number:** 1586**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

1585

1586 def save_maxent_params(wgt, mpg, lab, aon, tab_dir="/tmp"):

1587

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/nltk/classify/weka.py](#)**Line number:** 375**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

374 def make_classifier(featuresets):

375 return WekaClassifier.train("/tmp/name.model", featuresets, "C4.5")

376

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.**Test ID:** B307**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/nltk/collocations.py](#)**Line number:** 398**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

397 try:

398 scorer = eval("BigramAssocMeasures." + sys.argv[1])

399 except IndexError:

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.**Test ID:** B307**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/nltk/collocations.py](#)**Line number:** 402**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

401 try:

402 compare_scorer = eval("BigramAssocMeasures." + sys.argv[2])

403 except IndexError:

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called**Test ID:** B314**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-20](#)**File:** [./venv/lib/python3.9/site-packages/nltk/corpus/reader/bcp47.py](#)**Line number:** 40**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

39 self.subdiv = self.subdiv_dict(

40 et.parse(fp).iterfind("localeDisplayNames/subdivisions/subdivision")

41)

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called**Test ID:** B314**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-20](#)**File:** [./venv/lib/python3.9/site-packages/nltk/corpus/reader/nombank.py](#)**Line number:** 111**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

110 with self.abspath(framefile).open() as fp:

111 etree = ElementTree.parse(fp).getroot()

112 for roleset in etree.findall("predicate/roleset"):

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/nltk/corpus/reader/nombank.py](#)

Line number: 134

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```
133             with self.abspath(framefile).open() as fp:
134                 etree = ElementTree.parse(fp).getroot()
135             rsets.append(etree.findall("predicate/roleset"))
```

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/nltk/corpus/reader/propbank.py](#)

Line number: 107

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```
106             with self.abspath(framefile).open() as fp:
107                 etree = ElementTree.parse(fp).getroot()
108             for roleset in etree.findall("predicate/roleset"):
```

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/nltk/corpus/reader/propbank.py](#)

Line number: 130

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```
129             with self.abspath(framefile).open() as fp:
130                 etree = ElementTree.parse(fp).getroot()
131             rsets.append(etree.findall("predicate/roleset"))
```

blacklist: Using xml.etree.ElementTree.fromstring to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.fromstring with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/nltk/corpus/reader/senseval.py](#)

Line number: 114

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```
113             xml_block = _fixXML(xml_block)
114             inst = ElementTree.fromstring(xml_block)
115             return [self._parse_instance(inst, lexelt)]
```

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/nltk/corpus/reader/xmldocs.py](#)

Line number: 45

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```
44             with self.abspath(fileid).open() as fp:
45                 elt = ElementTree.parse(fp).getroot()
46             # If requested, wrap it.
```

blacklist: Using xml.etree.ElementTree.fromstring to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.fromstring with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/nltk/corpus/reader/xmldocs.py](#)

Line number: 393**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```

392         elt_handler(
393             ElementTree.fromstring(elt.encode("ascii", "xmlcharrefreplace")),
394             context,

```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.**Test ID:** B310**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-22](#)**File:** [./venv/lib/python3.9/site-packages/nltk/data.py](#)**Line number:** 967**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```

966         else:
967             return urlopen(resource_url)
968

```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.**Test ID:** B307**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/nltk/decorators.py](#)**Line number:** 136**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```

135         src = "lambda %(signature)s: _wrapper_((%(signature)s))" % infodict
136         funcopy = eval(src, dict(_wrapper_=wrapper))
137         return update_wrapper(funcopy, model, infodict)

```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.**Test ID:** B307**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/nltk/decorators.py](#)**Line number:** 204**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```

203         # import sys; print >> sys.stderr, src # for debugging purposes
204         dec_func = eval(src, dict(_func_=func, _call_=caller))
205         return update_wrapper(dec_func, func, infodict)

```

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called**Test ID:** B314**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-20](#)**File:** [./venv/lib/python3.9/site-packages/nltk/downloader.py](#)**Line number:** 268**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```

267         if isinstance(xml, str):
268             xml = ElementTree.parse(xml)
269         for key in xml.attrib:

```

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called**Test ID:** B314**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-20](#)**File:** [./venv/lib/python3.9/site-packages/nltk/downloader.py](#)**Line number:** 308**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```

307         if isinstance(xml, str):
308             xml = ElementTree.parse(xml)
309         for key in xml.attrib:

```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.**Test ID:** B310

Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-22](#)
File: [./venv/lib/python3.9/site-packages/nltk/downloader.py](#)
Line number: 694
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
693         try:
694             infile = urlopen(info.url)
695             with open(filepath, "wb") as outfile:
```

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-20](#)
File: [./venv/lib/python3.9/site-packages/nltk/downloader.py](#)
Line number: 937
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```
936         self._index = nltk.internals.ElementWrapper(
937             ElementTree.parse(urlopen(self._url)).getroot()
938         )
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.

