

botocore — Per-Module API

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botocore

Classes

```
[
    NullHandler
]
```

Functions

```
[
    invoke_initializers,
    register_initializer,
    unregister_initializer,
    xform_name
]
```

Sentinels / Constants / Objects

```
[
    BOTOCORE_ROOT,
    log,
    ScalarTypes,
    UNSIGNED
]
```

Import statements

Classes

```
from botocore import NullHandler
```

Functions

```
from botocore import invoke_initializers
from botocore import register_initializer
from botocore import unregister_initializer
from botocore import xform_name
```

Sentinels / Constants / Objects

```
from botocore import BOTOCORE_ROOT
from botocore import log
from botocore import ScalarTypes
from botocore import UNSIGNED
```

botocore.args

Classes

```
[
    ClientArgsCreator,
    ClientConfigString,
    Config,
    ConfigObjectWrapper,
    EndpointCreator,
    EndpointRulesetResolver,
    EPRBuiltins,
    RequestSigner,
    UserAgentString
]
```

Functions

```
[
    ensure_boolean,
    is_s3_accelerate_url,
    register_feature_id
]
```

Sentinels / Constants / Objects

```
[
    LEGACY_GLOBAL_STS_REGIONS,
    logger,
    PRIORITY_ORDERED_SUPPORTED_PROTOCOLS,
    USERAGENT_APPID_MAXLEN,
    VALID_ACCOUNT_ID_ENDPOINT_MODE_CONFIG,
    VALID_REGIONAL_ENDPOINTS_CONFIG,
    VALID_REQUEST_CHECKSUM_CALCULATION_CONFIG,
    VALID_RESPONSE_CHECKSUM_VALIDATION_CONFIG
]
```

Import statements

Classes

```
from botocore.args import ClientArgsCreator
from botocore.args import ClientConfigString
from botocore.args import Config
from botocore.args import ConfigObjectWrapper
from botocore.args import EndpointCreator
from botocore.args import EndpointRulesetResolver
from botocore.args import EPRBuiltins
from botocore.args import RequestSigner
from botocore.args import UserAgentString
```

Functions

```
from botocore.args import ensure_boolean
from botocore.args import is_s3_accelerate_url
from botocore.args import register_feature_id
```

Sentinels / Constants / Objects

```
from botocore.args import LEGACY_GLOBAL_STS_REGIONS
from botocore.args import logger
from botocore.args import PRIORITY_ORDERED_SUPPORTED_PROTOCOLS
from botocore.args import USERAGENT_APPID_MAXLEN
from botocore.args import VALID_ACCOUNT_ID_ENDPOINT_MODE_CONFIG
from botocore.args import VALID_REGIONAL_ENDPOINTS_CONFIG
from botocore.args import VALID_REQUEST_CHECKSUM_CALCULATION_CONFIG
from botocore.args import VALID_RESPONSE_CHECKSUM_VALIDATION_CONFIG
```

botocore.auth

Classes

```
[
    BaseSigner,
    BearerAuth,
    HmacV1Auth,
    HmacV1PostAuth,
    HmacV1QueryAuth,
    HTTPHeaders,
    itemgetter,
    Mapping,
    NoAuthTokenError,
    NoCredentialsError,
    S3ExpressAuth,
    S3ExpressPostAuth,
    S3ExpressQueryAuth,
    S3SigV4Auth,
    S3SigV4PostAuth,
    S3SigV4QueryAuth,
    SigV2Auth,
    SigV3Auth,
    SigV4Auth,
    SigV4QueryAuth,
    TokenSigner,
    UnknownSignatureVersionError,
    UnsupportedSignatureVersionError
]
```

Functions

```
[
    encodebytes,
    ensure_unicode,
    formatdate,
    get_current_datetime,
    is_valid_ipv6_endpoint_url,
    normalize_url_path,
    parse_qs,
    percent_encode_sequence,
    quote,
    resolve_auth_scheme_preference,
    resolve_auth_type,
    sha1,
    sha256,
    unquote,
    urlunsplit
]
```

Sentinels / Constants / Objects

```
[
    AUTH_PREF_TO_SIGNATURE_VERSION,
    AUTH_TYPE_MAPS,
    AUTH_TYPE_TO_SIGNATURE_VERSION,
    CRT_AUTH_TYPE_MAPS,
    EMPTY_SHA256_HASH,
    HAS_CRT,
    ISO8601,
    logger,
    MD5_AVAILABLE,
    PAYLOAD_BUFFER,
    SIGNED_HEADERS_BLACKLIST,
]
```

```
SIGV4_TIMESTAMP,  
STREAMING_UNSIGNED_PAYLOAD_TRAILER,  
UNSIGNED_PAYLOAD,  
urlsplit  
]
```

Import statements

Classes

```
from botocore.auth import BaseSigner  
from botocore.auth import BearerAuth  
from botocore.auth import HmacV1Auth  
from botocore.auth import HmacV1PostAuth  
from botocore.auth import HmacV1QueryAuth  
from botocore.auth import HTTPHeaders  
from botocore.auth import itemgetter  
from botocore.auth import Mapping  
from botocore.auth import NoAuthTokenError  
from botocore.auth import NoCredentialsError  
from botocore.auth import S3ExpressAuth  
from botocore.auth import S3ExpressPostAuth  
from botocore.auth import S3ExpressQueryAuth  
from botocore.auth import S3SigV4Auth  
from botocore.auth import S3SigV4PostAuth  
from botocore.auth import S3SigV4QueryAuth  
from botocore.auth import SigV2Auth  
from botocore.auth import SigV3Auth  
from botocore.auth import SigV4Auth  
from botocore.auth import SigV4QueryAuth  
from botocore.auth import TokenSigner  
from botocore.auth import UnknownSignatureVersionError  
from botocore.auth import UnsupportedSignatureVersionError
```

Functions

```
from botocore.auth import encodebytes  
from botocore.auth import ensure_unicode  
from botocore.auth import formatdate  
from botocore.auth import get_current_datetime  
from botocore.auth import is_valid_ipv6_endpoint_url  
from botocore.auth import normalize_url_path  
from botocore.auth import parse_qs  
from botocore.auth import percent_encode_sequence  
from botocore.auth import quote  
from botocore.auth import resolve_auth_scheme_preference  
from botocore.auth import resolve_auth_type  
from botocore.auth import sha1  
from botocore.auth import sha256  
from botocore.auth import unquote  
from botocore.auth import urlunsplit
```

Sentinels / Constants / Objects

```
from botocore.auth import AUTH_PREF_TO_SIGNATURE_VERSION  
from botocore.auth import AUTH_TYPE_MAPS  
from botocore.auth import AUTH_TYPE_TO_SIGNATURE_VERSION  
from botocore.auth import CRT_AUTH_TYPE_MAPS  
from botocore.auth import EMPTY_SHA256_HASH  
from botocore.auth import HAS_CRT  
from botocore.auth import ISO8601  
from botocore.auth import logger  
from botocore.auth import MD5_AVAILABLE  
from botocore.auth import PAYLOAD_BUFFER  
from botocore.auth import SIGNED_HEADERS_BLACKLIST  
from botocore.auth import SIGV4_TIMESTAMP  
from botocore.auth import STREAMING_UNSIGNED_PAYLOAD_TRAILER  
from botocore.auth import UNSIGNED_PAYLOAD
```

```
from botocore.auth import urlsplit
```

botocore.awsrequest

Classes

```
[
    AWSConnection,
    AWSHTTPConnection,
    AWSHTTPConnectionPool,
    AWSHTTPResponse,
    AWSHTTPSConnection,
    AWSHTTPSConnectionPool,
    AWSPreparedRequest,
    AWSRequest,
    AWSRequestPreparer,
    AWSResponse,
    HeadersDict,
    HTTPConnection,
    HTTPConnectionPool,
    HTTPHeaders,
    HTTPResponse,
    HTTPSConnectionPool,
    Mapping,
    MutableMapping,
    UnseekableStreamError,
    VerifiedHTTPSConnection
]
```

Functions

```
[
    create_request_object,
    prepare_request_dict,
    urlencode,
    urlparse,
    urlunsplit
]
```

Sentinels / Constants / Objects

```
[
    logger,
    urlsplit
]
```

Import statements

Classes

```
from botocore.awsrequest import AWSConnection
from botocore.awsrequest import AWSHTTPConnection
from botocore.awsrequest import AWSHTTPConnectionPool
from botocore.awsrequest import AWSHTTPResponse
from botocore.awsrequest import AWSHTTPSConnection
from botocore.awsrequest import AWSHTTPSConnectionPool
from botocore.awsrequest import AWSPreparedRequest
from botocore.awsrequest import AWSRequest
from botocore.awsrequest import AWSRequestPreparer
from botocore.awsrequest import AWSResponse
from botocore.awsrequest import HeadersDict
from botocore.awsrequest import HTTPConnection
from botocore.awsrequest import HTTPConnectionPool
from botocore.awsrequest import HTTPHeaders
from botocore.awsrequest import HTTPResponse
from botocore.awsrequest import HTTPSConnectionPool
from botocore.awsrequest import Mapping
from botocore.awsrequest import MutableMapping
```



```
from botocore.awsrequest import UnseekableStreamError
from botocore.awsrequest import VerifiedHTTPSConnection
# Functions
from botocore.awsrequest import create_request_object
from botocore.awsrequest import prepare_request_dict
from botocore.awsrequest import urlencode
from botocore.awsrequest import urlparse
from botocore.awsrequest import urlunsplit
# Sentinels / Constants / Objects
from botocore.awsrequest import logger
from botocore.awsrequest import urlsplit
```

botocore.client

Classes

```
[
    BaseClient,
    CachedProperty,
    ClientArgsCreator,
    ClientCreator,
    ClientEndpointBridge,
    ClientError,
    ClientMeta,
    ClientMethodDocstring,
    Config,
    DataNotFoundError,
    EndpointDiscoveryHandler,
    EndpointDiscoveryManager,
    EventbridgeSignerSetter,
    InvalidEndpointDiscoveryConfigurationError,
    OperationNotPageableError,
    Paginator,
    PaginatorDocstring,
    RefreshableCredentials,
    S3ArnParamHandler,
    S3ControlArnParamHandler,
    S3ControlArnParamHandlerv2,
    S3ControlEndpointSetter,
    S3EndpointSetter,
    S3ExpressIdentityResolver,
    S3RegionRedirector,
    S3RegionRedirectorv2,
    ServiceModel,
    UnknownServiceError,
    UnknownSignatureVersionError,
    UserAgentString
]
```

Functions

```
[
    apply_request_checksum,
    block_endpoint_discovery_required_operations,
    ensure_boolean,
    first_non_none_response,
    get_global_history_recorder,
    get_service_module_name,
    maybe_compress_request,
    prepare_request_dict,
    register_feature_id,
    resolve_auth_type,
    resolve_checksum_context,
    with_current_context,
    xform_name
]
```

Sentinels / Constants / Objects

```
[
    AUTH_TYPE_MAPS,
    history_recorder,
    logger,
    UNSIGNED
]
```

Import statements

Classes

```
from botocore.client import BaseClient
from botocore.client import CachedProperty
from botocore.client import ClientArgsCreator
from botocore.client import ClientCreator
from botocore.client import ClientEndpointBridge
from botocore.client import ClientError
from botocore.client import ClientMeta
from botocore.client import ClientMethodDocstring
from botocore.client import Config
from botocore.client import DataNotFoundError
from botocore.client import EndpointDiscoveryHandler
from botocore.client import EndpointDiscoveryManager
from botocore.client import EventbridgeSignerSetter
from botocore.client import InvalidEndpointDiscoveryConfigurationError
from botocore.client import OperationNotPageableError
from botocore.client import Paginator
from botocore.client import PaginatorDocstring
from botocore.client import RefreshableCredentials
from botocore.client import S3ArnParamHandler
from botocore.client import S3ControlArnParamHandler
from botocore.client import S3ControlArnParamHandlerv2
from botocore.client import S3ControlEndpointSetter
from botocore.client import S3EndpointSetter
from botocore.client import S3ExpressIdentityResolver
from botocore.client import S3RegionRedirector
from botocore.client import S3RegionRedirectorv2
from botocore.client import ServiceModel
from botocore.client import UnknownServiceError
from botocore.client import UnknownSignatureVersionError
from botocore.client import UserAgentString
```

