

New card processing rules from June 30 - is the payments ecosystem ready?

Summary

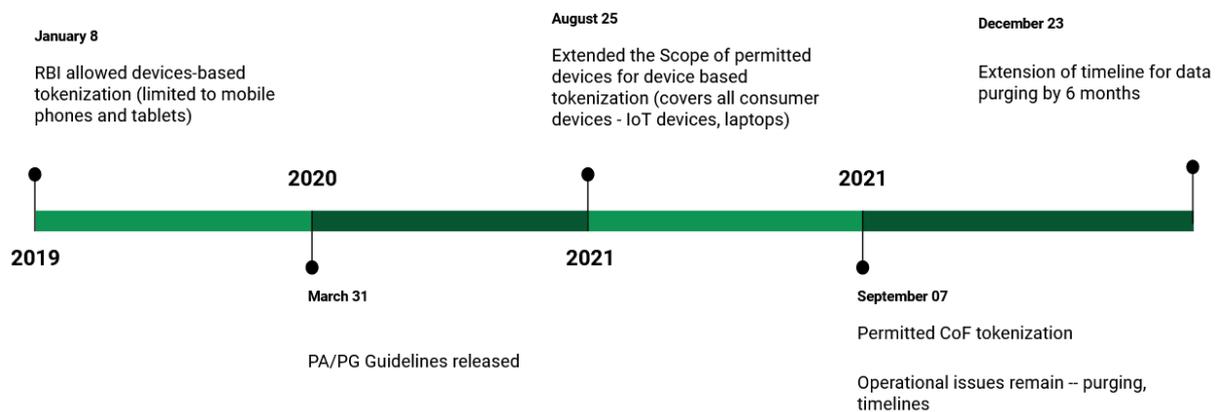
- The RBI has stipulated that customer card details be purged (deleted irrevocably) from the servers of merchants and Payment Aggregators/Payment Gateways (PA/PGs) by June 30, 2022, – by which time it expected the payments ecosystem to be ready with card-tokenization solutions. The RBI directed the entire payments ecosystem to migrate to a new card-processing mechanism – whereby tokens are used instead of card details - by June 30, 2022, in the interest of security. We applaud the consumer-welfare intent behind this.
- However, unless the back-end infrastructure for processing payments using tokens is ready by June 30th, data purging by merchants and PA/PGs would lead to a breakdown in settlements, reconciliation and basic life cycle management services such as refunds and cashbacks and chargebacks, nor would they be able to actually receive the monies paid by consumers (use cases). This backend infrastructure consists of acquirer banks, issuer banks, card networks, and PA/PGs.
- Unfortunately, with a few weeks left until the data-purging deadline elapses, we observe that requisite backend infrastructure still isn't ready. While some progress on token generation / issuance has been made, token processing solutions are still at the development / early testing stage. Data purging without demonstrated ecosystem readiness at scale across use cases would engender business continuity challenges for merchants of all sizes.
- For instance, if a consumer were to transact on these limited systems today, she would have to wait for a long time to obtain a token on her card, and then initiate a separate request to process the transaction using the token. Merchants within MPAI that have started testing are observing low single digit approval rates for real-time token processing.
- Thus, despite claims of 'readiness with tokenization' echoing in some sections of the media, the reality is that the backend infrastructure is not ready to create tokens and process payments on them simultaneously, nor process large transaction volumes on tokens created in real time.
- We observe high latency (time taken to fulfil one transaction), low throughput (number of transaction requests which can pass through) and limited use case support. Even when customers enter card details each time for each transaction, the transaction will likely fail because acquirers (who are also issuers in most cases) for online payments will not be able to store these card details (they store this in the offline world) , which is critical for several use cases.
- Transparency on where the payments ecosystem is with tokenization solutions - not just on token provisioning/ generation, but on the entire end-to-end transaction chain across use cases at scale - is the need of the hour. It is critical for acquirer banks, issuer banks, card networks, and PA/PGs to demonstrate that both token-based transactions and non-token-based transactions will be successful post 30 June 2022, else consumers will face disruptions similar to those while renewing their subscription-based services.