Test ID: B310
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-22](#)
File: [./venv/lib/python3.9/site-packages/nltk/downloader.py](#)
Line number: 937
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
936         self._index = nltk.internals.ElementWrapper(
937             ElementTree.parse(urlopen(self._url)).getroot()
938         )
```

hashlib: Use of weak MD5 hash for security. Consider usedforsecurity=False

Test ID: B324
Severity: HIGH
Confidence: HIGH
CWE: [CWE-327](#)
File: [./venv/lib/python3.9/site-packages/nltk/downloader.py](#)
Line number: 2245
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
2244     def _md5_hexdigest(fp):
2245         md5_digest = md5()
2246         while True:
```

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-20](#)
File: [./venv/lib/python3.9/site-packages/nltk/downloader.py](#)
Line number: 2450
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```
2449         xmlfile = os.path.join(dirname, filename)
2450         yield ElementTree.parse(xmlfile).getroot()
2451
```

blacklist: Using xml.etree.ElementTree.parse to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.parse with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-20](#)
File: [./venv/lib/python3.9/site-packages/nltk/downloader.py](#)
Line number: 2478
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```
2477         try:
2478             pkg_xml = ElementTree.parse(xmlfilename).getroot()
```

2479 except Exception as e:

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/nltk/internals.py](#)

Line number: 231

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
230         try:
231             return eval(s[start_position : match.end()]), match.end()
232         except ValueError as e:
```

blacklist: Using xml.etree.ElementTree.fromstring to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.fromstring with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called

Test ID: B314

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/nltk/internals.py](#)

Line number: 924

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```
923         if isinstance(etree, str):
924             etree = ElementTree.fromstring(etree)
925         self.__dict__["_etree"] = etree
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-377](#)

File: [./venv/lib/python3.9/site-packages/nltk/parse/featurechart.py](#)

Line number: 655

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
654
655         profile.run("for i in range(1): demo()", "/tmp/profile.out")
656         import pstats
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-377](#)

File: [./venv/lib/python3.9/site-packages/nltk/parse/featurechart.py](#)

Line number: 658

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
657
658         p = pstats.Stats("/tmp/profile.out")
659         p.strip_dirs().sort_stats("time", "cum").print_stats(60)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/nltk/parse/transitionparser.py](#)

Line number: 555

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
554         # First load the model
555         model = pickle.load(open(modelFile, "rb"))
556         operation = Transition(self._algorithm)
```

subprocess_popen_with_shell_equals_true: subprocess call with shell=True identified, security issue.

Test ID: B602

Severity: HIGH

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/nltk/sem/boxer.py](#)

Line number: 271

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b602_subprocess_popen_with_shell_equals_true.html

```

270         p = subprocess.Popen(
271             cmd, stdout=subprocess.PIPE, stderr=subprocess.PIPE, shell=True
272         )
273         stdout, stderr = p.communicate()
274

```

hardcoded_sql_expressions: Possible SQL injection vector through string-based query construction.

Test ID: B608

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-89](#)

File: [./venv/lib/python3.9/site-packages/nltk/sem/chat80.py](#)

Line number: 435

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b608_hardcoded_sql_expressions.html

```

434         for t in records:
435             cur.execute("insert into %s values (?, ?, ?)" % table_name, t)
436             if verbose:

```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/nltk/sem/chat80.py](#)

Line number: 615

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```

614         valuation = make_valuation(concepts, read=True)
615         db_out = shelve.open(db, "n")
616

```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/nltk/sem/chat80.py](#)

Line number: 635

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```

634         else:
635             db_in = shelve.open(db)
636             from nltk.sem import Valuation

```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/nltk/sem/util.py](#)

Line number: 274

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```

273         if options.model:
274             exec("import %s as model" % options.model)
275

```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/nltk/tbl/demo.py](#)

Line number: 256

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```

255         with open(cache_baseline_tagger) as print_rules:
256             baseline_tagger = pickle.load(print_rules)
257             print(f"Reloaded pickled tagger from {cache_baseline_tagger}")

```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)**File:** [./venv/lib/python3.9/site-packages/nltk/tbl/demo.py](#)**Line number:** 328**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```

327         with open(serialize_output) as print_rules:
328             brill_tagger_reloaded = pickle.load(print_rules)
329             print(f"Reloaded pickled tagger from {serialize_output}")

```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/nltk/tokenize/punkt.py](#)**Line number:** 1591**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```

1590         print("writing to /tmp/punkt.new...")
1591         with open("/tmp/punkt.new", "w") as outfile:
1592             for aug_tok in tokens:

```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/nltk/tokenize/punkt.py](#)**Line number:** 1754**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```

1753         def save_params(self):
1754             save_punkt_params(self._params, dir=f"/tmp/{self._lang}")
1755

```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/nltk/tokenize/punkt.py](#)**Line number:** 1774**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```

1773
1774     def save_punkt_params(params, dir="/tmp/punkt_tab"):
1775         from os import mkdir

```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.**Test ID:** B307**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/nltk/tokenize/texttiling.py](#)**Line number:** 451**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```

450         else:
451             w = eval("numpy." + window + "(window_len)")
452

```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.**Test ID:** B307**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/packaging/licenses/__init__.py](#)**Line number:** 100**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```

99         try:
100             invalid = eval(python_expression, globals(), locals())
101         except Exception:

```

exec_used: Use of exec detected.**Test ID:** B102

Severity: MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/peewee.py](#)**Line number:** 174**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
173         multi_types = (list, tuple, frozenset, set)
174         exec('def reraise(tp, value, tb=None): raise tp, value, tb')
175         def print_(s):
```

hashlib: Use of weak MD5 hash for security. Consider usedforsecurity=False**Test ID:** B324**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/peewee.py](#)**Line number:** 3045**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
3044         if len(constraint) > maxlen:
3045             name_hash = hashlib.md5(constraint.encode('utf-8')).hexdigest()
3046             constraint = '%s_%s' % (constraint[: (maxlen - 8)], name_hash[:7])
```

subprocess.Popen_with_shell_equals_true: subprocess call with shell=True identified, security issue.**Test ID:** B602**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/pip/_internal/commands/configuration.py](#)**Line number:** 247**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b602_subprocess_popen_with_shell_equals_true.html

```
246         try:
247             subprocess.check_call(f'{editor} "{fname}"', shell=True)
248         except FileNotFoundError as e:
```

blacklist: Using xmlrpc.client to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.**Test ID:** B411**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-20](#)**File:** [./venv/lib/python3.9/site-packages/pip/_internal/commands/search.py](#)**Line number:** 7**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
6         import textwrap
7         import xmlrpc.client
8         from collections import OrderedDict
```

blacklist: Using xmlrpc.client to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.**Test ID:** B411**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-20](#)**File:** [./venv/lib/python3.9/site-packages/pip/_internal/network/xmlrpc.py](#)**Line number:** 5**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
4         import urllib.parse
5         import xmlrpc.client
6         from typing import TYPE_CHECKING
```

blacklist: Using _HostType to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.**Test ID:** B411**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-20](#)**File:** [./venv/lib/python3.9/site-packages/pip/_internal/network/xmlrpc.py](#)**Line number:** 13**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
12         if TYPE_CHECKING:
13             from xmlrpc.client import _HostType, _Marshallable
```

14

tarfile_unsafe_members: tarfile.extractall used without any validation. Please check and discard dangerous members.

Test ID: B202

Severity: HIGH

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/pip/_internal/utils/unpacking.py](#)

Line number: 245

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b202_tarfile_unsafe_members.html

244

```
245         tar.extractall(location, filter=pip_filter)
```

246

blacklist: Using xmlrpclib to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411

Severity: HIGH

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/distlib/compat.py](#)

Line number: 42

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
41         import httplib
```

```
42         import xmlrpclib
```

```
43         import Queue as queue
```

blacklist: Using xmlrpc.client to parse untrusted XML data is known to be vulnerable to XML attacks. Use defusedxml.xmlrpc.monkey_patch() function to monkey-patch xmlrpclib and mitigate XML vulnerabilities.

Test ID: B411

Severity: HIGH

Confidence: HIGH

CWE: [CWE-20](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/distlib/compat.py](#)

Line number: 81

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_imports.html#b411-import-xmlrpclib

```
80         import urllib.request as urllib2
```

```
81         import xmlrpc.client as xmlrpclib
```

```
82         import queue
```

tarfile_unsafe_members: tarfile.extractall used without any validation. Please check and discard dangerous members.

Test ID: B202

Severity: HIGH

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/distlib/util.py](#)

Line number: 1285

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b202_tarfile_unsafe_members.html

1284

```
1285         archive.extractall(dest_dir)
```

1286

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/packaging/licenses/_init_.py](#)

Line number: 100

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
99         try:
```

```
100             invalid = eval(python_expression, globals(), locals())
```

```
101         except Exception:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/pkg_resources/_init_.py](#)

Line number: 1714

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
1713         code = compile(source, script_filename, 'exec')
1714         exec(code, namespace, namespace)
1715     else:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/pkg_resources/_init_.py](#)

Line number: 1725

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
1724         script_code = compile(script_text, script_filename, 'exec')
1725         exec(script_code, namespace, namespace)
1726
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-377](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/platformdirs/unix.py](#)

Line number: 182

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
181         if not Path(path).exists():
182             path = f"/tmp/runtime-{getuid()}" # noqa: S108
183     else:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/pygments/formatters/_init_.py](#)

Line number: 103

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
102         with open(filename, 'rb') as f:
103             exec(f.read(), custom_namespace)
104         # Retrieve the class `formattername` from that namespace
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/pygments/lexers/_init_.py](#)

Line number: 154

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
153         with open(filename, 'rb') as f:
154             exec(f.read(), custom_namespace)
155         # Retrieve the class `lexername` from that namespace
```

hashlib: Use of weak MD5 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/requests/auth.py](#)

Line number: 148

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
147         x = x.encode("utf-8")
148         return hashlib.md5(x).hexdigest()
149
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/pip/_vendor/requests/auth.py](#)

Line number: 156**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```

155                 x = x.encode("utf-8")
156                 return hashlib.sha1(x).hexdigest()
157

```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False**Test ID:** B324**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/pip/_vendor/requests/auth.py](#)**Line number:** 205**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```

204
205         cnonce = hashlib.sha1(s).hexdigest()[:16]
206         if _algorithm == "MD5-SESS":

```

blacklist: Deserialization with the marshal module is possibly dangerous.**Test ID:** B302**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-502](#)**File:** [./venv/lib/python3.9/site-packages/pip/_vendor/rich/style.py](#)**Line number:** 475**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b302-marshal

```

474         """Get meta information (can not be changed after construction)."""
475         return {} if self._meta is None else cast(Dict[str, Any], loads(self._meta))
476

```

exec_used: Use of exec detected.**Test ID:** B102**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/pip/_vendor/urllib3/packages/six.py](#)**Line number:** 787**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```

786         _locs_ = _globs_
787         exec ("""exec _code_ in _globs_, _locs_""")
788

```

exec_used: Use of exec detected.**Test ID:** B102**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/pkg_resources/_init_.py](#)**Line number:** 1738**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```