Functions

```
from botocore.client import apply_request_checksum
from botocore.client import block_endpoint_discovery_required_operations
from botocore.client import ensure_boolean
from botocore.client import first_non_none_response
from botocore.client import get_global_history_recorder
from botocore.client import get_service_module_name
from botocore.client import maybe_compress_request
from botocore.client import prepare_request_dict
from botocore.client import register_feature_id
from botocore.client import resolve_auth_type
from botocore.client import resolve_checksum_context
from botocore.client import with_current_context
from botocore.client import xform_name
```

Sentinels / Constants / Objects

```
from botocore.client import AUTH_TYPE_MAPS
from botocore.client import history_recorder
from botocore.client import logger
from botocore.client import UNSIGNED
```

botocore.compat

Classes

```
[
    file_type,
    HTTPHeaders,
    HTTPMessage,
    HTTPResponse,
    MD5UnavailableError,
    MutableMapping,
    OrderedDict,
    tzlocal,
    XMLParseError,
    zip,
    zip_longest
]
```

Functions

```
[
    accepts_kwargs,
    compat_shell_split,
    copy_kwargs,
    encodebytes,
    ensure_bytes,
    ensure_unicode,
    filter_ssl_warnings,
    floor,
    formatdate,
    get_current_datetime,
    get_md5,
    get_tzinfo_options,
    has_minimum_crt_version,
    parse_qs,
    parse_qsl,
    quote,
    set_socket_timeout,
    total_seconds,
    unquote,
    unquote_plus,
    unquote_str,
    urlencode,
    urljoin,
    urlparse,
    urlunsplit
]
```

Sentinels / Constants / Objects

```
[
    disabled,
    from_dict,
    from_pairs,
    HAS_CRT,
    HAS_GZIP,
    HEX_PAT,
    IPV4_PAT,
    IPV4_RE,
    IPV6_ADDRZ_PAT,
    IPV6_ADDRZ_RE,
    IPV6_PAT,
    logger,
    LS32_PAT,
```

```
MD5_AVAILABLE,  
UNRESERVED_PAT,  
UNSAFE_URL_CHARS,  
urlsplit,  
ZONE_ID_PAT  
]
```

Import statements

Classes

```
from botocore.compat import file_type  
from botocore.compat import HTTPHeaders  
from botocore.compat import HTTPMessage  
from botocore.compat import HTTPResponse  
from botocore.compat import MD5UnavailableError  
from botocore.compat import MutableMapping  
from botocore.compat import OrderedDict  
from botocore.compat import tzlocal  
from botocore.compat import XMLParseError  
from botocore.compat import zip  
from botocore.compat import zip_longest
```

Functions

```
from botocore.compat import accepts_kwargs  
from botocore.compat import compat_shell_split  
from botocore.compat import copy_kwargs  
from botocore.compat import encodebytes  
from botocore.compat import ensure_bytes  
from botocore.compat import ensure_unicode  
from botocore.compat import filter_ssl_warnings  
from botocore.compat import floor  
from botocore.compat import formatdate  
from botocore.compat import get_current_datetime  
from botocore.compat import get_md5  
from botocore.compat import get_tzinfo_options  
from botocore.compat import has_minimum_crt_version  
from botocore.compat import parse_qs  
from botocore.compat import parse_qsl  
from botocore.compat import quote  
from botocore.compat import set_socket_timeout  
from botocore.compat import total_seconds  
from botocore.compat import unquote  
from botocore.compat import unquote_plus  
from botocore.compat import unquote_str  
from botocore.compat import urlencode  
from botocore.compat import urljoin  
from botocore.compat import urlparse  
from botocore.compat import urlunsplit
```

Sentinels / Constants / Objects

```
from botocore.compat import disabled  
from botocore.compat import from_dict  
from botocore.compat import from_pairs  
from botocore.compat import HAS_CRT  
from botocore.compat import HAS_GZIP  
from botocore.compat import HEX_PAT  
from botocore.compat import IPV4_PAT  
from botocore.compat import IPV4_RE  
from botocore.compat import IPV6_ADDRZ_PAT  
from botocore.compat import IPV6_ADDRZ_RE  
from botocore.compat import IPV6_PAT  
from botocore.compat import logger  
from botocore.compat import LS32_PAT  
from botocore.compat import MD5_AVAILABLE  
from botocore.compat import UNRESERVED_PAT
```

```
from botocore.compat import UNSAFE_URL_CHARS
from botocore.compat import urlsplit
from botocore.compat import ZONE_ID_PAT
```

botocore.compress

Classes

```
[
    GzipFile
]
```

Functions

```
[
    determine_content_length,
    gzip_compress,
    maybe_compress_request,
    register_feature_id,
    urlencode
]
```

Sentinels / Constants / Objects

```
[
    COMPRESSION_MAPPING,
    logger
]
```

Import statements

Classes

```
from botocore.compress import GzipFile
```

Functions

```
from botocore.compress import determine_content_length
from botocore.compress import gzip_compress
from botocore.compress import maybe_compress_request
from botocore.compress import register_feature_id
from botocore.compress import urlencode
```

Sentinels / Constants / Objects

```
from botocore.compress import COMPRESSION_MAPPING
from botocore.compress import logger
```

botocore.config

Classes

```
[
    Config,
    InvalidMaxRetryAttemptsError,
    InvalidRetryConfigurationError,
    InvalidRetryModeError,
    InvalidS3AddressingStyleError,
    OrderedDict
]
```

Functions

```
[]
```

Sentinels / Constants / Objects

```
[
    DEFAULT_TIMEOUT,
    MAX_POOL_CONNECTIONS
]
```

Import statements

Classes

```
from botocore.config import Config
from botocore.config import InvalidMaxRetryAttemptsError
from botocore.config import InvalidRetryConfigurationError
from botocore.config import InvalidRetryModeError
from botocore.config import InvalidS3AddressingStyleError
from botocore.config import OrderedDict
```

Functions

```
(none)
```

Sentinels / Constants / Objects

```
from botocore.config import DEFAULT_TIMEOUT
from botocore.config import MAX_POOL_CONNECTIONS
```


botocore.configloader

Classes

[]

Functions

```
[
    build_profile_map,
    load_config,
    multi_file_load_config,
    raw_config_parse
]
```

Sentinels / Constants / Objects

[]

Import statements

Classes

(none)

Functions

```
from botocore.configloader import build_profile_map
from botocore.configloader import load_config
from botocore.configloader import multi_file_load_config
from botocore.configloader import raw_config_parse
```

Sentinels / Constants / Objects

(none)

botocore.configprovider

Classes

```
[
    BaseProvider,
    ChainProvider,
    ConfigChainFactory,
    ConfiguredEndpointProvider,
    ConfigValueStore,
    ConstantProvider,
    DefaultConfigResolver,
    EnvironmentProvider,
    InstanceVarProvider,
    InvalidConfigError,
    ScopedConfigProvider,
    SectionConfigProvider,
    SmartDefaultsConfigStoreFactory
]
```

Functions

```
[
    create_botocore_default_config_mapping
]
```

Sentinels / Constants / Objects

```
[
    BOTOCORE_DEFAULT_SESSION_VARIABLES,
    DEFAULT_PROXIES_CONFIG_VARS,
    DEFAULT_S3_CONFIG_VARS,
    logger
]
```

Import statements

Classes

```
from botocore.configprovider import BaseProvider
from botocore.configprovider import ChainProvider
from botocore.configprovider import ConfigChainFactory
from botocore.configprovider import ConfiguredEndpointProvider
from botocore.configprovider import ConfigValueStore
from botocore.configprovider import ConstantProvider
from botocore.configprovider import DefaultConfigResolver
from botocore.configprovider import EnvironmentProvider
from botocore.configprovider import InstanceVarProvider
from botocore.configprovider import InvalidConfigError
from botocore.configprovider import ScopedConfigProvider
from botocore.configprovider import SectionConfigProvider
from botocore.configprovider import SmartDefaultsConfigStoreFactory
```

Functions

```
from botocore.configprovider import create_botocore_default_config_mapping
```

Sentinels / Constants / Objects

```
from botocore.configprovider import BOTOCORE_DEFAULT_SESSION_VARIABLES
from botocore.configprovider import DEFAULT_PROXIES_CONFIG_VARS
from botocore.configprovider import DEFAULT_S3_CONFIG_VARS
from botocore.configprovider import logger
```

botocore.context

Classes

```
[
    ClientContext,
    ContextVar
]
```

Functions

```
[
    contextmanager,
    dataclass,
    deepcopy,
    field,
    get_context,
    reset_context,
    set_context,
    start_as_current_context,
    with_current_context,
    wraps
]
```

Sentinels / Constants / Objects

```
[ ]
```

Import statements

Classes

```
from botocore.context import ClientContext
from botocore.context import ContextVar
```

Functions

```
from botocore.context import contextmanager
from botocore.context import dataclass
from botocore.context import deepcopy
from botocore.context import field
from botocore.context import get_context
from botocore.context import reset_context
from botocore.context import set_context
from botocore.context import start_as_current_context
from botocore.context import with_current_context
from botocore.context import wraps
```

Sentinels / Constants / Objects

```
(none)
```

botocore.credentials

Classes

```
[
    ArnParser,
    AssumeRoleCredentialFetcher,
    AssumeRoleProvider,
    AssumeRoleWithWebIdentityCredentialFetcher,
    AssumeRoleWithWebIdentityProvider,
    BaseAssumeRoleCredentialFetcher,
    BotoProvider,
    CachedCredentialFetcher,
    CanonicalNameCredentialSourcer,
    Config,
    ConfigNotFound,
    ConfigProvider,
    ContainerMetadataFetcher,
    ContainerProvider,
    CredentialProvider,
    CredentialResolver,
    CredentialRetrievalError,
    Credentials,
    DeferredRefreshableCredentials,
    EnvProvider,
    FileWebIdentityTokenLoader,
    InfiniteLoopConfigError,
    InstanceMetadataFetcher,
    InstanceMetadataProvider,
    InvalidConfigError,
    JSONFileCache,
    MetadataRetrievalError,
    OriginalEC2Provider,
    PartialCredentialsError,
    ProcessProvider,
    ProfileProviderBuilder,
    ReadOnlyCredentials,
    RefreshableCredentials,
    RefreshWithMFAUnsupportedError,
    SharedCredentialProvider,
    SSOCredentialFetcher,
    SSOProvider,
    SSOTokenLoader,
    SSOTokenProvider,
    tzlocal,
    tzutc,
    UnauthorizedSSOTokenError,
    UnknownCredentialError
]
```

Functions

```
[
    compat_shell_split,
    create_assume_role_refresher,
    create_credential_resolver,
    create_mfa_serial_refresher,
    create_nested_client,
    deepcopy,
    get_credentials,
    namedtuple,
    parse,
    parse_key_val_file,
]
```

```
    register_feature_id,  
    resolve_imds_endpoint_mode,  
    sha1,  
    total_seconds  
]
```