The story thus far

In an effort to improve safety and security of card transactions, the Reserve bank of India (RBI) [directed](#) merchants and PA/PGs to stop storing card details of their customers, and instead use tokens (alphanumeric ciphertext) denoting customer card data for transaction processing.

Card networks and issuing banks were made responsible for creating the infrastructure for generating tokens, processing tokens and putting in place mechanisms for monitoring and certifying other participants (such as merchants and PA/PGs) interacting with the processing infrastructure.

The RBI [stipulated](#) that such card details be purged (deleted irrevocably) from the servers of merchants, acquiring banks and PA/PGs by June 30, 2022, – by which time it expected the payments ecosystem to be ready with card-tokenization solutions. The RBI effectively directed the entire payments ecosystem to migrate to a new card-processing mechanism – whereby tokens are used instead of card details - by June 30, 2022.

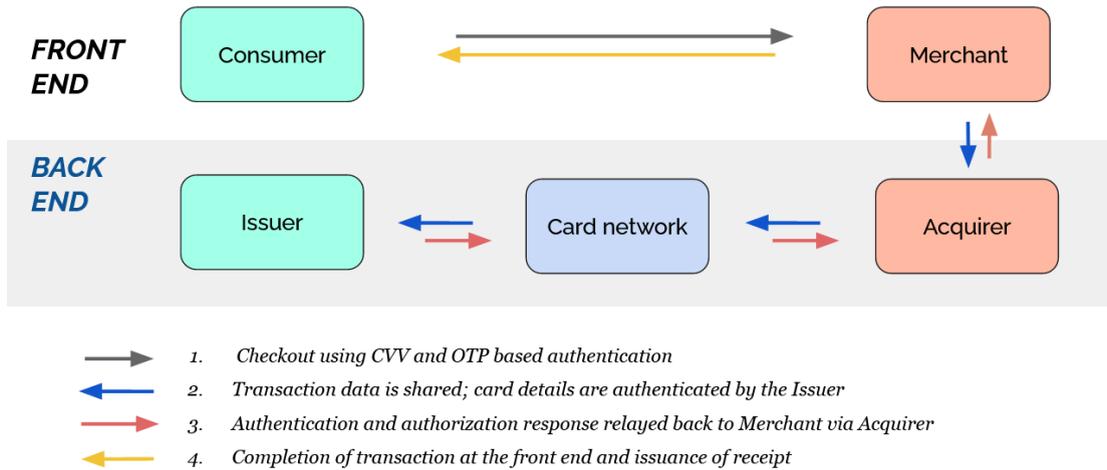


Regulations on card tokenization - a timeline

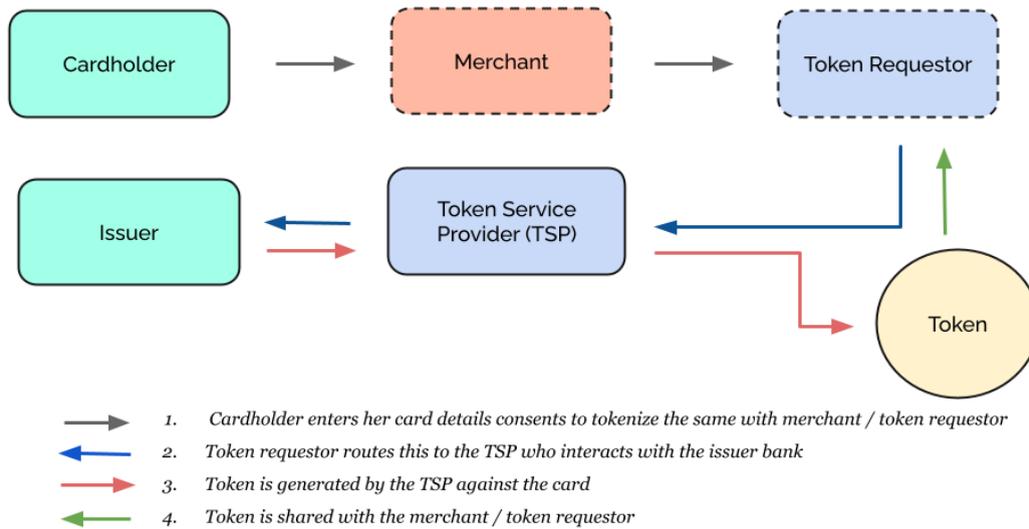
Unless the back-end infrastructure for processing payments using tokens is ready, data purging by merchants and PA/PGs would lead to breakdowns (in the form of failed payments, unsuccessful settlement, lack of reconciliation, and an inability to provide refunds and chargebacks for customers). Data purging without demonstrated ecosystem readiness at scale across use cases would also face business continuity challenges for merchants of all sizes - who would suddenly be unable to serve consumers and provide basic life cycle management services such as refunds and cashbacks and chargebacks, nor would they be able to actually receive the monies paid by consumers.