1737         code = compile(source, script_filename, 'exec')
1738         exec(code, namespace, namespace)
1739     else:

```

exec_used: Use of exec detected.**Test ID:** B102**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/pkg_resources/_init_.py](#)**Line number:** 1749**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```

1748         script_code = compile(script_text, script_filename, 'exec')
1749         exec(script_code, namespace, namespace)
1750

```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM

CWE: [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/platformdirs/unix.py](#)**Line number:** 182**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```

181             if not Path(path).exists():
182                 path = f"/tmp/runtime-{getuid()}" # noqa: S108
183             else:

```

hashlib: Use of weak MD5 hash for security. Consider usedforsecurity=False**Test ID:** B324**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/playhouse/migrate.py](#)**Line number:** 178**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```

177         if len(index_name) > 64:
178             index_hash = hashlib.md5(index_name.encode('utf-8')).hexdigest()
179             index_name = '%s_%s' % (index_name[:56], index_hash[:7])

```

hardcoded_sql_expressions: Possible SQL injection vector through string-based query construction.**Test ID:** B608**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-89](#)**File:** [./venv/lib/python3.9/site-packages/playhouse/reflection.py](#)**Line number:** 388**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b608_hardcoded_sql_expressions.html

```

387         # Look up the actual column type for each column.
388         cursor = self.execute('SELECT * FROM `%s` LIMIT 1' % table)
389

```

blacklist: Using xml.etree.ElementTree.fromstring to parse untrusted XML data is known to be vulnerable to XML attacks. Replace xml.etree.ElementTree.fromstring with its defusedxml equivalent function or make sure defusedxml.defuse_stdlib() is called**Test ID:** B314**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-20](#)**File:** [./venv/lib/python3.9/site-packages/psutil/_psbsd.py](#)**Line number:** 276**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b313-b320-xml-bad-elementtree

```

275         s = s[: index + 9]
276         root = ElementTree.fromstring(s)
277         try:

```

blacklist: Use of insecure and deprecated function (mktemp).**Test ID:** B306**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/psutil/tests/_init_.py](#)**Line number:** 978**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b306-mktemp-q

```

977         while True:
978             name = tempfile.mktemp(prefix=TESTFN_PREFIX, suffix=suffix, dir=dir)
979             if not os.path.exists(name): # also include dirs

```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.**Test ID:** B307**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/psutil/tests/test_connections.py](#)**Line number:** 358**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```

357         tcp4_proc = self.pyrun(tcp4_template)
358         tcp4_addr = eval(wait_for_file(testfile, delete=True))
359         udp4_proc = self.pyrun(udp4_template)

```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/psutil/tests/test_connections.py](#)

Line number: 360

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
359         udp4_proc = self.pyrun(udp4_template)
360         udp4_addr = eval(wait_for_file(testfile, delete=True))
361         if supports_ipv6():
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/psutil/tests/test_connections.py](#)

Line number: 363

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
362         tcp6_proc = self.pyrun(tcp6_template)
363         tcp6_addr = eval(wait_for_file(testfile, delete=True))
364         udp6_proc = self.pyrun(udp6_template)
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/psutil/tests/test_connections.py](#)

Line number: 365

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
364         udp6_proc = self.pyrun(udp6_template)
365         udp6_addr = eval(wait_for_file(testfile, delete=True))
366         else:
```

hardcoded_bind_all_interfaces: Possible binding to all interfaces.

Test ID: B104

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-605](#)

File: [./venv/lib/python3.9/site-packages/psutil/tests/test_linux.py](#)

Line number: 952

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b104_hardcoded_bind_all_interfaces.html

```
951         else:
952             assert get_ipv4_broadcast(name) == '0.0.0.0'
953             elif addr.family == socket.AF_INET6:
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/psutil/tests/test_misc.py](#)

Line number: 248

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
247         a = pickle.dumps(ret)
248         b = pickle.loads(a)
249         assert ret == b
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/psutil/tests/test_misc.py](#)

Line number: 282

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
281
282         b = pickle.loads(
```

```
283         pickle.dumps(  
284             psutil.NoSuchProcess(pid=4567, name='name', msg='msg')  
285         )  
286     )  
287     assert isinstance(b, psutil.NoSuchProcess)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/psutil/tests/test_misc.py](#)

Line number: 292

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
291  
292     b = pickle.loads(  
293         pickle.dumps(  
294             psutil.ZombieProcess(pid=4567, name='name', ppid=42, msg='msg')  
295         )  
296     )  
297     assert isinstance(b, psutil.ZombieProcess)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/psutil/tests/test_misc.py](#)

Line number: 303

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
302  
303     b = pickle.loads(  
304         pickle.dumps(psutil.AccessDenied(pid=123, name='name', msg='msg'))  
305     )  
306     assert isinstance(b, psutil.AccessDenied)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/psutil/tests/test_misc.py](#)

Line number: 311

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
310  
311     b = pickle.loads(  
312         pickle.dumps(  
313             psutil.TimeoutExpired(seconds=33, pid=4567, name='name')  
314         )  
315     )  
316     assert isinstance(b, psutil.TimeoutExpired)
```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/py_serializable/__init__.py](#)

Line number: 974

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
973                                     # Will load any class already loaded assuming fully qualified name  
974     self._type_ = eval(f'{mapped_array_type}[{results.get("array_of")}']')  
975     self._concrete_type = eval(str(results.get('array_of')))
```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/py_serializable/__init__.py](#)

Line number: 975

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval


```

974             self._type_ = eval(f'{mapped_array_type}[{results.get("array_of")}]}')
975             self._concrete_type = eval(str(results.get('array_of')))
976         except NameError:

```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/py_serializable/_init_.py](#)

Line number: 1007

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```

1006             # Will load any class already loaded assuming fully qualified name
1007             self._type_ = eval(f'{mapped_array_type}[{results.get("array_of")}]}')
1008             self._concrete_type = eval(str(results.get('array_of')))

```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/py_serializable/_init_.py](#)

Line number: 1008

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```

1007             self._type_ = eval(f'{mapped_array_type}[{results.get("array_of")}]}')
1008             self._concrete_type = eval(str(results.get('array_of')))
1009         except NameError:

```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/pycparser/ply/cpp.py](#)

Line number: 600

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```

599         try:
600             result = eval(expr)
601         except Exception:

```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/pycparser/ply/lex.py](#)

Line number: 215

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```

214         else:
215             exec('import %s' % tabfile)
216             lextab = sys.modules[tabfile]

```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/pycparser/ply/lex.py](#)

Line number: 1039

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```

1038             pkgname = '.'.join(parts[:-1])
1039             exec('import %s' % pkgname)
1040             srcfile = getattr(sys.modules[pkgname], '__file__', '')

```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/pycparser/ply/yacc.py](#)

Line number: 1562**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
1561             try:
1562                 c = eval(s)
1563                 if (len(c) > 1):
```

exec_used: Use of exec detected.**Test ID:** B102**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/pycparser/ply/yacc.py](#)**Line number:** 1982**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
1981         else:
1982             exec('import %s' % module)
1983             parsetab = sys.modules[module]
```

exec_used: Use of exec detected.**Test ID:** B102**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/pycparser/ply/yacc.py](#)**Line number:** 3254**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
3253         pkgname = '.'.join(parts[:-1])
3254         exec('import %s' % pkgname)
3255         srcfile = getattr(sys.modules[pkgname], '__file__', '')
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.**Test ID:** B301**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-502](#)**File:** [./venv/lib/python3.9/site-packages/pydantic/deprecated/parse.py](#)**Line number:** 54**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
53         bb = b if isinstance(b, bytes) else b.encode() # type: ignore
54         return pickle.loads(bb)
55     else:
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.**Test ID:** B301**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-502](#)**File:** [./venv/lib/python3.9/site-packages/pydantic/v1/parse.py](#)**Line number:** 42**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
41         bb = b if isinstance(b, bytes) else b.encode()
42         return pickle.loads(bb)
43     else:
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.**Test ID:** B307**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/pydantic/v1/utils.py](#)**Line number:** 195**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
194         try:
195             eval('__IPYTHON__')
196         except NameError:
```

exec_used: Use of exec detected.**Test ID:** B102**Severity:** MEDIUM**Confidence:** HIGH

CWE: [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/pygments/formatters/_init_.py](#)**Line number:** 103**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
102         with open(filename, 'rb') as f:
103             exec(f.read(), custom_namespace)
104         # Retrieve the class `formattername` from that namespace
```

exec_used: Use of exec detected.**Test ID:** B102**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-78](#)**File:** [./venv/lib/python3.9/site-packages/pygments/lexers/_init_.py](#)**Line number:** 154**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
153         with open(filename, 'rb') as f:
154             exec(f.read(), custom_namespace)
155         # Retrieve the class `lexername` from that namespace
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.**Test ID:** B310**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-22](#)**File:** [./venv/lib/python3.9/site-packages/pygments/lexers/_lua_builtins.py](#)**Line number:** 225**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
224     def get_newest_version():
225         f = urlopen('http://www.lua.org/manual/')
226         r = re.compile(r'^<A HREF="(\\d\\.\\d)/">(Lua )?\\1</A>')
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.**Test ID:** B310**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-22](#)**File:** [./venv/lib/python3.9/site-packages/pygments/lexers/_lua_builtins.py](#)**Line number:** 233**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
232     def get_lua_functions(version):
233         f = urlopen(f'http://www.lua.org/manual/{version}/')
234         r = re.compile(r'^<A HREF="manual.html#pdf-(?!lua|LUA)([^\:;]+)">\\1</A>')
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.**Test ID:** B310**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-22](#)**File:** [./venv/lib/python3.9/site-packages/pygments/lexers/_mysql_builtins.py](#)**Line number:** 1248**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
1247         # Pull content from lex.h.
1248         lex_file = urlopen(LEX_URL).read().decode('utf8', errors='ignore')
1249         keywords = parse_lex_keywords(lex_file)
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.**Test ID:** B310**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-22](#)**File:** [./venv/lib/python3.9/site-packages/pygments/lexers/_mysql_builtins.py](#)**Line number:** 1254**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
1253         # Parse content in item_create.cc.
1254         item_create_file = urlopen(ITEM_CREATE_URL).read().decode('utf8', errors='ignore')
1255         functions.update(parse_item_create_functions(item_create_file))
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.**Test ID:** B310

Severity: MEDIUM**Confidence:** HIGH**CWE:** [CWE-22](#)**File:** [./venv/lib/python3.9/site-packages/pygments/lexers/_php_builtins.py](#)**Line number:** 3299**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
3298         def get_php_references():
3299             download = urlretrieve(PHP_MANUAL_URL)
3300             with tarfile.open(download[0]) as tar:
```

tarfile_unsafe_members: tarfile.extractall used without any validation. Please check and discard dangerous members.**Test ID:** B202**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-22](#)**File:** [./venv/lib/python3.9/site-packages/pygments/lexers/_php_builtins.py](#)**Line number:** 3301**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b202_tarfile_unsafe_members.html