Sentinels / Constants / Objects

```
[  
    logger,  
    UNSIGNED  
]
```

Import statements

Classes

```
from botocore.credentials import ArnParser  
from botocore.credentials import AssumeRoleCredentialFetcher  
from botocore.credentials import AssumeRoleProvider  
from botocore.credentials import AssumeRoleWithWebIdentityCredentialFetcher  
from botocore.credentials import AssumeRoleWithWebIdentityProvider  
from botocore.credentials import BaseAssumeRoleCredentialFetcher  
from botocore.credentials import BotoProvider  
from botocore.credentials import CachedCredentialFetcher  
from botocore.credentials import CanonicalNameCredentialSourcer  
from botocore.credentials import Config  
from botocore.credentials import ConfigNotFound  
from botocore.credentials import ConfigProvider  
from botocore.credentials import ContainerMetadataFetcher  
from botocore.credentials import ContainerProvider  
from botocore.credentials import CredentialProvider  
from botocore.credentials import CredentialResolver  
from botocore.credentials import CredentialRetrievalError  
from botocore.credentials import Credentials  
from botocore.credentials import DeferredRefreshableCredentials  
from botocore.credentials import EnvProvider  
from botocore.credentials import FileWebIdentityTokenLoader  
from botocore.credentials import InfiniteLoopConfigError  
from botocore.credentials import InstanceMetadataFetcher  
from botocore.credentials import InstanceMetadataProvider  
from botocore.credentials import InvalidConfigError  
from botocore.credentials import JSONFileCache  
from botocore.credentials import MetadataRetrievalError  
from botocore.credentials import OriginalEC2Provider  
from botocore.credentials import PartialCredentialsError  
from botocore.credentials import ProcessProvider  
from botocore.credentials import ProfileProviderBuilder  
from botocore.credentials import ReadOnlyCredentials  
from botocore.credentials import RefreshableCredentials  
from botocore.credentials import RefreshWithMFAUnsupportedError  
from botocore.credentials import SharedCredentialProvider  
from botocore.credentials import SSOCredentialFetcher  
from botocore.credentials import SSOProvider  
from botocore.credentials import SSOTokenLoader  
from botocore.credentials import SSOTokenProvider  
from botocore.credentials import tzlocal  
from botocore.credentials import tzutc  
from botocore.credentials import UnauthorizedSSOTokenError  
from botocore.credentials import UnknownCredentialError
```

Functions

```
from botocore.credentials import compat_shell_split  
from botocore.credentials import create_assume_role_refresher  
from botocore.credentials import create_credential_resolver  
from botocore.credentials import create_mfa_serial_refresher
```

```
from botocore.credentials import create_nested_client
from botocore.credentials import deepcopy
from botocore.credentials import get_credentials
from botocore.credentials import namedtuple
from botocore.credentials import parse
from botocore.credentials import parse_key_val_file
from botocore.credentials import register_feature_id
from botocore.credentials import resolve_imds_endpoint_mode
from botocore.credentials import sha1
from botocore.credentials import total_seconds
# Sentinels / Constants / Objects
from botocore.credentials import logger
from botocore.credentials import UNSIGNED
```

botocore.crt

Classes

[]

Functions

[]

Sentinels / Constants / Objects

```
[  
    CRT_SUPPORTED_AUTH_TYPES  
]
```

Import statements

Classes

(none)

Functions

(none)

Sentinels / Constants / Objects

```
from botocore.crt import CRT_SUPPORTED_AUTH_TYPES
```

botocore.discovery

Classes

```
[
    BotoCoreError,
    CachedProperty,
    ConnectionError,
    EndpointDiscoveryException,
    EndpointDiscoveryHandler,
    EndpointDiscoveryManager,
    EndpointDiscoveryModel,
    EndpointDiscoveryRefreshFailed,
    EndpointDiscoveryRequired,
    HTTPClientError,
    OperationNotFoundError
]
```

Functions

```
[
    block_endpoint_discovery_required_operations,
    xform_name
]
```

Sentinels / Constants / Objects

```
[
    logger
]
```

Import statements

Classes

```
from botocore.discovery import BotoCoreError
from botocore.discovery import CachedProperty
from botocore.discovery import ConnectionError
from botocore.discovery import EndpointDiscoveryException
from botocore.discovery import EndpointDiscoveryHandler
from botocore.discovery import EndpointDiscoveryManager
from botocore.discovery import EndpointDiscoveryModel
from botocore.discovery import EndpointDiscoveryRefreshFailed
from botocore.discovery import EndpointDiscoveryRequired
from botocore.discovery import HTTPClientError
from botocore.discovery import OperationNotFoundError
```

Functions

```
from botocore.discovery import block_endpoint_discovery_required_operations
from botocore.discovery import xform_name
```

Sentinels / Constants / Objects

```
from botocore.discovery import logger
```


botocore.docs

Classes

```
[
    ServiceDocumenter
]
```

Functions

```
[
    generate_docs
]
```

Sentinels / Constants / Objects

```
[
    DEPRECATED_SERVICE_NAMES
]
```

Import statements

Classes

```
from botocore.docs import ServiceDocumenter
```

Functions

```
from botocore.docs import generate_docs
```

Sentinels / Constants / Objects

```
from botocore.docs import DEPRECATED_SERVICE_NAMES
```

botocore.endpoint

Classes

```
[
    Endpoint,
    EndpointCreator,
    HTTPClientError,
    StreamingBody,
    URLLib3Session
]
```

Functions

```
[
    convert_to_response_dict,
    create_request_object,
    first_non_none_response,
    get_current_datetime,
    get_environ_proxies,
    get_global_history_recorder,
    handle_checksum_body,
    is_valid_endpoint_url,
    is_valid_ipv6_endpoint_url
]
```

Sentinels / Constants / Objects

```
[
    DEFAULT_TIMEOUT,
    history_recorder,
    logger,
    MAX_POOL_CONNECTIONS
]
```

Import statements

Classes

```
from botocore.endpoint import Endpoint
from botocore.endpoint import EndpointCreator
from botocore.endpoint import HTTPClientError
from botocore.endpoint import StreamingBody
from botocore.endpoint import URLLib3Session
```

Functions

```
from botocore.endpoint import convert_to_response_dict
from botocore.endpoint import create_request_object
from botocore.endpoint import first_non_none_response
from botocore.endpoint import get_current_datetime
from botocore.endpoint import get_environ_proxies
from botocore.endpoint import get_global_history_recorder
from botocore.endpoint import handle_checksum_body
from botocore.endpoint import is_valid_endpoint_url
from botocore.endpoint import is_valid_ipv6_endpoint_url
```

Sentinels / Constants / Objects

```
from botocore.endpoint import DEFAULT_TIMEOUT
from botocore.endpoint import history_recorder
from botocore.endpoint import logger
from botocore.endpoint import MAX_POOL_CONNECTIONS
```

botocore.endpoint_provider

Classes

```
[
    ArnParser,
    BaseRule,
    EndpointProvider,
    EndpointResolutionError,
    EndpointRule,
    Enum,
    ErrorRule,
    Formatter,
    InvalidArnException,
    ParameterDefinition,
    ParameterType,
    RuleCreator,
    RuleSet,
    RuleSetEndpoint,
    RuleSetStandardLibrary,
    RuleSetStandardLibrary,
    TreeRule
]
```

Functions

```
[
    is_valid_ipv4_endpoint_url,
    is_valid_ipv6_endpoint_url,
    lru_cache_weakref,
    NamedTuple,
    normalize_url_path,
    percent_encode,
    quote,
    urlparse,
    xform_name
]
```

Sentinels / Constants / Objects

```
[
    ARN_PARSER,
    CACHE_SIZE,
    GET_ATTR_RE,
    IPV4_RE,
    logger,
    STRING_FORMATTER,
    TEMPLATE_STRING_RE,
    VALID_HOST_LABEL_RE
]
```

Import statements

Classes

```
from botocore.endpoint_provider import ArnParser
from botocore.endpoint_provider import BaseRule
from botocore.endpoint_provider import EndpointProvider
from botocore.endpoint_provider import EndpointResolutionError
from botocore.endpoint_provider import EndpointRule
from botocore.endpoint_provider import Enum
from botocore.endpoint_provider import ErrorRule
from botocore.endpoint_provider import Formatter
from botocore.endpoint_provider import InvalidArnException
from botocore.endpoint_provider import ParameterDefinition
from botocore.endpoint_provider import ParameterType
```

```
from botocore.endpoint_provider import RuleCreator
from botocore.endpoint_provider import RuleSet
from botocore.endpoint_provider import RuleSetEndpoint
from botocore.endpoint_provider import RuleSetStandardLibrary
from botocore.endpoint_provider import RuleSetStandardLibrary
from botocore.endpoint_provider import TreeRule
# Functions
from botocore.endpoint_provider import is_valid_ipv4_endpoint_url
from botocore.endpoint_provider import is_valid_ipv6_endpoint_url
from botocore.endpoint_provider import lru_cache_weakref
from botocore.endpoint_provider import NamedTuple
from botocore.endpoint_provider import normalize_url_path
from botocore.endpoint_provider import percent_encode
from botocore.endpoint_provider import quote
from botocore.endpoint_provider import urlparse
from botocore.endpoint_provider import xform_name
# Sentinels / Constants / Objects
from botocore.endpoint_provider import ARN_PARSER
from botocore.endpoint_provider import CACHE_SIZE
from botocore.endpoint_provider import GET_ATTR_RE
from botocore.endpoint_provider import IPV4_RE
from botocore.endpoint_provider import logger
from botocore.endpoint_provider import STRING_FORMATTER
from botocore.endpoint_provider import TEMPLATE_STRING_RE
from botocore.endpoint_provider import VALID_HOST_LABEL_RE
```

botocore.errorfactory

Classes

```
[
    BaseClientExceptions,
    ClientError,
    ClientExceptionsFactory
]
```

Functions

```
[
    get_service_module_name
]
```

Sentinels / Constants / Objects

```
[]
```

Import statements

Classes

```
from botocore.errorfactory import BaseClientExceptions
from botocore.errorfactory import ClientError
from botocore.errorfactory import ClientExceptionsFactory
```

Functions

```
from botocore.errorfactory import get_service_module_name
```

Sentinels / Constants / Objects

```
(none)
```

botocore.eventstream

Classes

```
[
    ChecksumMismatch,
    DecodeUtils,
    DuplicateHeader,
    EventStream,
    EventStreamBuffer,
    EventStreamError,
    EventStreamHeaderParser,
    EventStreamMessage,
    InvalidHeadersLength,
    InvalidPayloadLength,
    MessagePrelude,
    NoInitialResponseError,
    ParserError
]
```

Functions

```
[
    crc32,
    unpack
]
```

Sentinels / Constants / Objects

```
[ ]
```

Import statements

Classes

```
from botocore.eventstream import ChecksumMismatch
from botocore.eventstream import DecodeUtils
from botocore.eventstream import DuplicateHeader
from botocore.eventstream import EventStream
from botocore.eventstream import EventStreamBuffer
from botocore.eventstream import EventStreamError
from botocore.eventstream import EventStreamHeaderParser
from botocore.eventstream import EventStreamMessage
from botocore.eventstream import InvalidHeadersLength
from botocore.eventstream import InvalidPayloadLength
from botocore.eventstream import MessagePrelude
from botocore.eventstream import NoInitialResponseError
from botocore.eventstream import ParserError
```

Functions

```
from botocore.eventstream import crc32
from botocore.eventstream import unpack
```

Sentinels / Constants / Objects

```
(none)
```

botocore.exceptions

Classes

```
[
    AliasConflictParameterError,
    ApiVersionNotFoundError,
    AwsChunkedWrapperError,
    BaseEndpointResolverError,
    BotoCoreError,
    CapacityNotAvailableError,
    ChecksumError,
    ClientError,
    ConfigNotFound,
    ConfigParseError,
    ConnectionClosedError,
    ConnectionError,
    ConnectTimeoutError,
    CredentialRetrievalError,
    DataNotFoundError,
    EndpointConnectionError,
    EndpointProviderError,
    EndpointResolutionError,
    EndpointVariantError,
    EventStreamError,
    FlexibleChecksumError,
    HTTPClientError,
    ImminentRemovalWarning,
    IncompleteReadError,
    InfiniteLoopConfigError,
    InvalidChecksumConfigError,
    InvalidConfigError,
    InvalidDefaultsMode,
    InvalidDNSNameError,
    InvalidEndpointConfigurationError,
    InvalidEndpointDiscoveryConfigurationError,
    InvalidExpressionError,
    InvalidHostLabelError,
    InvalidIMDSEndpointError,
    InvalidIMDSEndpointModeError,
    InvalidMaxRetryAttemptsError,
    InvalidProxiesConfigError,
    InvalidRegionError,
    InvalidRetryConfigurationError,
    InvalidRetryModeError,
    InvalidS3AddressingStyleError,
    InvalidS3UsEast1RegionalEndpointConfigError,
    InvalidSTSRegionalEndpointsConfigError,
    MD5UnavailableError,
    MetadataRetrievalError,
    MissingDependencyException,
    MissingParametersError,
    MissingServiceIdError,
    NoAuthTokenError,
    NoCredentialsError,
    NoRegionError,
    OperationNotPageableError,
    PaginationError,
    ParamValidationError,
    PartialCredentialsError,
    ProfileNotFound,
    ProxyConnectionError,
```

```

RangeError,
ReadTimeoutError,
RefreshWithMFAUnsupportedError,
ResponseStreamingError,
ServiceNotInRegionError,
SSLError,
SSOError,
SSOTokenLoadError,
StubAssertionError,
StubResponseError,
TokenRetrievalError,
UnauthorizedSSOTokenError,
UndefinedModelAttributeError,
UnknownClientMethodError,
UnknownCredentialError,
UnknownEndpointError,
UnknownEndpointResolutionBuiltInName,
UnknownFIPSEndpointError,
UnknownKeyError,
UnknownParameterError,
UnknownRegionError,
UnknownServiceError,
UnknownServiceStyle,
UnknownSignatureVersionError,
UnseekableStreamError,
UnStubbedResponseError,
UnsupportedOutpostResourceError,
UnsupportedS3AccesspointConfigurationError,
UnsupportedS3ArnError,
UnsupportedS3ConfigurationError,
UnsupportedS3ControlArnError,
UnsupportedS3ControlConfigurationError,
UnsupportedServiceProtocolsError,
UnsupportedSignatureVersionError,
UnsupportedTLSVersionWarning,
ValidationError,
WaiterConfigError,
WaiterError
]