What does "readiness" with tokenization mean?

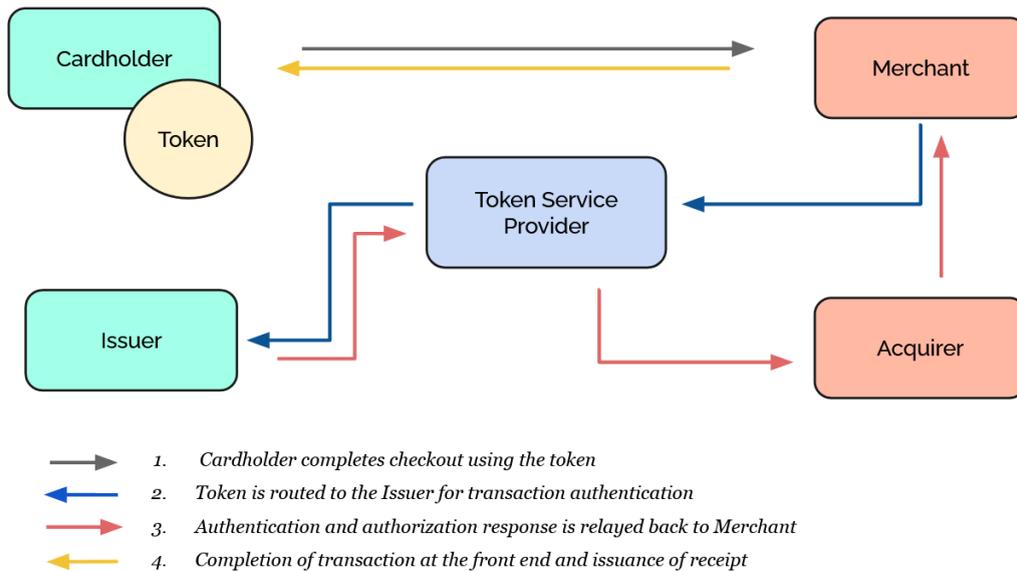
The readiness with Card on File Tokenization must be viewed holistically from the end consumer's perspective, and not as a compliance mandate of a particular issuer or card network. Until merchants are able to fulfil transactions and perform lifecycle management for the card transaction by seamlessly interacting with PA/PGs, card networks and banks, ecosystem readiness is not achieved. To ensure that, each consumer (regardless of which bank or which card she uses) is able to transact in the new tokenization framework, this back-end infrastructure creation must be done sequentially. This cannot be done on an ad-hoc basis by a few banks, card networks and PA/PGs – as the same would not reflect the state of the entire ecosystem.



