Error codes

This section provides details of errors that could occur when running ActiveServer.

Authentication API Error Codes Overview

In ActiveServer, there are 6 error code categories:

1. **3DS Error Codes**

   Error codes in this category are defined by the EMVCo Core Protocol specifications. Error codes defined here can be returned from either the **3DS Server (ActiveServer)**, **DS**, **ACS** or the **3DS SDK**. The component which identified the error will return the error response and set the `errorComponent` field as itself in the JSON response (for example, if an error was identified by the DS, it will set the `errorComponent` to `D`). If the error was identified in a component that is outside of **ActiveServer**, it will forward the same error JSON to the **3DS Requestor**. The `errorMessageType`, `errorDetail` and `errorDescription` fields can be used to interpret the message that was erroneous. Refer to the `ApiErrorResponse` model for description of each field.

2. **Transaction Error Codes**

   Transaction error codes defined by **ActiveServer**. The `errorComponent` field will be `S` at all times because the error was identified by the 3DS Server.

3. **General Error Codes**

   Errors that does not fall into either **3DS Error Codes** or **Transaction Error Codes** are returned as a **General Code**. These error codes may also be returned from the Admin API. Check the **Auth API Description** for descriptions related to the Authentication API.

4. **Security Error Codes**

5. **User Error Codes**

6. **Setup Error Code**

Additionally,

- Only error codes in the **3DS Error Codes**, **Transaction Error Codes** and **General Error Codes** categories can be returned from the Authentication API(`/api/v2/auth/***`).

- **Security Error Codes**, **User Error Codes** or **Setup Error Code** will not be returned from the Authentication API.

- For each error code, an associated **HTTP Status Code** from the table below will be returned.

- **Description** contains the possible scenario in which the error code may be returned, and for some error codes common solutions are also highlighted.

> 🔥 **Tip**
>
> Error codes which have the tag **Not returned in Auth API v2** will not be returned as a response for `/api/v2/auth/***` .

3DS Error Codes (101 ~ XXX)

Code	Name	HTTP Status Code	Description
101	MESSAGE_RECEIVED_INVALID	400	Received message is invalid. Message is not AReq, ARes, CReq, CRes, PReq, PRes, RReq, or RRes. For example, 3DS Server receives an message from DS as a response to AReq that is not ARes or Erro message.
102	MESSAGE_VERSION_NUMBER_ NOT_SUPPORTED	400	Unsupported message version number. Message Version Number received is not valid for the receiving component. For example, DS sends a `messageVersion` field set to an invalid value, or value that is not supported by the ACS.
103	SENT_MESSAGES_LIMIT_EXCEEDED	500	Message sent exceeds the limit. Exceeded maximum number of PReq messages sent to the DS. **Not returned in Auth API v2**. (PReq is outside the authentication flow and is an internal process between ActiveServer and DS).

Code	Name	HTTP Status Code	Description
201	REQUIRED_DATA_ELEMENT_MISSING	400	A message element required as defined according the specification is missing. This error code will be returned if any of the fields marked as **required** is missing in the request. For example, `messageCategory` is missing in the call to `/api/v2/auth/brw`. If the `errorMessageType` is `AReq` or missing, and `errorComponent` is `S` then the request from the **3DS Requestor** is missing the required fields defined by the Authentication API. Please double check the fields returned in `errorDetail` is present in the request.
202	CRITICAL_MESSAGE_ EXTENSION_NOT_RECOGNISED	400	Message extension that is critical is not present. May be returned from DS or ACS if the `messageExtension` field is missing an identifier.
203	FORMAT_OF_ONE_OR_MORE _DATA_ELEMENTS_IS_INVALID _ACCORDING_TO_THE_SPECIFICATION	400	Data element is not in the required format or value is invalid as defined according the specification. This error code will be returned if any of the fields in the request is not well formatted. For example, `purchaseAmount` is not numeric in the call to `/api/v2/auth/brw`. If the `errorMessageType` is `AReq` or empty, and `errorComponent` is `S` then request from the **3DS requestor** is not matching the fields defined by the Authentication API. Please double check the formatting of fields returned in `errorDetail` is present in the request.
204	DUPLICATE_DATA_ELEMENT	400	Found duplicate data elements in the request.
301	TRANSACTION_ID_NOT_RECOGNISED	400	Transaction ID received is not valid for the receiving component. For example, 3DS Requestor sets the `threeDSSereverTransID` in the `/api/v2/auth/brw` that is different from the one returned by `/api/v2/auth/brw/init`.