```

Functions

```
[ ]
```

Sentinels / Constants / Objects

```
[ ]
```

Import statements

Classes

```

from botocore.exceptions import AliasConflictParameterError
from botocore.exceptions import ApiVersionNotFoundError
from botocore.exceptions import AwsChunkedWrapperError
from botocore.exceptions import BaseEndpointResolverError
from botocore.exceptions import BotoCoreError
from botocore.exceptions import CapacityNotAvailableError
from botocore.exceptions import ChecksumError
from botocore.exceptions import ClientError
from botocore.exceptions import ConfigNotFound
from botocore.exceptions import ConfigParseError
from botocore.exceptions import ConnectionClosedError
from botocore.exceptions import ConnectionError
from botocore.exceptions import ConnectTimeoutError
from botocore.exceptions import CredentialRetrievalError

```



```
from botocore.exceptions import DataNotFoundError
from botocore.exceptions import EndpointConnectionError
from botocore.exceptions import EndpointProviderError
from botocore.exceptions import EndpointResolutionError
from botocore.exceptions import EndpointVariantError
from botocore.exceptions import EventStreamError
from botocore.exceptions import FlexibleChecksumError
from botocore.exceptions import HTTPClientError
from botocore.exceptions import ImminentRemovalWarning
from botocore.exceptions import IncompleteReadError
from botocore.exceptions import InfiniteLoopConfigError
from botocore.exceptions import InvalidChecksumConfigError
from botocore.exceptions import InvalidConfigError
from botocore.exceptions import InvalidDefaultsMode
from botocore.exceptions import InvalidDNSNameError
from botocore.exceptions import InvalidEndpointConfigurationError
from botocore.exceptions import InvalidEndpointDiscoveryConfigurationError
from botocore.exceptions import InvalidExpressionError
from botocore.exceptions import InvalidHostLabelError
from botocore.exceptions import InvalidIMDSEndpointError
from botocore.exceptions import InvalidIMDSEndpointModeError
from botocore.exceptions import InvalidMaxRetryAttemptsError
from botocore.exceptions import InvalidProxiesConfigError
from botocore.exceptions import InvalidRegionError
from botocore.exceptions import InvalidRetryConfigurationError
from botocore.exceptions import InvalidRetryModeError
from botocore.exceptions import InvalidS3AddressingStyleError
from botocore.exceptions import InvalidS3UsEast1RegionalEndpointConfigError
from botocore.exceptions import InvalidSTSRegionalEndpointsConfigError
from botocore.exceptions import MD5UnavailableError
from botocore.exceptions import MetadataRetrievalError
from botocore.exceptions import MissingDependencyException
from botocore.exceptions import MissingParametersError
from botocore.exceptions import MissingServiceIdError
from botocore.exceptions import NoAuthTokenError
from botocore.exceptions import NoCredentialsError
from botocore.exceptions import NoRegionError
from botocore.exceptions import OperationNotPageableError
from botocore.exceptions import PaginationError
from botocore.exceptions import ParamValidationError
from botocore.exceptions import PartialCredentialsError
from botocore.exceptions import ProfileNotFound
from botocore.exceptions import ProxyConnectionError
from botocore.exceptions import RangeError
from botocore.exceptions import ReadTimeoutError
from botocore.exceptions import RefreshWithMFAUnsupportedError
from botocore.exceptions import ResponseStreamingError
from botocore.exceptions import ServiceNotInRegionError
from botocore.exceptions import SSLError
from botocore.exceptions import SSOError
from botocore.exceptions import SSOTokenLoadError
from botocore.exceptions import StubAssertionError
from botocore.exceptions import StubResponseError
from botocore.exceptions import TokenRetrievalError
from botocore.exceptions import UnauthorizedSSOTokenError
from botocore.exceptions import UndefinedModelAttributeError
from botocore.exceptions import UnknownClientMethodError
from botocore.exceptions import UnknownCredentialError
from botocore.exceptions import UnknownEndpointError
from botocore.exceptions import UnknownEndpointResolutionBuiltInName
from botocore.exceptions import UnknownFIPSEndpointError
from botocore.exceptions import UnknownKeyError
```

```
from botocore.exceptions import UnknownParameterError
from botocore.exceptions import UnknownRegionError
from botocore.exceptions import UnknownServiceError
from botocore.exceptions import UnknownServiceStyle
from botocore.exceptions import UnknownSignatureVersionError
from botocore.exceptions import UnseekableStreamError
from botocore.exceptions import UnStubbedResponseError
from botocore.exceptions import UnsupportedOutpostResourceError
from botocore.exceptions import UnsupportedS3AccesspointConfigurationError
from botocore.exceptions import UnsupportedS3ArnError
from botocore.exceptions import UnsupportedS3ConfigurationError
from botocore.exceptions import UnsupportedS3ControlArnError
from botocore.exceptions import UnsupportedS3ControlConfigurationError
from botocore.exceptions import UnsupportedServiceProtocolsError
from botocore.exceptions import UnsupportedSignatureVersionError
from botocore.exceptions import UnsupportedTLSVersionWarning
from botocore.exceptions import ValidationError
from botocore.exceptions import WaiterConfigError
from botocore.exceptions import WaiterError
```

Functions

(none)

Sentinels / Constants / Objects

(none)

botocore.handlers

Classes

```
[
    AliasConflictParameterError,
    AppendParamDocumentation,
    ArnParser,
    AutoPopulatedParam,
    BytesIO,
    ClientConfigString,
    ClientMethodAlias,
    DeprecatedServiceDocumenter,
    EndpointResolverBuiltins,
    HeaderToHostHoister,
    HideParamFromOperations,
    MissingServiceIdError,
    OrderedDict,
    ParameterAlias,
    ParamValidationError,
    UnsupportedTLSVersionWarning,
    XMLParseError
]
```

Functions

```
[
    add_accept_header,
    add_dsql_generate_db_auth_token_methods,
    add_expect_header,
    add_generate_db_auth_token,
    add_generate_presigned_post,
    add_generate_presigned_url,
    add_glacier_checksums,
    add_glacier_version,
    add_recursion_detection_header,
    add_retry_headers,
    base64_encode_user_data,
    change_get_to_post,
    check_for_200_error,
    check_openssl_supports_tls_version_1_2,
    convert_body_to_file_like_object,
    copy_source_sse_md5,
    customize_endpoint_resolver_builtins,
    decode_console_output,
    decode_list_object,
    decode_list_object_v2,
    decode_list_object_versions,
    decode_quoted_jsondoc,
    disable_signing,
    document_base64_encoding,
    document_cloudformation_get_template_return_type,
    document_copy_source_form,
    document_expires_shape,
    document_glacier_tree_hash_checksum,
    ensure_bytes,
    escape_xml_payload,
    fix_route53_ids,
    generate_idempotent_uuid,
    get_bearer_auth_supported_services,
    get_md5,
    get_token_from_environment,
    handle_copy_source_param,
```

```

handle_expires_header,
handle_service_name_alias,
hyphenize_service_id,
inject_account_id,
inject_api_version_header_if_needed,
inject_presigned_url_ec2,
inject_presigned_url_rds,
is_global_accesspoint,
json_decode_policies,
json_decode_template_body,
parse_get_bucket_location,
percent_encode,
quote,
register_feature_id,
remove_accid_host_prefix_from_model,
remove_arn_from_signing_path,
remove_bedrock_runtime_invoke_model_with_bidirectional_stream,
remove_bucket_from_url_paths_from_model,
remove_content_type_header_for_presigning,
remove_lex_v2_start_conversation,
remove_qbusiness_chat,
set_list_objects_encoding_type_url,
set_operation_specific_signer,
sse_md5,
switch_host_machinelearning,
switch_host_with_param,
unquote,
unquote_str,
urlunsplit,
validate_ascii_metadata,
validate_bucket_name
]

```

Sentinels / Constants / Objects

```

[
    BUILTIN_HANDLERS,
    logger,
    MD5_AVAILABLE,
    REGISTER_FIRST,
    REGISTER_LAST,
    S3_SIGNING_NAMES,
    SAFE_CHARS,
    SERVICE_NAME_ALIASES,
    urlsplit,
    VALID_BUCKET,
    VALID_HOST_LABEL_RE,
    VALID_S3_ARN,
    VERSION_ID_SUFFIX
]

```

Import statements

Classes

```

from botocore.handlers import AliasConflictParameterError
from botocore.handlers import AppendParamDocumentation
from botocore.handlers import ArnParser
from botocore.handlers import AutoPopulatedParam
from botocore.handlers import BytesIO
from botocore.handlers import ClientConfigString
from botocore.handlers import ClientMethodAlias
from botocore.handlers import DeprecatedServiceDocumenter
from botocore.handlers import EndpointResolverBuiltins
from botocore.handlers import HeaderToHostHoister

```

```

from botocore.handlers import HideParamFromOperations
from botocore.handlers import MissingServiceIdError
from botocore.handlers import OrderedDict
from botocore.handlers import ParameterAlias
from botocore.handlers import ParamValidationError
from botocore.handlers import UnsupportedTLSVersionWarning
from botocore.handlers import XMLParseError
# Functions
from botocore.handlers import add_accept_header
from botocore.handlers import add_dsql_generate_db_auth_token_methods
from botocore.handlers import add_expect_header
from botocore.handlers import add_generate_db_auth_token
from botocore.handlers import add_generate_presigned_post
from botocore.handlers import add_generate_presigned_url
from botocore.handlers import add_glacier_checksums
from botocore.handlers import add_glacier_version
from botocore.handlers import add_recursion_detection_header
from botocore.handlers import add_retry_headers
from botocore.handlers import base64_encode_user_data
from botocore.handlers import change_get_to_post
from botocore.handlers import check_for_200_error
from botocore.handlers import check_openssl_supports_tls_version_1_2
from botocore.handlers import convert_body_to_file_like_object
from botocore.handlers import copy_source_sse_md5
from botocore.handlers import customize_endpoint_resolver_builtins
from botocore.handlers import decode_console_output
from botocore.handlers import decode_list_object
from botocore.handlers import decode_list_object_v2
from botocore.handlers import decode_list_object_versions
from botocore.handlers import decode_quoted_jsondoc
from botocore.handlers import disable_signing
from botocore.handlers import document_base64_encoding
from botocore.handlers import document_cloudformation_get_template_return_type
from botocore.handlers import document_copy_source_form
from botocore.handlers import document_expires_shape
from botocore.handlers import document_glacier_tree_hash_checksum
from botocore.handlers import ensure_bytes
from botocore.handlers import escape_xml_payload
from botocore.handlers import fix_route53_ids
from botocore.handlers import generate_idempotent_uuid
from botocore.handlers import get_bearer_auth_supported_services
from botocore.handlers import get_md5
from botocore.handlers import get_token_from_environment
from botocore.handlers import handle_copy_source_param
from botocore.handlers import handle_expires_header
from botocore.handlers import handle_service_name_alias
from botocore.handlers import hyphenize_service_id
from botocore.handlers import inject_account_id
from botocore.handlers import inject_api_version_header_if_needed
from botocore.handlers import inject_presigned_url_ec2
from botocore.handlers import inject_presigned_url_rds
from botocore.handlers import is_global_accesspoint
from botocore.handlers import json_decode_policies
from botocore.handlers import json_decode_template_body
from botocore.handlers import parse_get_bucket_location
from botocore.handlers import percent_encode
from botocore.handlers import quote
from botocore.handlers import register_feature_id
from botocore.handlers import remove_accid_host_prefix_from_model
from botocore.handlers import remove_arn_from_signing_path
from botocore.handlers import remove_bedrock_runtime_invoke_model_with_bidirectional_stream
from botocore.handlers import remove_bucket_from_url_paths_from_model