```
3300         with tarfile.open(download[0]) as tar:
3301             tar.extractall()
3302             yield from glob.glob(f"{PHP_MANUAL_DIR}{PHP_REFERENCE_GLOB}")
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.**Test ID:** B310**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-22](#)**File:** [./venv/lib/python3.9/site-packages/pygments/lexers/_postgres_builtins.py](#)**Line number:** 642**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
641         def update_myself():
642             content = urlopen(DATATYPES_URL).read().decode('utf-8', errors='ignore')
643             data_file = list(content.splitlines())
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.**Test ID:** B310**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-22](#)**File:** [./venv/lib/python3.9/site-packages/pygments/lexers/_postgres_builtins.py](#)**Line number:** 647**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
646
647         content = urlopen(KEYWORDS_URL).read().decode('utf-8', errors='ignore')
648         keywords = parse_keywords(content)
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.**Test ID:** B301**Severity:** MEDIUM**Confidence:** HIGH**CWE:** [CWE-502](#)**File:** [./venv/lib/python3.9/site-packages/regex/test_regex.py](#)**Line number:** 3775**More info:** https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
3774         p = pickle.dumps(r)
3775         r = pickle.loads(p)
3776         self.assertEqual(r.match('foo').span(), (0, 3))
```

hashlib: Use of weak MD5 hash for security. Consider usedforsecurity=False**Test ID:** B324**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-327](#)**File:** [./venv/lib/python3.9/site-packages/requests/auth.py](#)**Line number:** 148**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
147             x = x.encode("utf-8")
148             return hashlib.md5(x).hexdigest()
149
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False
Test ID: B324
Severity: HIGH
Confidence: HIGH
CWE: [CWE-327](#)
File: [./venv/lib/python3.9/site-packages/requests/auth.py](#)
Line number: 156
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
155             x = x.encode("utf-8")
156             return hashlib.sha1(x).hexdigest()
157
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False
Test ID: B324
Severity: HIGH
Confidence: HIGH
CWE: [CWE-327](#)
File: [./venv/lib/python3.9/site-packages/requests/auth.py](#)
Line number: 205
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
204
205             cnonce = hashlib.sha1(s).hexdigest()[:16]
206             if _algorithm == "MD5-SESS":
```

blacklist: Deserialization with the marshal module is possibly dangerous.
Test ID: B302
Severity: MEDIUM
Confidence: HIGH
CWE: [CWE-502](#)
File: [./venv/lib/python3.9/site-packages/rich/style.py](#)
Line number: 475
More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b302-marshal

```
474             """Get meta information (can not be changed after construction)."""
475             return {} if self._meta is None else cast(Dict[str, Any], loads(self._meta))
476
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.
Test ID: B108
Severity: MEDIUM
Confidence: MEDIUM
CWE: [CWE-377](#)
File: [./venv/lib/python3.9/site-packages/ruamel/yaml/compat.py](#)
Line number: 151
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
150     nprint = Nprint()
151     nprintf = Nprint('/var/tmp/ruamel.yaml.log')
152
```

jinja2_autoescape_false: By default, jinja2 sets autoescape to False. Consider using autoescape=True or use the select_autoescape function to mitigate XSS vulnerabilities.
Test ID: B701
Severity: HIGH
Confidence: HIGH
CWE: [CWE-94](#)
File: [./venv/lib/python3.9/site-packages/safety/alerts/utils.py](#)
Line number: 154
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b701_jinja2_autoescape_false.html

```
153     p = Path(__file__).parent / "templates"
154     env = jinja2.Environment(loader=jinja2.FileSystemLoader(Path(p))) # type: ignore
155     template = env.get_template("pr.jinja2")
```

jinja2_autoescape_false: By default, jinja2 sets autoescape to False. Consider using autoescape=True or use the select_autoescape function to mitigate XSS vulnerabilities.
Test ID: B701
Severity: HIGH
Confidence: HIGH
CWE: [CWE-94](#)
File: [./venv/lib/python3.9/site-packages/safety/alerts/utils.py](#)
Line number: 204
More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b701_jinja2_autoescape_false.html

```
203     p = Path(__file__).parent / "templates"
204     env = jinja2.Environment(loader=jinja2.FileSystemLoader(Path(p))) # type: ignore
205     template = env.get_template("issue.jinja2")
```

hashlib: Use of weak SHA1 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/safety/alerts/utils.py](#)

Line number: 262

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
261     """
262     return hashlib.sha1(
263         b"blob " + str(len(raw_contents)).encode("ascii") + b"\0" + raw_contents
264     ).hexdigest()
265
```

jinja2_autoescape_false: By default, jinja2 sets autoescape to False. Consider using autoescape=True or use the select_autoescape function to mitigate XSS vulnerabilities.

Test ID: B701

Severity: HIGH

Confidence: HIGH

CWE: [CWE-94](#)

File: [./venv/lib/python3.9/site-packages/safety/output_utils.py](#)

Line number: 1251

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b701_jinja2_autoescape_false.html

```
1250     file_loader = PackageLoader('safety', 'templates')
1251     env = Environment(loader=file_loader)
1252     template = env.get_template(template)
```

start_process_with_a_shell: Starting a process with a shell, possible injection detected, security issue.

Test ID: B605

Severity: HIGH

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/_distutils/command/bdist_rpm.py](#)

Line number: 357

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b605_start_process_with_a_shell.html

