



SWIFT gpi Version 4 API enhancements



December 2019

Executive summary



API traffic in numbers

154 million

API calls in May 2020 | A YOY increase of 101%

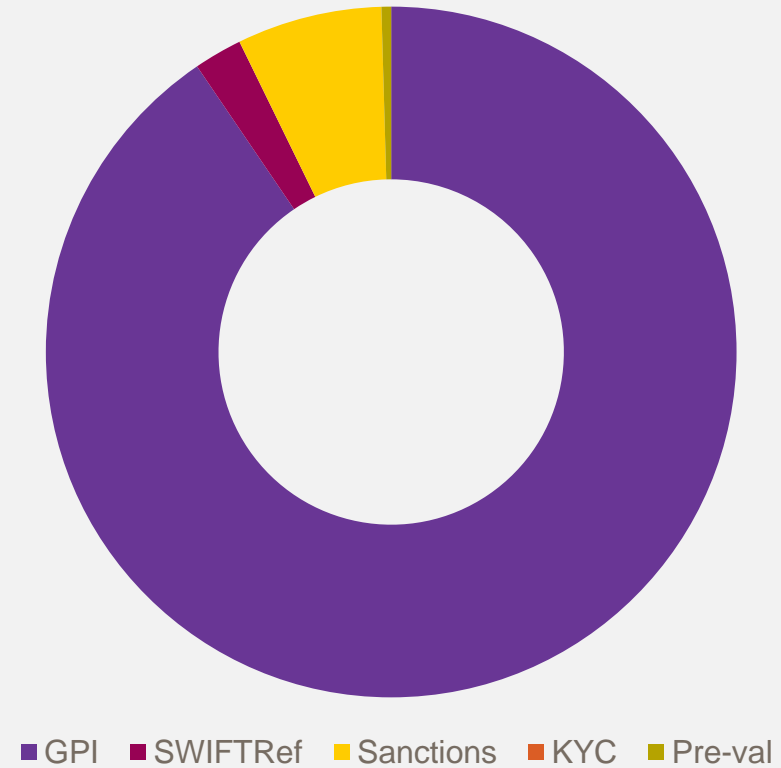
~1.4 billion

Cumulative API calls 4/19 – 5/20

420

API consumers

API product traffic distribution (2020)



Key gpi API v4 updates

1. API specifications, schemas and documentation available on SWIFT developer portal: <https://developer.swift.com>
2. **Financial Institution Transfer (FIT) transaction status updates to tracker enabled**
3. **gpi APIs version 2, enters maintenance mode when v4 becomes available in Live in November**
4. **API data structures simplified to ease API consumption and improve code generation from specification (including error responses)**
5. **Get Invalid Events API removed due to low usage**
6. Questions and feedback related to the API specifications can be sent to your API onboarding consultant (if subscribed to this service), standard swift.com support channel or developer-support@swift.com



| API | Use | API V2 | API V3 | API V4 |
|--|--|---------------------|---|--|
| Update status of payment transaction | Status confirmation update to inform the tracker about the updated status of a given payment | gCCT gCOV | gCCT gCOV | gCCT , gCOV, gFITv2 |
| Get payment transaction details | Payment query to GET detailed information regarding a given payment. It requires the UETR to be known | gCCT, gCOV, gSRP | gCCT, gCOV, gFIT v1, gSRP (status) gCASE (counter) | gCCT, gCOV, gFITv2 gSRP (status) gCASE (counter) |
| Get Changed Payment Transactions | Delta query to GET all payment update information starting from a given date and time. Filtering per service is possible (CCT, COV, FIT, SRP) | | | |
| Request cancellation of transaction | Initiate request to Stop & Recall a transaction | gSRP | gSRP | gSRP |
| Update status of cancellation of transaction | Provide a response to the Tracker related to a gSRP request received | gSRP | gSRP | gSRP |
| Phase out Get invalid events | This API will no longer be available (as of API V4) Returns all invalid events on all UETRs in a given time window (included in the Get Payment Transaction Details) | gCCT, gCOV, gSRP | gCCT, gCOV, gSRP | |
| Phase out Search for transactions | This API was no longer available as of API V3. Searches for transactions based on a list of criteria. | gCCT, gCOV, gSRP | | |

Deep dive updates per API and comparison between v3 and v4



Status Confirmations

This API is a status confirmation update to inform the Tracker about the updated status of a given payment.