the lifecycle of a card transaction prior to tokenization framework



the process of token generation under the new framework



transaction processing using tokens under the new framework

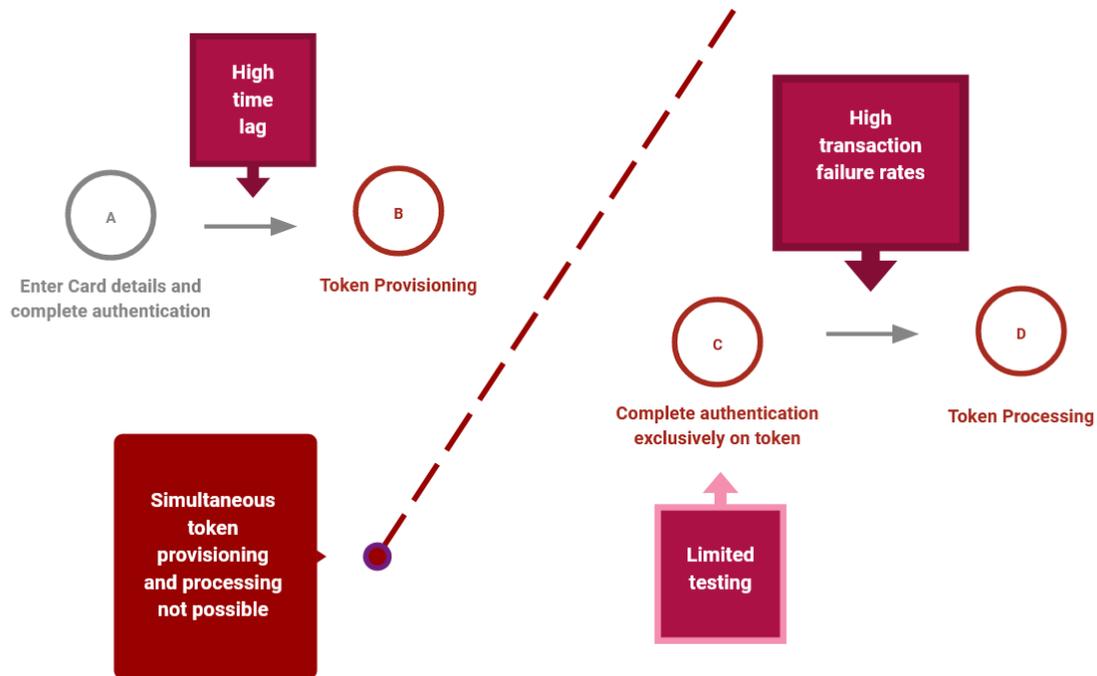
Banks and card networks must first provide to PA/PGs a working and final application programming interface (APIs) that enable tokenization. PA/PGs would thereafter build, test, and roll out their solutions on top of the API documentation shared by banks and card networks. Subsequently, merchants would either integrate with PA/PGs or build API links between their payment systems and existing tokenization solutions offered by Networks/Schemes (Visa/Mastercard/RuPay etc). After all of this infrastructure building is done, it will need to undergo rigorous testing, including stress-testing for volume and a multiplicity of use cases, after which any identified issues will need to be fixed. Only then will the solution be ready for consumer deployment and use.

These solutions need to account for and ensure all payments use cases are supported. Thus, not only should one-time transactions go through, but recurring payments, EMIs, refunds, and chargebacks should be seamlessly and successfully functional as well. In addition, situations where the consumer refuses to tokenize her card details (i.e. guest checkouts) and all first e-commerce transactions must be solved for as well.

Where we are

With a few weeks left until the data-purging deadline elapses, ecosystem readiness is a distant dream. Despite tall claims of 'readiness with tokenization' echoing in some sections of the media, the unfortunate reality is that the ecosystem is not even close to being able to create tokens and process payments on them simultaneously, nor process large transaction volumes on tokens created in real time.

The ecosystem has adopted a top-down approach of initially issuing tokens against cards, and subsequently building processing solutions for such tokens. Thus, despite some progress on token generation / issuance, token processing solutions are still at the development / early testing stage.