Code	Name	HTTP Status Code	Description
302	DATA_DECRYPTION_FAILURE	500	Data could not be decrypted by the receiving system due to technical or other reason. DS may return this error code if data decryption of the SDK Encrypted data failed.
303	ACCESS_DENIED_INVALID_ENDPOINT	401	Endpoint for the API request is invalid. Check the requesting URL. Reference number does not represent the participating component (for example, `acsReferenceNumber` sent from ACS to DS is invalid).
304	ISO_CODE_INVALID	400	ISO code not valid according to ISO tables (for either country or currency).
305	TRANSACTION_DATA_NOT_VALID	400	Transaction data is invalid. Please refer to the error description to find out why the transaction data was invalid.
306	MERCHANT_CATEGORY_CODE_MCC_NOT_VALID_FOR_PAYMENT_SYSTEM	400	Merchant category code is invalid. Invalid MCC received in the AReq message and DS may throw this error back to ActiveServer.
307	SERIAL_NUMBER_NOT_VALID	500	Serial number is invalid. **Not returned in Auth API v2**. (PReq is outside the authentication flow and is an internal process between ActiveServer and DS).
402	TRANSACTION_TIMED_OUT	408	Transaction has timed out. In ActiveServer, this error code is returned if transaction timed out during sending the request to the DS (for example, sending AReq to the DS).
403	TRANSIENT_SYSTEM_FAILURE	500	System has failed for a short period. For example, a slowly processing back-end system.

Code	Name	HTTP Status Code	Description
404	PERMANENT_SYSTEM_FAILURE	500	System has failed permanently. For example, a critical database cannot be accessed. May be returned if DS settings is not properly configured in ActiveServer such as client certificate for the DS is not installed in ActiveServer.
405	SYSTEM_CONNECTION_FAILURE	500	Failed to connect to the system. For example, the sending component is unable to establish connection to the receiving component.

DS Specific Error Codes

In addition to the EMVCo defined 3DS error codes, there may be additional error codes defined by the card schemes which may be returned by the card scheme's directory server in certain scenarios.

UnionPay International

The following special error codes are defined in the **UnionPay International** specifications.

Code	Name	HTTP Status Code	Description
911	Data fields relevance check failed	500	ECI value and AV appearance are inconsistent with transaction status
912	Duplicated transaction ID	500	Transaction ID should be unique for each AReq request

Transaction Error Codes (1001 ~ 1027)

Code	Name	HTTP Status Code	Description
1000	DIRECTORY_SERVER_NOT_AVAILABLE	500	If any errors occurred during the connection to Directory Server this error code may be returned. Error code `402` is returned instead if the reason the connection error was because of timeout.
1001	DIRECTORY_SERVER_NOT_FOUND	500	No Directory Server was found for a card scheme associated with the PAN. May be returned if **Default URL** is empty in the Administration UI for card scheme. Make sure the **Default URL** is configured in the ActiveServer admin UI dashboard.
1002	ERROR_SAVE_TRANSACTION	500	Error occurred while saving transaction. May be returned if transaction details is failed to be saved into the database during the authentication.
1003	ERROR_SAVE_TRANSACTION_MESSAGE	500	Error returned while saving transaction message. **Not returned in Auth API v2**. But, if an error occurred while saving a raw message (for example, raw AReq JSON message), it will not fail the transaction.
1004	UNHANDLED_EXCEPTION	500	Unhandled exception occurred during the transaction. Please check the error description report error logs for further investigation.
1005	PAN_NOT_PARTICIPATING	400	Primary Account Number (PAN) is not participating. **Not returned in Auth API v2**.
1009	MERCHANT_INTERFACE_DISABLED	400	The interface is disabled for this merchant. **Not returned in Auth API v2**. `MERCHANT_ID_THREEDS_REQUESTOR_ID_INVALID (1026)` will be returned instead.
1011	INVALID_LICENSE	403	Invalid ActiveServer license in use. Please resolve this licensing issue with GPayments as soon as possible.