```
356
357     out = os.popen(q_cmd)
358     try:
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/_distutils/compilers/C/base.py](#)

Line number: 1120

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
1119     expected = "static", "shared", "dylib", "xcode_stub"
1120     if lib_type not in eval(expected):
1121         raise ValueError(f"'lib_type' must be {expected}")
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/_distutils/core.py](#)

Line number: 268

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
267         code = f.read().replace(r'\r\n', r'\n')
268         exec(code, g)
269     finally:
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/setuptools/_distutils/tests/test_build_ext.py](#)**Line number:** 115**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
114         libz_so = sorted(libz_so, key=lambda lib_path: len(lib_path))
115         shutil.copyfile(libz_so[-1], '/tmp/libxx_z.so')
116
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/setuptools/_distutils/tests/test_build_ext.py](#)**Line number:** 120**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
119         [xx_c],
120         library_dirs=['/tmp'],
121         libraries=['xx_z'],
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/setuptools/_distutils/tests/test_build_ext.py](#)**Line number:** 122**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
121         libraries=['xx_z'],
122         runtime_library_dirs=['/tmp'],
123     )
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/setuptools/_distutils/tests/test_build_ext.py](#)**Line number:** 145**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
144         if sys.platform == 'linux' and copy_so:
145             os.unlink('/tmp/libxx_z.so')
146
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.**Test ID:** B108**Severity:** MEDIUM**Confidence:** MEDIUM**CWE:** [CWE-377](#)**File:** [./venv/lib/python3.9/site-packages/setuptools/_distutils/tests/test_build_ext.py](#)**Line number:** 182**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
181         # Linked against a library in /tmp
182         assert "/tmp" in rpaths
183         # The import is the real test here
```

set_bad_file_permissions: Chmod setting a permissive mask 0o777 on file (exe).**Test ID:** B103**Severity:** HIGH**Confidence:** HIGH**CWE:** [CWE-732](#)**File:** [./venv/lib/python3.9/site-packages/setuptools/_distutils/tests/test_spawn.py](#)**Line number:** 32**More info:** https://bandit.readthedocs.io/en/1.8.6/plugins/b103_set_bad_file_permissions.html

```
31
32         os.chmod(exe, 0o777)
33         with pytest.raises(DistutilsExecError):
```


set_bad_file_permissions: Chmod setting a permissive mask 0o777 on file (exe).

Test ID: B103

Severity: HIGH

Confidence: HIGH

CWE: [CWE-732](#)

File: [./venv/lib/python3.9/site-packages/setuptools/_distutils/tests/test_spawn.py](#)

Line number: 44

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b103_set_bad_file_permissions.html

```
43
44         os.chmod(exe, 0o777)
45         spawn([exe]) # should work without any error
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.

Test ID: B310

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/setuptools/_vendor/jaraco/context.py](#)

Line number: 63

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
62         try:
63             req = urllib.request.urlopen(url)
64             with tarfile.open(fileobj=req, mode='r|*') as tf:
```

tarfile_unsafe_members: tarfile.extractall used without any validation. Please check and discard dangerous members.

Test ID: B202

Severity: HIGH

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/setuptools/_vendor/jaraco/context.py](#)

Line number: 65

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b202_tarfile_unsafe_members.html

```
64         with tarfile.open(fileobj=req, mode='r|*') as tf:
65             tf.extractall(path=target_dir, filter=strip_first_component)
66         yield target_dir
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/_vendor/jaraco/functools/_init_.py](#)

Line number: 522

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
521         try:
522             return eval(use)
523         except TypeError:
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/_vendor/packaging/licenses/_init_.py](#)

Line number: 100

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
99         try:
100             invalid = eval(python_expression, globals(), locals())
101         except Exception:
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-377](#)

File: [./venv/lib/python3.9/site-packages/setuptools/_vendor/platformdirs/unix.py](#)

Line number: 179

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
178         if not Path(path).exists():
179             path = f"/tmp/runtime-{getuid()}" # noqa: S108
```

```
180         else:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/build_meta.py](#)

Line number: 317

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
316         try:
317             exec(code, locals())
318         except SystemExit as e:
```

blacklist: Deserialization with the marshal module is possibly dangerous.

Test ID: B302

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/setuptools/command/bdist_egg.py](#)

Line number: 383

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b302-marshal

```
382         f.read(skip)
383         code = marshal.load(f)
384         f.close()
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.

Test ID: B310

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/setuptools/config/_validate_pyproject/formats.py](#)

Line number: 152

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
151         context = ssl.create_default_context()
152         with urlopen(url, context=context) as response: # noqa: S310 (audit URLs)
153             headers = Message()
```

blacklist: Deserialization with the marshal module is possibly dangerous.

Test ID: B302

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/setuptools/depends.py](#)

Line number: 133

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b302-marshal

```
132         f.read(8) # skip magic & date
133         code = marshal.load(f)
134         elif kind == PY_FROZEN:
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/launch.py](#)

Line number: 32

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
31         code = compile(norm_script, script_name, 'exec')
32         exec(code, namespace)
33
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.