```

```
from botocore.handlers import remove_content_type_header_for_presigning
from botocore.handlers import remove_lex_v2_start_conversation
from botocore.handlers import remove_qbusiness_chat
from botocore.handlers import set_list_objects_encoding_type_url
from botocore.handlers import set_operation_specific_signer
from botocore.handlers import sse_md5
from botocore.handlers import switch_host_machinelearning
from botocore.handlers import switch_host_with_param
from botocore.handlers import unquote
from botocore.handlers import unquote_str
from botocore.handlers import urlunsplit
from botocore.handlers import validate_ascii_metadata
from botocore.handlers import validate_bucket_name
```

Sentinels / Constants / Objects

```
from botocore.handlers import BUILTIN_HANDLERS
from botocore.handlers import logger
from botocore.handlers import MD5_AVAILABLE
from botocore.handlers import REGISTER_FIRST
from botocore.handlers import REGISTER_LAST
from botocore.handlers import S3_SIGNING_NAMES
from botocore.handlers import SAFE_CHARS
from botocore.handlers import SERVICE_NAME_ALIASES
from botocore.handlers import urlsplit
from botocore.handlers import VALID_BUCKET
from botocore.handlers import VALID_HOST_LABEL_RE
from botocore.handlers import VALID_S3_ARN
from botocore.handlers import VERSION_ID_SUFFIX
```

botocore.history

Classes

```
[
    BaseHistoryHandler,
    HistoryRecorder
]
```

Functions

```
[
    get_global_history_recorder
]
```

Sentinels / Constants / Objects

```
[
    HISTORY_RECORDER,
    logger
]
```

Import statements

Classes

```
from botocore.history import BaseHistoryHandler
from botocore.history import HistoryRecorder
```

Functions

```
from botocore.history import get_global_history_recorder
```

Sentinels / Constants / Objects

```
from botocore.history import HISTORY_RECORDER
from botocore.history import logger
```

botocore.hooks

Classes

```
[
    BaseEventHooks,
    deque,
    EventAliaser,
    HierarchicalEmitter,
    NodeList
]
```

Functions

```
[
    accepts_kwargs,
    first_non_none_response,
    namedtuple
]
```

Sentinels / Constants / Objects

```
[
    EVENT_ALIASES,
    logger
]
```

Import statements

Classes

```
from botocore.hooks import BaseEventHooks
from botocore.hooks import deque
from botocore.hooks import EventAliaser
from botocore.hooks import HierarchicalEmitter
from botocore.hooks import NodeList
```

Functions

```
from botocore.hooks import accepts_kwargs
from botocore.hooks import first_non_none_response
from botocore.hooks import namedtuple
```

Sentinels / Constants / Objects

```
from botocore.hooks import EVENT_ALIASES
from botocore.hooks import logger
```


botocore.httpchecksum

Classes

```
[
    AwsChunkedWrapper,
    AwsChunkedWrapperError,
    BaseChecksum,
    Crc32Checksum,
    CrtCrc32cChecksum,
    CrtCrc32Checksum,
    CrtCrc64NvmeChecksum,
    FlexibleChecksumError,
    MissingDependencyException,
    Sha1Checksum,
    Sha256Checksum,
    StreamingBody,
    StreamingChecksumBody,
    StructureShape
]
```

Functions

```
[
    apply_request_checksum,
    conditionally_calculate_md5,
    crc32,
    determine_content_length,
    handle_checksum_body,
    has_checksum_header,
    has_minimum crt_version,
    register_feature_id,
    resolve_checksum_context,
    resolve_request_checksum_algorithm,
    resolve_response_checksum_algorithms,
    sha1,
    sha256,
    urlparse
]
```

Sentinels / Constants / Objects

```
[
    DEFAULT_CHECKSUM_ALGORITHM,
    HAS_CRT,
    logger
]
```

Import statements

Classes

```
from botocore.httpchecksum import AwsChunkedWrapper
from botocore.httpchecksum import AwsChunkedWrapperError
from botocore.httpchecksum import BaseChecksum
from botocore.httpchecksum import Crc32Checksum
from botocore.httpchecksum import CrtCrc32cChecksum
from botocore.httpchecksum import CrtCrc32Checksum
from botocore.httpchecksum import CrtCrc64NvmeChecksum
from botocore.httpchecksum import FlexibleChecksumError
from botocore.httpchecksum import MissingDependencyException
from botocore.httpchecksum import Sha1Checksum
from botocore.httpchecksum import Sha256Checksum
from botocore.httpchecksum import StreamingBody
from botocore.httpchecksum import StreamingChecksumBody
from botocore.httpchecksum import StructureShape
```

Functions

```
from botocore.httpchecksum import apply_request_checksum
from botocore.httpchecksum import conditionally_calculate_md5
from botocore.httpchecksum import crc32
from botocore.httpchecksum import determine_content_length
from botocore.httpchecksum import handle_checksum_body
from botocore.httpchecksum import has_checksum_header
from botocore.httpchecksum import has_minimum_crt_version
from botocore.httpchecksum import register_feature_id
from botocore.httpchecksum import resolve_checksum_context
from botocore.httpchecksum import resolve_request_checksum_algorithm
from botocore.httpchecksum import resolve_response_checksum_algorithms
from botocore.httpchecksum import sha1
from botocore.httpchecksum import sha256
from botocore.httpchecksum import urlparse
```

Sentinels / Constants / Objects

```
from botocore.httpchecksum import DEFAULT_CHECKSUM_ALGORITHM
from botocore.httpchecksum import HAS_CRT
from botocore.httpchecksum import logger
```

botocore.httpsession

Classes

```
[
    ConnectionClosedError,
    ConnectTimeoutError,
    EndpointConnectionError,
    HTTPClientError,
    InvalidProxiesConfigError,
    LocationParseError,
    NewConnectionError,
    PoolManager,
    ProtocolError,
    ProxyConfiguration,
    ProxyConnectionError,
    ProxyError,
    ReadTimeoutError,
    Retry,
    SSLContext,
    SSLError,
    Timeout,
    URLLib3ConnectTimeoutError,
    URLLib3ReadTimeoutError,
    URLLib3Session,
    URLLib3SSLError
]
```

Functions

```
[
    b64encode,
    create_urllib3_context,
    ensure_boolean,
    ensure_bytes,
    filter_ssl_warnings,
    get_cert_path,
    is_ipaddress,
    mask_proxy_url,
    parse_url,
    proxy_from_url,
    unquote,
    urlparse,
    where
]
```

Sentinels / Constants / Objects

```
[
    DEFAULT_CA_BUNDLE,
    DEFAULT_CIPHERS,
    DEFAULT_TIMEOUT,
    IPV6_ADDRZ_RE,
    logger,
    MAX_POOL_CONNECTIONS,
    OP_NO_COMPRESSION,
    OP_NO_SSLv2,
    OP_NO_SSLv3,
    OP_NO_TICKET,
    PROTOCOL_TLS,
    PROTOCOL_TLS_CLIENT
]
```

Import statements

Classes

```
from botocore.httpsession import ConnectionClosedError
from botocore.httpsession import ConnectTimeoutError
from botocore.httpsession import EndpointConnectionError
from botocore.httpsession import HTTPClientError
from botocore.httpsession import InvalidProxiesConfigError
from botocore.httpsession import LocationParseError
from botocore.httpsession import NewConnectionError
from botocore.httpsession import PoolManager
from botocore.httpsession import ProtocolError
from botocore.httpsession import ProxyConfiguration
from botocore.httpsession import ProxyConnectionError
from botocore.httpsession import ProxyError
from botocore.httpsession import ReadTimeoutError
from botocore.httpsession import Retry
from botocore.httpsession import SSLContext
from botocore.httpsession import SSLError
from botocore.httpsession import Timeout
from botocore.httpsession import URLLib3ConnectTimeoutError
from botocore.httpsession import URLLib3ReadTimeoutError
from botocore.httpsession import URLLib3Session
from botocore.httpsession import URLLib3SSLError
```

Functions

```
from botocore.httpsession import b64encode
from botocore.httpsession import create_urllib3_context
from botocore.httpsession import ensure_boolean
from botocore.httpsession import ensure_bytes
from botocore.httpsession import filter_ssl_warnings
from botocore.httpsession import get_cert_path
from botocore.httpsession import is_ipaddress
from botocore.httpsession import mask_proxy_url
from botocore.httpsession import parse_url
from botocore.httpsession import proxy_from_url
from botocore.httpsession import unquote
from botocore.httpsession import urlparse
from botocore.httpsession import where
```

Sentinels / Constants / Objects

```
from botocore.httpsession import DEFAULT_CA_BUNDLE
from botocore.httpsession import DEFAULT_CIPHERS
from botocore.httpsession import DEFAULT_TIMEOUT
from botocore.httpsession import IPV6_ADDRZ_RE
from botocore.httpsession import logger
from botocore.httpsession import MAX_POOL_CONNECTIONS
from botocore.httpsession import OP_NO_COMPRESSION
from botocore.httpsession import OP_NO_SSLv2
from botocore.httpsession import OP_NO_SSLv3
from botocore.httpsession import OP_NO_TICKET
from botocore.httpsession import PROTOCOL_TLS
from botocore.httpsession import PROTOCOL_TLS_CLIENT
```

botocore.loaders

Classes

```
[
    DataNotFoundError,
    ExtrasProcessor,
    JSONFileLoader,
    Loader,
    OrderedDict,
    UnknownServiceError
]
```

Functions

```
[
    create_loader,
    deep_merge,
    gzip_open,
    instance_cache
]
```

Sentinels / Constants / Objects

```
[
    BOTOCORE_ROOT,
    HAS_GZIP,
    logger
]
```

Import statements

Classes

```
from botocore.loaders import DataNotFoundError
from botocore.loaders import ExtrasProcessor
from botocore.loaders import JSONFileLoader
from botocore.loaders import Loader
from botocore.loaders import OrderedDict
from botocore.loaders import UnknownServiceError
```

Functions

```
from botocore.loaders import create_loader
from botocore.loaders import deep_merge
from botocore.loaders import gzip_open
from botocore.loaders import instance_cache
```

Sentinels / Constants / Objects

```
from botocore.loaders import BOTOCORE_ROOT
from botocore.loaders import HAS_GZIP
from botocore.loaders import logger
```

botocore.model

Classes

```
[
    CachedProperty,
    ClientContextParameter,
    ContextParameter,
    defaultdict,
    DenormalizedStructureBuilder,
    InvalidShapeError,
    InvalidShapeReferenceError,
    ListShape,
    MapShape,
    MissingServiceIdError,
    NoShapeFoundError,
    OperationModel,
    OperationNotFoundError,
    OrderedDict,
    ServiceId,
    ServiceModel,
    Shape,
    ShapeNameGenerator,
    ShapeResolver,
    StaticContextParameter,
    StringShape,
    StructureShape,
    UndefinedModelAttributeError,
    UnresolvableShapeMap,
    UnsupportedServiceProtocolsError
]
```

Functions

```
[
    hyphenize_service_id,
    instance_cache,
    NamedTuple,
    resolve_auth_type
]
```

Sentinels / Constants / Objects

```
[
    NOT_SET,
    PRIORITY_ORDERED_SUPPORTED_PROTOCOLS,
    Union
]
```