Code	Name	HTTP Status Code	Description
1013	INVALID_TRANSACTION_ID	400	Transaction ID of 3DS Server is not recognised. This error code may be returned if `threeDSServerTransID` is invalid in the given request.
1014	INVALID_REQUESTOR_TRANSACTION_ID	400	Transaction ID of 3DS Requestor is not recognised. May be returned if the `threeDSRequestorTransID` is not in UUID form
1015	THREEDS_REQUESTOR_NOT_FOUND	400	Invalid 3DS Requestor ID or Merchant ID. **Not returned in Auth API v2**. `MERCHANT_ID_THREEDS_REQUESTOR_ID_INVALID (1026)` will be returned when client certificate c merchantId is invalid.
1016	MISSING_REQUIRED_ELEMENT	400	Required element missing. May be returned if required fields in the authentication API is miss
1018	ELEMENT_NOT_DEFINED	400	Message element not a defined message. **Not returned in Auth API v2**.
1019	PROTOCOL_OLD	500	Protocol version is too old. **Not returned in Autl API v2**.
1020	ERROR_TRANSMISSION_DATA	500	Errors in data transmission. It will be returned when there is an error sending a request or receiving a response from the DS. If the reason the error is request being timed out, then it will return error code `TRANSACTION_TIMED_OUT (402` instead. If the connection is not established in t first place, then it will return `DIRECTORY_SERVER_NOT_AVAILABLE (1000)`.
1021	PRIOR_TRANS_ID_NOT_FOUND	400	Prior Transaction ID could not be found in the database, or is invalid. This error may be returne if `priorTransID` given in the authentication request is not in a valid UUID format. `priorTransID` should contain the `threeDSServerTransID` used in the same cardholder's last transaction.

Code	Name	HTTP Status Code	Description
1022	INVALID_FORMAT	400	Format of one or more elements is invalid according to the specification. May be returned fields in the authentication API has an invalid format. For example, `browserInfo` given in `/ap v2/auth/brw` is not in the same format as the c collected by ActiveServer.
1023	CARD_RANGE_IS_NOT_VALID	400	Card range provided is invalid. **Not returned in Auth API v2**.
1024	CACHE_UPDATE_IS_DISABLE	500	Cache update is disabled. **Not returned in Auth API v2**.
1025	CACHE_REFRESH_INTERVAL_IS_NOT_SET	500	Cache refresh interval is not set. **Not returned i Auth API v2**.
1026	MERCHANT_ID_THREEDS_REQUESTOR_ ID_INVALID	400	Invalid `merchantId` is given to the authenticati request. Make sure that `merchantId` provided i the request matches the client certificate for th merchant, or the `merchantToken` if master clien certificate is used. If you have revoked the clien certificate, make sure to update the client certificate or the `merchantToken` in the API request.
1027	UNSUPPORTED_API_VERSION	403	This error may be thrown if the API version you trying to make a request to is not supported. Fo example, API version 1 is not supported for ActiveServer using AWS KMS.

General Error Codes (2000 ~ 2009)

Code	Name	HTTP Status Code	Description	Auth API Description
2000	NOT_FOUND	404	Resource not found.	**Not returned in Auth API v2**.

Code	Name	HTTP Status Code	Description	Auth API Description
2001	DUPLICATE_RECORD	409	Record already exists.	**Not returned in Auth API v2**.
2002	VALIDATION_ERROR	400	Invalid inputs.	May be returned if the request is not properly formatted as a JSON.
2003	INVALID_REQUEST	400	Invalid request.	**Not returned in Auth API v2**.
2004	CONCURRENCY_FAILURE	409	Failed to update node.	**Not returned in Auth API v2**.
2005	ACCESS_DENIED	401	Access is denied.	Check the error detail for more description for why the access was denied.
2006	METHOD_NOT_SUPPORTED	405	Request HTTP method is not supported.	**Not returned in Auth API v2**
2007	INTERNAL_SERVER_ERROR	500	Internal server error.	Internal server error has occurred in ActiveServer, may be due to some configuration issue or setup issue. Please refer to the error description for more details.

Code	Name	HTTP Status Code	Description	Auth API Description
2008	DATA_INTEGRITY_VIOLATION_ERROR	400	A specified value violated the integrity constraints. May occur if attempting to insert of update results in violation of an integrity constraint. For example, unique primary keys are not inserted into the table.	**Not returned in Auth API v2**
2009	SESSION_TIMED_OUT	408	Session has timed out.	May be returned if the transaction has already finished.

Security Error Codes (3001 ~ 3024)

Code	Name	HTTP Status Code	Description
3001	JDK_NOT_SUPPORT_SHA224WITHRSA	500	JDK used does not support the SHA224 with RSA algorithm.
3002	NO_SUCH_ALGORITHM	500	No such algorithm.
3003	INVALID_CERT	400	The certificate's public key is not compatible with the corresponding private key.
3004	INVALID_CHAIN	400	ActiveServer is unable to build the full certificate chain as one or more intermediate certificates cannot be found in the CA certificate store. You should either install/ import a certificate which contains the full chain or install the missing intermediate certificates before attempting again.