Test ID: B310

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/setuptools/tests/config/downloads/__init__.py](#)

Line number: 53

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
52     def download(url: str, dest: Path):
53         with urlopen(url) as f:
54             data = f.read()
```

subprocess_popen_with_shell_equals_true: subprocess call with shell=True identified, security issue.

Test ID: B602

Severity: HIGH

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/tests/environment.py](#)

Line number: 77

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b602_subprocess_popen_with_shell_equals_true.html

```
76         stderr=_PIPE,
77         shell=shell,
78         env=env,
79         encoding="utf-8",
80     )
81
82     if isinstance(data_stream, tuple):
83         data_stream = slice(*data_stream)
84     data = proc.communicate()[data_stream]
85     except OSError:
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.

Test ID: B310

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/setuptools/tests/integration/test_pip_install_sdist.py](#)

Line number: 174

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
173         id_ = package if version is LATEST else f"{package}/{version}"
174         with urlopen(f"https://pypi.org/pypi/{id_}/json") as f:
175             metadata = json.load(f)
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.

Test ID: B310

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/setuptools/tests/integration/test_pip_install_sdist.py](#)

Line number: 187

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
186     def download(url, dest, md5_digest):
187         with urlopen(url) as f:
188             data = f.read()
```

hashlib: Use of weak MD5 hash for security. Consider usedforsecurity=False

Test ID: B324

Severity: HIGH

Confidence: HIGH

CWE: [CWE-327](#)

File: [./venv/lib/python3.9/site-packages/setuptools/tests/integration/test_pip_install_sdist.py](#)

Line number: 190

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b324_hashlib.html

```
189
190         assert md5(data).hexdigest() == md5_digest
191
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/tests/test_editable_install.py](#)

Line number: 449

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
448         loc = {}
449         exec(finder, loc, loc)
450         loc["install"]()
```

blacklist: Pickle and modules that wrap it can be unsafe when used to deserialize untrusted data, possible security issue.

Test ID: B301

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-502](#)

File: [./venv/lib/python3.9/site-packages/setuptools/tests/test_extern.py](#)

Line number: 15

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b301-pickle

```
14     def test_distribution_picklable():
15         pickle.loads(pickle.dumps(Distribution()))
```

blacklist: Audit url open for permitted schemes. Allowing use of file:/ or custom schemes is often unexpected.

Test ID: B310

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-22](#)

File: [./venv/lib/python3.9/site-packages/setuptools/tests/test_virtualenv.py](#)

Line number: 33

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b310-urllib-urlopen

```
32         try:
33             urlopen('https://pypi.org', timeout=1)
34         except URLError:
```

set_bad_file_permissions: Chmod setting a permissive mask 0o777 on file (runsh).

Test ID: B103

Severity: HIGH

Confidence: HIGH

CWE: [CWE-732](#)

File: [./venv/lib/python3.9/site-packages/setuptools/tests/test_wheel.py](#)

Line number: 626

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b103_set_bad_file_permissions.html

```
625         runsh = pathlib.Path(source_dir) / "script.sh"
626         os.chmod(runsh, 0o777)
627         subprocess.check_call(
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/setuptools/wheel.py](#)

Line number: 211

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
210         raw_req,
211         (req for req in reqs if for_extra(req) and eval(req, extra=extra)),
212     )
```

hardcoded_tmp_directory: Probable insecure usage of temp file/directory.

Test ID: B108

Severity: MEDIUM

Confidence: MEDIUM

CWE: [CWE-377](#)

File: [./venv/lib/python3.9/site-packages/stevedore/tests/test_cache.py](#)

Line number: 29

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b108_hardcoded_tmp_directory.html

```
28         """
29         with mock.patch.object(sys, 'executable', '/tmp/fake'):
30             sot = _cache.Cache()
```

blacklist: Use of possibly insecure function - consider using safer ast.literal_eval.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/tqdm/cli.py](#)

Line number: 38

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
37         if re.match(r"^\\w+$", val):
38             return eval(f'"{val}"').encode()
39         raise TqdmTypeError(f"{val} : {typ}")
```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/typing_extensions.py](#)

Line number: 4034

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
4033         return_value = {key:
4034                         value if not isinstance(value, str) else eval(value, globals, locals)
4035                         for key, value in ann.items() }
```

blacklist: Use of possibly insecure function - consider using safer `ast.literal_eval`.

Test ID: B307

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/typing_extensions.py](#)

Line number: 4116

More info: https://bandit.readthedocs.io/en/1.8.6/blacklists/blacklist_calls.html#b307-eval

```
4115         code = forward_ref.__forward_code__
4116         value = eval(code, globals, locals)
4117         forward_ref.__forward_evaluated__ = True
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/typing_inspection/typing_objects.py](#)

Line number: 101

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
100         globals_: dict[str, Any] = {'Any': Any, 'typing': typing, 'typing_extensions': typing_extensions}
101         exec(func_code, globals_, locals_)
102         return locals_[function_name]
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/typing_inspection/typing_objects.py](#)

Line number: 133

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
132         globals_: dict[str, Any] = {'Any': Any, 'typing': typing, 'typing_extensions': typing_extensions}
133         exec(func_code, globals_, locals_)
134         return locals_[function_name]
```

exec_used: Use of exec detected.

Test ID: B102

Severity: MEDIUM

Confidence: HIGH

CWE: [CWE-78](#)

File: [./venv/lib/python3.9/site-packages/wrapt/decorators.py](#)

Line number: 23

More info: https://bandit.readthedocs.io/en/1.8.6/plugins/b102_exec_used.html

```
22         _locs_ = _globs_
23         exec("""exec _code_ in _globs_, _locs_""")
24
```