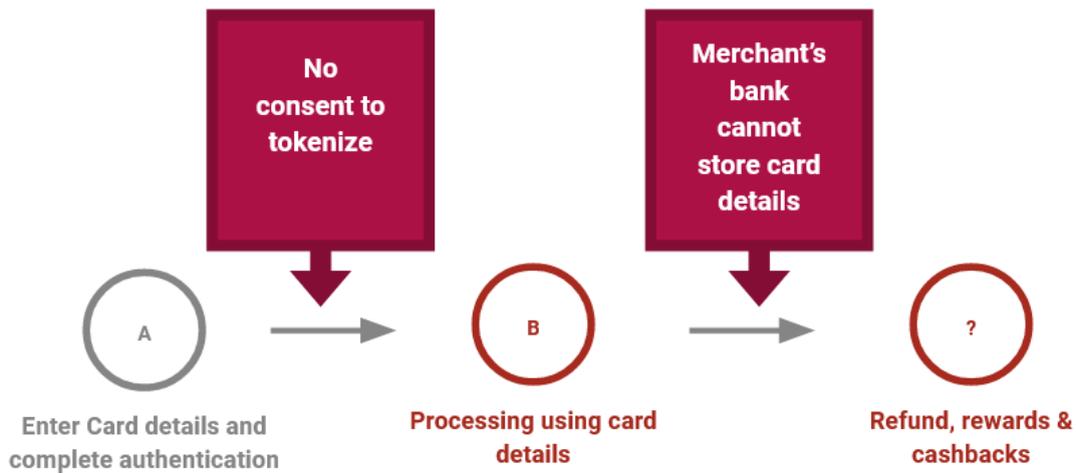


Simultaneous token provisioning and testing not successful

If a consumer were to transact on these limited systems today, she would have to wait for a long time to obtain a token on her card, and then initiate a separate request to process the transaction using the token. Merchants that have started testing with simultaneous Token provisioning, crypto fetch and Token + crypto processing have been observing low single digit approval rates. While approval rates are gradually getting better, the payments ecosystem is still a long way from arriving at synchronicity. As the deadline for data purging looms over the ecosystem, instant token generation and processing in real time is not ready, neither is processing of transactions where the user refuses to tokenize her card.

As things stand, we note that while some card networks and PA/PGs will have generated tokens against some cards by June 30, in the absence of a robust processing infrastructure for these tokens – tokenized transactions will fail, and consumers will have to enter their card details each time for making payments. Merchants today have access only to draft APIs which have revealed high latency (time taken to fulfill one transaction), low throughput (number of transaction requests which can pass through) and limited use case support.

Even when customers enter card details each time for each transaction, the transaction will fail because acquirers (who are also issuers in most cases) will not be able to store card details (as they do in the offline world) for settlement, reconciliation, refunds and chargebacks functions.

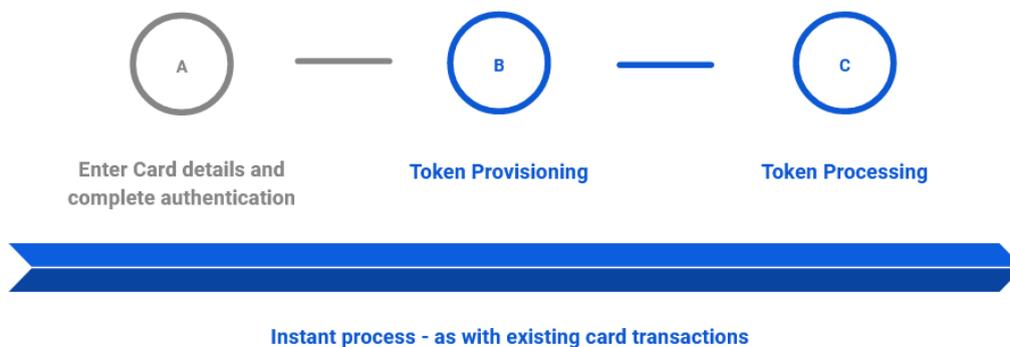


Transaction processing in the absence of consent to tokenize (guest checkout)

What next?

The payments ecosystem should be:

1. **READY:** fully and demonstrably functional,
2. **SCALEABLE:** to process large volumes of transactions,
3. **TRANSACTION LIFECYCLE:** complete the entire transaction lifecycle successfully from end to end,
4. **SYNCHRONOUS:** allow immediate on tokens created in real time and otherwise.



Where we should be with tokenization

The need of the hour is transparency, on where the ecosystem is with roll out of tokenization solutions - not just on token provisioning/ generation, but on the entire end-to-end transaction chain across use cases and at scale. The ecosystem must ensure linkages in processing infrastructure beyond mere token generation, and share final APIs with merchants so that they can uplink their internal systems with the same. This step-wise process must be fulfilled without exception to ensure that the consumer is able to seamlessly transact using tokens, across use cases and for high volumes. And for instances where the customer chooses to not tokenize the card, acquirers for online payments (like in the offline world) must have the ability to store customer card information for the life cycle of the transaction.

It is critical for the ecosystem to demonstrate that both token-based transactions and non-token-based transactions will be successful post 30 June 2022, else the ecosystem is doing the consumer an immense disservice by not helping prepare for the mass failure of card based online transactions, and the inability to have her grievances redressed, and get refunds and chargebacks.