Import statements

Classes

```
from botocore.model import CachedProperty
from botocore.model import ClientContextParameter
from botocore.model import ContextParameter
from botocore.model import defaultdict
from botocore.model import DenormalizedStructureBuilder
from botocore.model import InvalidShapeError
from botocore.model import InvalidShapeReferenceError
from botocore.model import ListShape
from botocore.model import MapShape
from botocore.model import MissingServiceIdError
from botocore.model import NoShapeFoundError
from botocore.model import OperationModel
from botocore.model import OperationNotFoundError
```

```
from botocore.model import OrderedDict
from botocore.model import ServiceId
from botocore.model import ServiceModel
from botocore.model import Shape
from botocore.model import ShapeNameGenerator
from botocore.model import ShapeResolver
from botocore.model import StaticContextParameter
from botocore.model import StringShape
from botocore.model import StructureShape
from botocore.model import UndefinedModelAttributeError
from botocore.model import UnresolvableShapeMap
from botocore.model import UnsupportedServiceProtocolsError

# Functions
from botocore.model import hyphenize_service_id
from botocore.model import instance_cache
from botocore.model import NamedTuple
from botocore.model import resolve_auth_type

# Sentinels / Constants / Objects
from botocore.model import NOT_SET
from botocore.model import PRIORITY_ORDERED_SUPPORTED_PROTOCOLS
from botocore.model import Union
```

botocore.monitoring

Classes

```
[
    APICallAttemptEvent,
    APICallEvent,
    BaseMonitorEvent,
    CSMSerializer,
    Monitor,
    MonitorEventAdapter,
    SocketPublisher
]
```

Functions

```
[
    ensure_bytes,
    ensure_unicode,
    urlparse
]
```

Sentinels / Constants / Objects

```
[
    logger,
    RETRYABLE_EXCEPTIONS
]
```

Import statements

Classes

```
from botocore.monitoring import APICallAttemptEvent
from botocore.monitoring import APICallEvent
from botocore.monitoring import BaseMonitorEvent
from botocore.monitoring import CSMSerializer
from botocore.monitoring import Monitor
from botocore.monitoring import MonitorEventAdapter
from botocore.monitoring import SocketPublisher
```

Functions

```
from botocore.monitoring import ensure_bytes
from botocore.monitoring import ensure_unicode
from botocore.monitoring import urlparse
```

Sentinels / Constants / Objects

```
from botocore.monitoring import logger
from botocore.monitoring import RETRYABLE_EXCEPTIONS
```


botocore.paginate

Classes

```
[
    PageIterator,
    PaginationError,
    Paginator,
    PaginatorModel,
    partial,
    ResultKeyIterator,
    TokenDecoder,
    TokenEncoder
]
```

Functions

```
[
    merge_dicts,
    register_feature_id,
    set_value_from_jmespath,
    tee,
    with_current_context
]
```

Sentinels / Constants / Objects

```
[
    log
]
```

Import statements

Classes

```
from botocore.paginate import PageIterator
from botocore.paginate import PaginationError
from botocore.paginate import Paginator
from botocore.paginate import PaginatorModel
from botocore.paginate import partial
from botocore.paginate import ResultKeyIterator
from botocore.paginate import TokenDecoder
from botocore.paginate import TokenEncoder
```

Functions

```
from botocore.paginate import merge_dicts
from botocore.paginate import register_feature_id
from botocore.paginate import set_value_from_jmespath
from botocore.paginate import tee
from botocore.paginate import with_current_context
```

Sentinels / Constants / Objects

```
from botocore.paginate import log
```

botocore.parsers

Classes

```
[
    BaseCBORParser,
    BaseEventStreamParser,
    BaseJSONParser,
    BaseRestParser,
    BaseRpcV2Parser,
    BaseXMLResponseParser,
    CachedProperty,
    EC2QueryParser,
    EventStream,
    EventStreamCBORParser,
    EventStreamJSONParser,
    EventStreamXMLParser,
    JSONParser,
    NoInitialResponseError,
    QueryParser,
    ResponseParser,
    ResponseParserError,
    ResponseParserFactory,
    RestJSONParser,
    RestXMLParser,
    RpcV2CBORParser,
    XMLParseError
]
```

Functions

```
[
    create_parser,
    DEFAULT_TIMESTAMP_PARSER,
    ensure_boolean,
    is_json_value_header,
    lowercase_dict,
    merge_dicts,
    parse_timestamp
]
```

Sentinels / Constants / Objects

```
[
    LOG,
    PROTOCOL_PARSERS
]
```

Import statements

Classes

```
from botocore.parsers import BaseCBORParser
from botocore.parsers import BaseEventStreamParser
from botocore.parsers import BaseJSONParser
from botocore.parsers import BaseRestParser
from botocore.parsers import BaseRpcV2Parser
from botocore.parsers import BaseXMLResponseParser
from botocore.parsers import CachedProperty
from botocore.parsers import EC2QueryParser
from botocore.parsers import EventStream
from botocore.parsers import EventStreamCBORParser
from botocore.parsers import EventStreamJSONParser
from botocore.parsers import EventStreamXMLParser
from botocore.parsers import JSONParser
from botocore.parsers import NoInitialResponseError
```

```
from botocore.parsers import QueryParser
from botocore.parsers import ResponseParser
from botocore.parsers import ResponseParserError
from botocore.parsers import ResponseParserFactory
from botocore.parsers import RestJSONParser
from botocore.parsers import RestXMLParser
from botocore.parsers import RpcV2CBORParser
from botocore.parsers import XMLParseError
# Functions
from botocore.parsers import create_parser
from botocore.parsers import DEFAULT_TIMESTAMP_PARSER
from botocore.parsers import ensure_boolean
from botocore.parsers import is_json_value_header
from botocore.parsers import lowercase_dict
from botocore.parsers import merge_dicts
from botocore.parsers import parse_timestamp
# Sentinels / Constants / Objects
from botocore.parsers import LOG
from botocore.parsers import PROTOCOL_PARSERS
```

botocore.plugin

Classes

```
[
    ContextVar,
    PluginContext
]
```

Functions

```
[
    dataclass,
    get_botocore_plugins,
    get_plugin_context,
    load_client_plugins,
    reset_plugin_context,
    set_plugin_context
]
```

Sentinels / Constants / Objects

```
[
    log,
    Optional
]
```

Import statements

Classes

```
from botocore.plugin import ContextVar
from botocore.plugin import PluginContext
```

Functions

```
from botocore.plugin import dataclass
from botocore.plugin import get_botocore_plugins
from botocore.plugin import get_plugin_context
from botocore.plugin import load_client_plugins
from botocore.plugin import reset_plugin_context
from botocore.plugin import set_plugin_context
```

Sentinels / Constants / Objects

```
from botocore.plugin import log
from botocore.plugin import Optional
```

botocore.regions

Classes

```
[
    BaseEndpointResolver,
    EndpointProvider,
    EndpointProviderError,
    EndpointResolver,
    EndpointResolverBuiltins,
    EndpointRulesetResolver,
    EndpointVariantError,
    Enum,
    InvalidEndpointConfigurationError,
    InvalidHostLabelError,
    MissingDependencyException,
    NoRegionError,
    ParamValidationError,
    UnknownEndpointResolutionBuiltInName,
    UnknownRegionError,
    UnknownSignatureVersionError,
    UnsupportedS3AccesspointConfigurationError,
    UnsupportedS3ConfigurationError,
    UnsupportedS3ControlArnError,
    UnsupportedS3ControlConfigurationError
]
```

Functions

```
[
    ensure_boolean,
    instance_cache,
    register_feature_id,
    xform_name
]
```

Sentinels / Constants / Objects

```
[
    AUTH_TYPE_MAPS,
    CRT_SUPPORTED_AUTH_TYPES,
    DEFAULT_SERVICE_DATA,
    DEFAULT_URI_TEMPLATE,
    HAS_CRT,
    LOG,
    UNSIGNED
]
```

Import statements

Classes

```
from botocore.regions import BaseEndpointResolver
from botocore.regions import EndpointProvider
from botocore.regions import EndpointProviderError
from botocore.regions import EndpointResolver
from botocore.regions import EndpointResolverBuiltins
from botocore.regions import EndpointRulesetResolver
from botocore.regions import EndpointVariantError
from botocore.regions import Enum
from botocore.regions import InvalidEndpointConfigurationError
from botocore.regions import InvalidHostLabelError
from botocore.regions import MissingDependencyException
from botocore.regions import NoRegionError
from botocore.regions import ParamValidationError
from botocore.regions import UnknownEndpointResolutionBuiltInName
```

```
from botocore.regions import UnknownRegionError
from botocore.regions import UnknownSignatureVersionError
from botocore.regions import UnsupportedS3AccesspointConfigurationError
from botocore.regions import UnsupportedS3ConfigurationError
from botocore.regions import UnsupportedS3ControlArnError
from botocore.regions import UnsupportedS3ControlConfigurationError
```

Functions

```
from botocore.regions import ensure_boolean
from botocore.regions import instance_cache
from botocore.regions import register_feature_id
from botocore.regions import xform_name
```

Sentinels / Constants / Objects

```
from botocore.regions import AUTH_TYPE_MAPS
from botocore.regions import CRT_SUPPORTED_AUTH_TYPES
from botocore.regions import DEFAULT_SERVICE_DATA
from botocore.regions import DEFAULT_URI_TEMPLATE
from botocore.regions import HAS_CRT
from botocore.regions import LOG
from botocore.regions import UNSIGNED
```

botocore.response

Classes

```
[
    IncompleteReadError,
    IOBase,
    ReadTimeoutError,
    ResponseStreamingError,
    StreamingBody,
    URLLib3ProtocolError,
    URLLib3ReadTimeoutError,
    XMLParseError
]
```

Functions

```
[
    first_non_none_response,
    get_response,
    set_socket_timeout
]
```

Sentinels / Constants / Objects

```
[
    logger,
    ScalarTypes
]
```

Import statements

Classes

```
from botocore.response import IncompleteReadError
from botocore.response import IOBase
from botocore.response import ReadTimeoutError
from botocore.response import ResponseStreamingError
from botocore.response import StreamingBody
from botocore.response import URLLib3ProtocolError
from botocore.response import URLLib3ReadTimeoutError
from botocore.response import XMLParseError
```

Functions

```
from botocore.response import first_non_none_response
from botocore.response import get_response
from botocore.response import set_socket_timeout
```

Sentinels / Constants / Objects

```
from botocore.response import logger
from botocore.response import ScalarTypes
```

botocore.retries

Classes

[]

Functions

[]

Sentinels / Constants / Objects

[]

Import statements

Classes

(none)

Functions

(none)

Sentinels / Constants / Objects

(none)

botocore.retryhandler

Classes

```
[
    BaseChecker,
    ChecksumError,
    ConnectionClosedError,
    ConnectionError,
    CRC32Checker,
    EndpointConnectionError,
    ExceptionRaiser,
    HTTPStatusCodeChecker,
    MaxAttemptsDecorator,
    MultiChecker,
    ReadTimeoutError,
    RetryHandler,
    ServiceErrorCodeChecker
]
```

Functions

```
[
    crc32,
    create_checker_from_retry_config,
    create_exponential_delay_function,
    create_retry_action_from_config,
    create_retry_handler,
    delay_exponential
]
```

Sentinels / Constants / Objects

```
[
    EXCEPTION_MAP,
    logger
]
```

Import statements

Classes

```
from botocore.retryhandler import BaseChecker
from botocore.retryhandler import ChecksumError
from botocore.retryhandler import ConnectionClosedError
from botocore.retryhandler import ConnectionError
from botocore.retryhandler import CRC32Checker
from botocore.retryhandler import EndpointConnectionError
from botocore.retryhandler import ExceptionRaiser
from botocore.retryhandler import HTTPStatusCodeChecker
from botocore.retryhandler import MaxAttemptsDecorator
from botocore.retryhandler import MultiChecker
from botocore.retryhandler import ReadTimeoutError
from botocore.retryhandler import RetryHandler
from botocore.retryhandler import ServiceErrorCodeChecker
```

Functions

```
from botocore.retryhandler import crc32
from botocore.retryhandler import create_checker_from_retry_config
from botocore.retryhandler import create_exponential_delay_function
from botocore.retryhandler import create_retry_action_from_config
from botocore.retryhandler import create_retry_handler
from botocore.retryhandler import delay_exponential
```