Request

- UETR required in URI (as shown above) and removed from request body.
- gFIT (Financial Institution Transfers) transaction status updates enabled (business_service = '004').
- The SWIFT signature, "X-SWIFT-Signature" (HTTP Header), is removed. Non-repudiation is not supported for tracker updates (it is supported for cancellations gSRP).
- payment_status_request object wrapping the request parameters removed.
- payment_status object removed and inner attributes moved up one level
- transaction_status object replaced with transaction_status and transaction_status_reason attributes.
- New field added: end_to_end_identification.
- end_to_end_identification must be present for gFIT (where the payment_scenario is FCTR)
- end_to_end_identification must not be present where the payment_scenario is not FCTR

Response

- The successful response body is removed. The API responds with 200 OK for successful tracker updates.



Get Payment Transaction Details

Payment query to get detailed information regarding a given payment. It requires the UETR to be known

GET /payments/{uetr}/transactions



GET /payments/{uetr}/transactions

Request

- No change to request

Response

- Payment_transaction_details_response object wrapping the response removed.
- transaction_status object replaced with transaction_status and transaction_status_reason attributes.
- transaction_status and transaction_status_reason are optional to support cancellation events.
- New field added: end_to_end_identification.

Get Changed Payment Transactions

This API is a delta query to get all payment update information starting from a given date and time

GET /payments/changed/transactions



GET /payments/changed/transactions

Request

- No change to request.

Response

- `changed_payment_transaction_response` object wrapping the response removed.
- `transaction_status` object replaced with `transaction_status` and `transaction_status_reason` attributes.
- New field added: `end_to_end_identification`.

Get Invalid Events

Query to get invalid events for payment transactions within a given time frame

GET `/payments/events/invalid` Get Invalid Events.

Get Invalid Events removed due to rare usage.



Cancel Transaction

Requesting cancellation of a transaction.



Request

- UETR required in URI (as shown above) and removed from request body.
- `cancel_transaction_request` object wrapping the request removed.
- `transaction_status` object replaced with `transaction_status` and `transaction_status_reason` attributes.
- `underlying_cancellation_details` flattened; `cancellation_reason_information` attribute moved up to root object.

Response

- The successful response body is removed. The API responds with 200 OK for successful tracker updates.

Transaction Cancellation Status

Updating the status of a transaction cancellation.



Request

- UETR required in URI (as shown above) and removed from request body.
- transaction_cancellation_status_request object wrapping the request removed.
- transaction_status object replaced with transaction_status and transaction_status_reason attributes.
- underlying_cancellation_details flattened; investigation_execution_status and investigation_execution_status_reason attributes moved up to root object.

Response

- The successful response body is removed. The API responds with 200 OK for successful tracker updates.

Deep dive updates per API and comparison between v2 and v3



Status Confirmations

This API is a status confirmation update to inform the Tracker about the updated status of a given payment.



Request

- BusinessService => [0,1] Max35Text
- PaymentStatusReason => new reasons for the rejection status
- POST to PUT (modifying a payment status)

Get Payment Transaction Details

Payment query to get detailed information regarding a given payment. It requires the UETR to be known

POST /get_payment_transaction_details



GET /payments/{uetr}/transactions

Request

- UETR is passed as HTTP header (LAUSigned)
- POST to GET (querying information)

Response

- PaymentStatusReason => new reasons for the rejection status
- Tracker Event Type => new values FTPT and FTSU
- Case Identification => from Max35Text to Max16Text
- Return => [1,1] Indicates if a payment is a return YES or NO
- Duplicate Message Ref => from Max50Text to Max35Text

Get Changed Payment Transactions

This API is a delta query to get all payment update information starting from a given date and time

POST /get_changed_payment_transactions



GET /payments/changed/transactions Get Changed Payment Transactions.

Request

- POST to GET (querying information)
- Pagination 'more' field renamed to 'next'
- Introduce to_date_time field to limit search
- Usage of query parameters

Response

- PaymentStatusReason => new reasons for the rejection status
- Tracker Event Type => new values FTPT and FTSU
- Case Identification => from Max35Text to Max16Text
- Return => [1,1] Indicates if a payment is a return YES or NO
- Duplicate Message Ref => from Max50Text to Max35Text

Get Invalid Events

Query to get invalid events for payment transactions within a given time frame

POST /get_invalid_events Get Invalid Events



GET /payments/events/invalid Get Invalid Events.

Request

- POST to GET (querying information)
- Pagination 'more' field renamed to 'next'
- Usage of query parameters

Response

- Tracker Event Type => new values FTPT and FTSU
- tracker_event_type => New field, Indicates type of payment event