Code	Name	HTTP Status Code	Description
3005	NO_PRIVATE_KEY_FOUND	400	No private key found.
3006	INVALID_CERTIFICATE_CONTENT	400	Invalid certificate content
3007	CERTIFICATE_IO_READ	400	Unable to read certificate.
3008	SUCH_PROVIDER_EXCEPTION	500	No such provider exception.
3009	NO_KEY	400	The certificate could not be installed because this object does not have an existing key.
3010	CERTIFICATE_CHAIN_BAD_FORMAT	400	Certificate chain has invalid format.
3011	MISMATCHED_PASSWORDS	400	Password fields do not match.
3012	IMPORT_CERTIFICATE	400	No certificate found for the importing certificate. Please import client certificate.
3013	IMPORT_NO_CERTIFICATE	400	There is no certificate to export.
3014	FAILED_TO_INITIALIZE	500	Failed to initialise.
3015	ENCRYPTION_FAIL	500	Failed to encrypt.
3016	DECRYPTION_FAIL	500	Failed to decrypt.
3017	INVALID_HSM_PROVIDER	500	The specified provider name for hardware encryption is not supported
3018	INVALID_PKCS11_CONFIG	500	Invalid PKCS11 config path
3019	FAILED_TO_INITIALIZE_PKCS11	500	Failed to initialise PKCS11.
3020	IMPORT_FAIL	500	Failed to import.
3021	NOT_SUPPORTED_IBM_PROVIDER	500	Only SUN provider is supported.
3022	UNABLE_TO_LOAD_KEYSTORE	500	Loading keystore failed.

Code	Name	HTTP Status Code	Description
3023	UNABLE_TO_LOAD_CERTIFICATE	500	Loading certificate failed.
3024	INVALID_KEY_SIZE	500	Key size is invalid.

User Error Codes (4000 ~ 4032)

Code	Name	HTTP Status Code	Description
4000	DUPLICATE_EMAIL	400	E-mail already in use.
4001	LAST_ADMIN_DELETE_NOT_ALLOWED	400	You need to be at least a System Admin user to perform this action.
4002	ACCOUNT_IS_LOCKED	401	Your account is locked.
4003	ACCOUNT_IS_DISABLED	401	Your account is disabled.
4004	ACCOUNT_WILL_BE_LOCKED	401	Your account will be locked after another wrong try. If you have been forgotten your password please click on "Lost your password"

Code	Name	HTTP Status Code	Description
4005	ACCOUNT_WAS_LOCKED	401	Password has been locked for 1 hour.
4006	ACCOUNT_IS_INACTIVE	401	Your account was not activated.
4007	PASSWORD_POLICY_MATCH	401	The password should be minimum eight characters, with at least one letter and one number.
4008	LOGIN_ALREADY_IN_USE	401	Username already in use.
4009	EMAIL_ALREADY_IN_USE	401	Email already in use.
4010	INVALID_TOTP_CODE	400	Invalid TOTP authentication code.
4011	EMAIL_SENDING_FAILED	400	Failed to send email.
4012	EMAIL_NOT_REGISTERED	400	Your email is not registered.
4014	FAILED_TO_CREATE_ACCOUNT	500	Failed to create the account.
4015	TWO_FA_MANDATORY	400	Using two factor login is mandatory.

Code	Name	HTTP Status Code	Description
4016	PASSWORD_EXPIRED	403	The password for user was expired.
4017	PASSWORD_EXPIRED_WARNING	403	The password for user is going to be expired on.
4018	PASSWORD_HISTORY_MATCHED	403	The password matched with the previous historical passwords.
4019	INVALID_TOKEN	400	An invalid token.
4020	INVALID_HSM_PIN	400	Invalid HSM Pin.
4021	INVALID_PASSWORD	400	Invalid password.
4022	EMAIL_INVALID_ACTIVATION	403	Account activation code is invalid.
4026	REMOVE_USER_ADMIN_ROLE_FROM_USER_NOT_ALLOWED	400	Your instance always requires at least one User admin role.
4027	DELETE_THE_ONLY_USER_WITH_USER_ADMIN_ROLE_NOT_ALLOWED	403	Your instance always requires at least one User admin role.

Code	Name	HTTP Status Code	Description
4029	DELETE_LOGGED_IN_USER_NOT_ALLOWED	403	Cannot delete the currently logged in user.
4031	USERNAME_OR_PASSWORD_INCORRECT	403	Username or password is incorrect.
4032	PASSWORD_RESET_LIMIT_REACHED	400	Password reset cannot be requested more than once every 15 mins.

Setup Error Code (5000)

Code	Name	HTTP Status Code	Description
5000	SETUP_NOT_ALLOWED	500	Setup is not allowed.