Sentinels / Constants / Objects

```
from botocore.retryhandler import EXCEPTION_MAP
from botocore.retryhandler import logger
```


botocore.serialize

Classes

```
[
    BaseRestSerializer,
    BaseRpcV2Serializer,
    CBORSerializer,
    EC2Serializer,
    JSONSerializer,
    ParamValidationError,
    QuerySerializer,
    RestJSONSerializer,
    RestXMLSerializer,
    RpcV2CBORSerializer,
    Serializer
]
```

Functions

```
[
    create_serializer,
    formatdate,
    has_header,
    is_json_value_header,
    parse_to_aware_datetime,
    percent_encode,
    register_feature_id
]
```

Sentinels / Constants / Objects

```
[
    DEFAULT_TIMESTAMP_FORMAT,
    HOST_PREFIX_RE,
    ISO8601,
    ISO8601_MICRO,
    SERIALIZERS
]
```

Import statements

Classes

```
from botocore.serialize import BaseRestSerializer
from botocore.serialize import BaseRpcV2Serializer
from botocore.serialize import CBORSerializer
from botocore.serialize import EC2Serializer
from botocore.serialize import JSONSerializer
from botocore.serialize import ParamValidationError
from botocore.serialize import QuerySerializer
from botocore.serialize import RestJSONSerializer
from botocore.serialize import RestXMLSerializer
from botocore.serialize import RpcV2CBORSerializer
from botocore.serialize import Serializer
```

Functions

```
from botocore.serialize import create_serializer
from botocore.serialize import formatdate
from botocore.serialize import has_header
from botocore.serialize import is_json_value_header
from botocore.serialize import parse_to_aware_datetime
from botocore.serialize import percent_encode
from botocore.serialize import register_feature_id
```

Sentinels / Constants / Objects

```
from botocore.serialize import DEFAULT_TIMESTAMP_FORMAT
from botocore.serialize import HOST_PREFIX_RE
```

```
from botocore.serialize import ISO8601
from botocore.serialize import ISO8601_MICRO
from botocore.serialize import SERIALIZERS
```

botocore.session

Classes

```
[
    ClientExceptionsFactory,
    ComponentLocator,
    ConfigChainFactory,
    ConfigNotFound,
    ConfiguredEndpointProvider,
    ConfigValueStore,
    DefaultConfigResolver,
    EndpointResolver,
    EventAliaser,
    HierarchicalEmitter,
    IMDSRegionProvider,
    InvalidDefaultsMode,
    MutableMapping,
    PartialCredentialsError,
    ProfileNotFound,
    ResponseParserFactory,
    ServiceModel,
    Session,
    SessionVarDict,
    SmartDefaultsConfigStoreFactory,
    SubsetChainConfigFactory,
    UnknownServiceError,
    UserAgentString
]
```

Functions

```
[
    create_botocore_default_config_mapping,
    create_loader,
    first_non_none_response,
    get_botocore_plugins,
    get_context,
    get_session,
    invoke_initializers,
    load_client_plugins,
    validate_region_name,
    with_current_context
]
```

Sentinels / Constants / Objects

```
[
    BOTOCORE_DEFAULT_SESSION_VARIABLES,
    EVENT_ALIASES,
    HAS_CRT,
    logger,
    UNSIGNED
]
```

Import statements

Classes

```
from botocore.session import ClientExceptionsFactory
from botocore.session import ComponentLocator
from botocore.session import ConfigChainFactory
from botocore.session import ConfigNotFound
from botocore.session import ConfiguredEndpointProvider
from botocore.session import ConfigValueStore
from botocore.session import DefaultConfigResolver
```

```
from botocore.session import EndpointResolver
from botocore.session import EventAliaser
from botocore.session import HierarchicalEmitter
from botocore.session import IMDSRegionProvider
from botocore.session import InvalidDefaultsMode
from botocore.session import MutableMapping
from botocore.session import PartialCredentialsError
from botocore.session import ProfileNotFound
from botocore.session import ResponseParserFactory
from botocore.session import ServiceModel
from botocore.session import Session
from botocore.session import SessionVarDict
from botocore.session import SmartDefaultsConfigStoreFactory
from botocore.session import SubsetChainConfigFactory
from botocore.session import UnknownServiceError
from botocore.session import UserAgentString

# Functions
from botocore.session import create_botocore_default_config_mapping
from botocore.session import create_loader
from botocore.session import first_non_none_response
from botocore.session import get_botocore_plugins
from botocore.session import get_context
from botocore.session import get_session
from botocore.session import invoke_initializers
from botocore.session import load_client_plugins
from botocore.session import validate_region_name
from botocore.session import with_current_context

# Sentinels / Constants / Objects
from botocore.session import BOTOCORE_DEFAULT_SESSION_VARIABLES
from botocore.session import EVENT_ALIASES
from botocore.session import HAS_CRT
from botocore.session import logger
from botocore.session import UNSIGNED
```

botocore.signers

Classes

```
[
    ArnParser,
    CloudFrontSigner,
    FrozenAuthToken,
    OrderedDict,
    ParamValidationError,
    RequestSigner,
    S3PostPresigner,
    UnknownClientMethodError,
    UnknownSignatureVersionError,
    UnsupportedSignatureVersionError
]
```

Functions

```
[
    add_dsql_generate_db_auth_token_methods,
    add_generate_db_auth_token,
    add_generate_presigned_post,
    add_generate_presigned_url,
    create_request_object,
    datetime2timestamp,
    dsql_generate_db_connect_admin_auth_token,
    dsql_generate_db_connect_auth_token,
    fix_s3_host,
    generate_db_auth_token,
    generate_presigned_post,
    generate_presigned_url,
    get_current_datetime,
    prepare_request_dict
]
```

Sentinels / Constants / Objects

```
[ ]
```

Import statements

Classes

```
from botocore.signers import ArnParser
from botocore.signers import CloudFrontSigner
from botocore.signers import FrozenAuthToken
from botocore.signers import OrderedDict
from botocore.signers import ParamValidationError
from botocore.signers import RequestSigner
from botocore.signers import S3PostPresigner
from botocore.signers import UnknownClientMethodError
from botocore.signers import UnknownSignatureVersionError
from botocore.signers import UnsupportedSignatureVersionError
```

Functions

```
from botocore.signers import add_dsql_generate_db_auth_token_methods
from botocore.signers import add_generate_db_auth_token
from botocore.signers import add_generate_presigned_post
from botocore.signers import add_generate_presigned_url
from botocore.signers import create_request_object
from botocore.signers import datetime2timestamp
from botocore.signers import dsql_generate_db_connect_admin_auth_token
from botocore.signers import dsql_generate_db_connect_auth_token
from botocore.signers import fix_s3_host
from botocore.signers import generate_db_auth_token
from botocore.signers import generate_presigned_post
```

```
from botocore.signers import generate_presigned_url
from botocore.signers import get_current_datetime
from botocore.signers import prepare_request_dict
# Sentinels / Constants / Objects
(none)
```


botocore.stub

Classes

```
[
    AWSResponse,
    deque,
    ParamValidationError,
    StubAssertionError,
    Stubber,
    StubResponseError,
    UnStubbedResponseError
]
```

Functions

```
[
    pformat,
    validate_parameters
]
```

Sentinels / Constants / Objects

```
[
    ANY
]
```

Import statements

Classes

```
from botocore.stub import AWSResponse
from botocore.stub import deque
from botocore.stub import ParamValidationError
from botocore.stub import StubAssertionError
from botocore.stub import Stubber
from botocore.stub import StubResponseError
from botocore.stub import UnStubbedResponseError
```

Functions

```
from botocore.stub import pformat
from botocore.stub import validate_parameters
```

Sentinels / Constants / Objects

```
from botocore.stub import ANY
```

botocore.tokens

Classes

```
[
    CachedProperty,
    ClientError,
    Config,
    datetime,
    DeferredRefreshableToken,
    FrozenAuthToken,
    InvalidConfigError,
    JSONFileCache,
    ScopedEnvTokenProvider,
    SSOTokenLoader,
    SSOTokenProvider,
    timedelta,
    TokenProviderChain,
    TokenRetrievalError,
    tzutc
]
```

Functions

```
[
    create_nested_client,
    create_token_resolver,
    get_token_from_environment,
    NamedTuple,
    total_seconds
]
```

Sentinels / Constants / Objects

```
[
    logger,
    Optional,
    UNSIGNED
]
```

Import statements

Classes

```
from botocore.tokens import CachedProperty
from botocore.tokens import ClientError
from botocore.tokens import Config
from botocore.tokens import datetime
from botocore.tokens import DeferredRefreshableToken
from botocore.tokens import FrozenAuthToken
from botocore.tokens import InvalidConfigError
from botocore.tokens import JSONFileCache
from botocore.tokens import ScopedEnvTokenProvider
from botocore.tokens import SSOTokenLoader
from botocore.tokens import SSOTokenProvider
from botocore.tokens import timedelta
from botocore.tokens import TokenProviderChain
from botocore.tokens import TokenRetrievalError
from botocore.tokens import tzutc
```

Functions

```
from botocore.tokens import create_nested_client
from botocore.tokens import create_token_resolver
from botocore.tokens import get_token_from_environment
from botocore.tokens import NamedTuple
from botocore.tokens import total_seconds
```

Sentinels / Constants / Objects

```
from botocore.tokens import logger
from botocore.tokens import Optional
from botocore.tokens import UNSIGNED
```

botocore.translate

Classes

[]

Functions

```
[
    build_retry_config,
    merge_dicts,
    resolve_references
]
```

Sentinels / Constants / Objects

[]

Import statements

Classes

(none)

Functions

```
from botocore.translate import build_retry_config
from botocore.translate import merge_dicts
from botocore.translate import resolve_references
```

Sentinels / Constants / Objects

(none)

botocore.useragent

Classes

```
[
    RawStringUserAgentComponent,
    UserAgentComponent,
    UserAgentComponentSizeConfig,
    UserAgentString
]
```

Functions

```
[
    copy,
    get_context,
    modify_components,
    NamedTuple,
    register_feature_id,
    sanitize_user_agent_string_component
]
```

Sentinels / Constants / Objects

```
[
    ascii_letters,
    botocore_version,
    digits,
    HAS_CRT,
    logger,
    Optional
]
```

Import statements

Classes

```
from botocore.useragent import RawStringUserAgentComponent
from botocore.useragent import UserAgentComponent
from botocore.useragent import UserAgentComponentSizeConfig
from botocore.useragent import UserAgentString
```

Functions

```
from botocore.useragent import copy
from botocore.useragent import get_context
from botocore.useragent import modify_components
from botocore.useragent import NamedTuple
from botocore.useragent import register_feature_id
from botocore.useragent import sanitize_user_agent_string_component
```

Sentinels / Constants / Objects

```
from botocore.useragent import ascii_letters
from botocore.useragent import botocore_version
from botocore.useragent import digits
from botocore.useragent import HAS_CRT
from botocore.useragent import logger
from botocore.useragent import Optional
```

botocore.utils

Classes

```
[
    ArgumentGenerator,
    ArnParser,
    BadIMDSRequestError,
    CachedProperty,
    ClientError,
    ConfigNotFound,
    ConnectionClosedError,
    ConnectTimeoutError,
    ContainerMetadataFetcher,
    EndpointConnectionError,
    EventbridgeSignerSetter,
    FileWebIdentityTokenLoader,
    HTTPClientError,
    IdentityCache,
    IMDSFetcher,
    IMDSRegionProvider,
    InstanceMetadataFetcher,
    InstanceMetadataRegionFetcher,
    InvalidArnException,
    InvalidDNSNameError,
    InvalidEndpointConfigurationError,
    InvalidExpressionError,
    InvalidHostLabelError,
    InvalidIMDSEndpointError,
    InvalidIMDSEndpointModeError,
    InvalidRegionError,
    JSONFileCache,
    LocationParseError,
    MetadataRetrievalError,
    MissingDependencyException,
    OrderedDict,
    Path,
    PluginContext,
    ReadTimeoutError,
    S3ArnParamHandler,
    S3ControlArnParamHandler,
    S3ControlArnParamHandlerv2,
    S3ControlEndpointSetter,
    S3EndpointSetter,
    S3ExpressIdentityCache,
    S3ExpressIdentityResolver,
    S3RegionRedirector,
    S3RegionRedirectorv2,
    SSOTokenLoader,
    SSOTokenLoadError,
    tzutc,
    UnsupportedOutpostResourceError,
    UnsupportedS3AccesspointConfigurationError,
    UnsupportedS3ArnError,
    UnsupportedS3ConfigurationError,
    UnsupportedS3ControlArnError,
    UnsupportedS3ControlConfigurationError,
    zip_longest
]
```

Functions

```
[
```

calculate_md5,
calculate_sha256,
calculate_tree_hash,
check_dns_name,
conditionally_calculate_checksum,
conditionally_calculate_md5,
conditionally_enable_crc32,
create_nested_client,
datetime2timestamp,
deep_merge,
determine_content_length,
ensure_boolean,
fix_s3_host,
get_current_datetime,
get_encoding_from_headers,
get_envron_proxies,
get_md5,
get_service_module_name,
get_token_from_environment,
get_tzinfo_options,
getproxies,
has_checksum_header,
has_header,
hyphenize_service_id,
instance_cache,
ip_address,
is_global_accesspoint,
is_json_value_header,
is_s3_accelerate_url,
is_s3express_bucket,
is_valid_endpoint_url,
is_valid_ipv4_endpoint_url,
is_valid_ipv6_endpoint_url,
is_valid_uri,
lowercase_dict,
lru_cache_weakref,
merge_dicts,
normalize_boolean,
normalize_url_path,
parse_key_val_file,
parse_key_val_file_contents,
parse_timestamp,
parse_to_aware_datetime,
percent_encode,
percent_encode_sequence,
proxy_bypass,
quote,
remove_dot_segments,
reset_plugin_context,
resolve_imds_endpoint_mode,
set_plugin_context,
set_value_from_jmespath,
should_bypass_proxies,
switch_host_s3_accelerate,
switch_host_with_param,
switch_to_virtual_host_style,
urlparse,
urlunsplit,
validate_jmespath_for_set,
validate_region_name

]

Sentinels / Constants / Objects

```
[
    CHECKSUM_HEADER_PATTERN,
    CLIENT_NAME_TO_HYPHENIZED_SERVICE_ID_OVERRIDES,
    DEFAULT_METADATA_SERVICE_TIMEOUT,
    EVENT_ALIASES,
    HAS_CRT,
    HEX_PAT,
    IPV4_PAT,
    IPV4_RE,
    IPV6_ADDRZ_PAT,
    IPV6_ADDRZ_RE,
    IPV6_PAT,
    LABEL_RE,
    logger,
    LS32_PAT,
    MD5_AVAILABLE,
    METADATA_BASE_URL,
    METADATA_BASE_URL_IPv6,
    METADATA_ENDPOINT_MODES,
    PRIORITY_ORDERED_SUPPORTED_PROTOCOLS,
    RETRYABLE_HTTP_ERRORS,
    S3_ACCELERATE_WHITELIST,
    SAFE_CHARS,
    SERVICE_NAME_ALIASES,
    UNRESERVED_PAT,
    UNSAFE_URL_CHARS,
    urlsplit,
    ZONE_ID_PAT
]
```

Import statements

Classes

```
from botocore.utils import ArgumentGenerator
from botocore.utils import ArnParser
from botocore.utils import BadIMDSRequestError
from botocore.utils import CachedProperty
from botocore.utils import ClientError
from botocore.utils import ConfigNotFound
from botocore.utils import ConnectionClosedError
from botocore.utils import ConnectTimeoutError
from botocore.utils import ContainerMetadataFetcher
from botocore.utils import EndpointConnectionError
from botocore.utils import EventbridgeSignerSetter
from botocore.utils import FileWebIdentityTokenLoader
from botocore.utils import HTTPClientError
from botocore.utils import IdentityCache
from botocore.utils import IMDSFetcher
from botocore.utils import IMDSRegionProvider
from botocore.utils import InstanceMetadataFetcher
from botocore.utils import InstanceMetadataRegionFetcher
from botocore.utils import InvalidArnException
from botocore.utils import InvalidDNSNameError
from botocore.utils import InvalidEndpointConfigurationError
from botocore.utils import InvalidExpressionError
from botocore.utils import InvalidHostLabelError
from botocore.utils import InvalidIMDSEndpointError
from botocore.utils import InvalidIMDSEndpointModeError
from botocore.utils import InvalidRegionError
from botocore.utils import JSONFileCache
from botocore.utils import LocationParseError
```



```
from botocore.utils import MetadataRetrievalError
from botocore.utils import MissingDependencyException
from botocore.utils import OrderedDict
from botocore.utils import Path
from botocore.utils import PluginContext
from botocore.utils import ReadTimeoutError
from botocore.utils import S3ArnParamHandler
from botocore.utils import S3ControlArnParamHandler
from botocore.utils import S3ControlArnParamHandlerv2
from botocore.utils import S3ControlEndpointSetter
from botocore.utils import S3EndpointSetter
from botocore.utils import S3ExpressIdentityCache
from botocore.utils import S3ExpressIdentityResolver
from botocore.utils import S3RegionRedirector
from botocore.utils import S3RegionRedirectorv2
from botocore.utils import SSOTokenLoader
from botocore.utils import SSOTokenLoadError
from botocore.utils import tzutc
from botocore.utils import UnsupportedOutpostResourceError
from botocore.utils import UnsupportedS3AccesspointConfigurationError
from botocore.utils import UnsupportedS3ArnError
from botocore.utils import UnsupportedS3ConfigurationError
from botocore.utils import UnsupportedS3ControlArnError
from botocore.utils import UnsupportedS3ControlConfigurationError
from botocore.utils import zip_longest
```

Functions

```
from botocore.utils import calculate_md5
from botocore.utils import calculate_sha256
from botocore.utils import calculate_tree_hash
from botocore.utils import check_dns_name
from botocore.utils import conditionally_calculate_checksum
from botocore.utils import conditionally_calculate_md5
from botocore.utils import conditionally_enable_crc32
from botocore.utils import create_nested_client
from botocore.utils import datetime2timestamp
from botocore.utils import deep_merge
from botocore.utils import determine_content_length
from botocore.utils import ensure_boolean
from botocore.utils import fix_s3_host
from botocore.utils import get_current_datetime
from botocore.utils import get_encoding_from_headers
from botocore.utils import get_envron_proxies
from botocore.utils import get_md5
from botocore.utils import get_service_module_name
from botocore.utils import get_token_from_environment
from botocore.utils import get_tzinfo_options
from botocore.utils import getproxies
from botocore.utils import has_checksum_header
from botocore.utils import has_header
from botocore.utils import hyphenize_service_id
from botocore.utils import instance_cache
from botocore.utils import ip_address
from botocore.utils import is_global_accesspoint
from botocore.utils import is_json_value_header
from botocore.utils import is_s3_accelerate_url
from botocore.utils import is_s3express_bucket
from botocore.utils import is_valid_endpoint_url
from botocore.utils import is_valid_ipv4_endpoint_url
from botocore.utils import is_valid_ipv6_endpoint_url
from botocore.utils import is_valid_uri
from botocore.utils import lowercase_dict
from botocore.utils import lru_cache_weakref
```

```
from botocore.utils import merge_dicts
from botocore.utils import normalize_boolean
from botocore.utils import normalize_url_path
from botocore.utils import parse_key_val_file
from botocore.utils import parse_key_val_file_contents
from botocore.utils import parse_timestamp
from botocore.utils import parse_to_aware_datetime
from botocore.utils import percent_encode
from botocore.utils import percent_encode_sequence
from botocore.utils import proxy_bypass
from botocore.utils import quote
from botocore.utils import remove_dot_segments
from botocore.utils import reset_plugin_context
from botocore.utils import resolve_imds_endpoint_mode
from botocore.utils import set_plugin_context
from botocore.utils import set_value_from_jmespath
from botocore.utils import should_bypass_proxies
from botocore.utils import switch_host_s3_accelerate
from botocore.utils import switch_host_with_param
from botocore.utils import switch_to_virtual_host_style
from botocore.utils import urlparse
from botocore.utils import urlunsplit
from botocore.utils import validate_jmespath_for_set
from botocore.utils import validate_region_name
# Sentinels / Constants / Objects
from botocore.utils import CHECKSUM_HEADER_PATTERN
from botocore.utils import CLIENT_NAME_TO_HYPHENIZED_SERVICE_ID_OVERRIDES
from botocore.utils import DEFAULT_METADATA_SERVICE_TIMEOUT
from botocore.utils import EVENT_ALIASES
from botocore.utils import HAS_CRT
from botocore.utils import HEX_PAT
from botocore.utils import IPV4_PAT
from botocore.utils import IPV4_RE
from botocore.utils import IPV6_ADDRZ_PAT
from botocore.utils import IPV6_ADDRZ_RE
from botocore.utils import IPV6_PAT
from botocore.utils import LABEL_RE
from botocore.utils import logger
from botocore.utils import LS32_PAT
from botocore.utils import MD5_AVAILABLE
from botocore.utils import METADATA_BASE_URL
from botocore.utils import METADATA_BASE_URL_IPv6
from botocore.utils import METADATA_ENDPOINT_MODES
from botocore.utils import PRIORITY_ORDERED_SUPPORTED_PROTOCOLS
from botocore.utils import RETRYABLE_HTTP_ERRORS
from botocore.utils import S3_ACCELERATE_WHITELIST
from botocore.utils import SAFE_CHARS
from botocore.utils import SERVICE_NAME_ALIASES
from botocore.utils import UNRESERVED_PAT
from botocore.utils import UNSAFE_URL_CHARS
from botocore.utils import urlsplit
from botocore.utils import ZONE_ID_PAT
```

botocore.validate

Classes

```
[
    datetime,
    ParamValidationDecorator,
    ParamValidationError,
    ParamValidator,
    ValidationErrors
]
```

Functions

```
[
    is_json_value_header,
    parse_to_aware_datetime,
    range_check,
    type_check,
    validate_parameters
]
```

Sentinels / Constants / Objects

```
[]
```

Import statements

Classes

```
from botocore.validate import datetime
from botocore.validate import ParamValidationDecorator
from botocore.validate import ParamValidationError
from botocore.validate import ParamValidator
from botocore.validate import ValidationErrors
```

Functions

```
from botocore.validate import is_json_value_header
from botocore.validate import parse_to_aware_datetime
from botocore.validate import range_check
from botocore.validate import type_check
from botocore.validate import validate_parameters
```

Sentinels / Constants / Objects

```
(none)
```

botocore.vendored

Classes

[]

Functions

[]

Sentinels / Constants / Objects

[]

Import statements

Classes

(none)

Functions

(none)

Sentinels / Constants / Objects

(none)

botocore.waiter

Classes

```
[
    AcceptorConfig,
    ClientError,
    NormalizedOperationMethod,
    partial,
    SingleWaiterConfig,
    Waiter,
    WaiterConfigError,
    WaiterDocstring,
    WaiterError,
    WaiterModel
]
```

Functions

```
[
    create_waiter_with_client,
    get_service_module_name,
    is_valid_waiter_error,
    register_feature_id,
    with_current_context,
    xform_name
]
```

Sentinels / Constants / Objects

```
[
    logger
]
```

Import statements

Classes

```
from botocore.waiter import AcceptorConfig
from botocore.waiter import ClientError
from botocore.waiter import NormalizedOperationMethod
from botocore.waiter import partial
from botocore.waiter import SingleWaiterConfig
from botocore.waiter import Waiter
from botocore.waiter import WaiterConfigError
from botocore.waiter import WaiterDocstring
from botocore.waiter import WaiterError
from botocore.waiter import WaiterModel
```

Functions

```
from botocore.waiter import create_waiter_with_client
from botocore.waiter import get_service_module_name
from botocore.waiter import is_valid_waiter_error
from botocore.waiter import register_feature_id
from botocore.waiter import with_current_context
from botocore.waiter import xform_name
```

Sentinels / Constants / Objects

```
from botocore.waiter import logger
```