

Embedded Payments Technical Review

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Useful Testing Tools in Sandbox [🔗](#)





- American Express Payment Test App [📱 Amex Payment Test Emulator - Apps on Google Play](#) - If you have a second Android device you can use this app to perform Tap to Pay Transactions to test Sandbox payments
- Seems XP Card 03 can trigger a declined transaction from the American Express Payment Test App for now [📱 Amex Payment Test Emulator - Apps on Google Play](#)
- XP Card 01 can trigger signature flow for transaction value > \$200

Common Cases [🔗](#)

App Functionality (POS App) [🔗](#)

Authorisation Flow (POS Portal - POS Server) [🔗](#)



Test Case #	Test Case	Implementation Being Tested	Required (y/n)  	Test Verification	Test in (Sandbox/Production/Bot h)	Test Results/Notes
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AF-1	<ul style="list-style-type: none"> User must login to authenticate for POS Portal 	<ul style="list-style-type: none"> Merchant Admin Auth Flow Merchant Authentication 		<input type="checkbox"/> User required to authenticate before using POS Portal <input type="checkbox"/> When Authenticated, user has access to POS Portal <input type="checkbox"/> When not Authenticated, user has restricted access to POS Portal <ul style="list-style-type: none"> Partner could send video/screen shot evidence of the above 	<ul style="list-style-type: none"> Both 	
AF-2	<ul style="list-style-type: none"> Has option to authorise POS 	<ul style="list-style-type: none"> Merchant Admin Auth Flow 		<input type="checkbox"/> There is an option to Authorise POS for Embedded Payments found through the UI <input type="checkbox"/> Confirm flow exists <input type="checkbox"/> Mentions that user will be redirected to Tyro to complete authorisation <ul style="list-style-type: none"> Partner could send video/screen shot evidence of the above 	<ul style="list-style-type: none"> Both 	
AF-3	<ul style="list-style-type: none"> Integrates with Tyro Integration Portal 	<ul style="list-style-type: none"> Merchant Admin Auth Flow Redirect/Modal to Tyro Integration Portal 		<input type="checkbox"/> Check that once the Authorise POS for Embedded Payments flow has been kicked off by opening the Tyro Integration Portal in a new tab <input type="checkbox"/> Check the url contains the POS ID and POS Reference as a query param. The POS ID will be their Client Id. e.g. https://integrate.stg.tyro.com/tap-to-pay?posId=client_id&posReference=pos_reference <ul style="list-style-type: none"> Partner could send video evidence of the above 	<ul style="list-style-type: none"> Production 	
AF-4	<ul style="list-style-type: none"> Authorising POS and Merchant ID on Tyro Integration Portal updates list of enabled Tap to Pay 	<ul style="list-style-type: none"> Merchant Admin Auth Flow TAPTOPAY_MERCHANT_ID_ENABLED webhook Fetch a Tap To Pay Merchant 		<input type="checkbox"/> Displays the correct list of MIDs that are owned by the current Merchant and allow user selection <input type="checkbox"/> Displays the correct list of authorised locations for Embedded Payments <input type="checkbox"/> Check what was enabled on the Tyro Integration Portal reflects this list <ul style="list-style-type: none"> Partner could send video evidence of the above 	<ul style="list-style-type: none"> Production 	

	Locations					
AF-5	<ul style="list-style-type: none"> Admin merchant can manage their Embedded Payments trading locations (Sandbox) 	<ul style="list-style-type: none"> Merchant Admin Auth Flow Merchant Authentication List Tap to Pay Locations 	✓	<ul style="list-style-type: none"> <input type="checkbox"/> Partner to send screen shots or video that show the following: <ul style="list-style-type: none"> <input type="checkbox"/> How authorised locations are being shown <input type="checkbox"/> That there is ability to manage these locations Partner could send video evidence of the above 	<ul style="list-style-type: none"> Sandbox 	
AF-6	<ul style="list-style-type: none"> Admin merchant can choose to use a MID and manage their Embedded Payments trading locations 	<ul style="list-style-type: none"> Merchant Admin Auth Flow Merchant Authentication List Tap to Pay Locations 	✓	<ul style="list-style-type: none"> <input type="checkbox"/> After completing the process on Tyro Merchant Portal, user navigates back to POS Portal <input type="checkbox"/> Merchant can choose a MID to use from a list of MIDs that is owned by the user <input type="checkbox"/> Merchant can see locations they are enabled for the chosen MID for Embedded Payments on POS Portal <input type="checkbox"/> Their Locations are listed <ul style="list-style-type: none"> <input type="checkbox"/> Shows list of authorised locations <input type="checkbox"/> Management options present for each location e.g. user access <input type="checkbox"/> Can Update Authorisation for each location <input type="checkbox"/> Redirect back to Tyro Integration Portal to complete <input type="checkbox"/> Deauthorised Locations not shown in authorised locations list Partner could send video evidence of the above 	<ul style="list-style-type: none"> Production 	
AF-7	<ul style="list-style-type: none"> Admin merchant can manage their Embedded Payments 	<ul style="list-style-type: none"> Merchant Admin Auth Flow - User/Device Management Create a Reader List Readers Merchant Operator Enablement 	✓	<ul style="list-style-type: none"> <input type="checkbox"/> Partner to send screen shots or video that show the following: <ul style="list-style-type: none"> <input type="checkbox"/> How Admin users can manage devices <input type="checkbox"/> How Admin users can create Readers and 1 per device 	<ul style="list-style-type: none"> Sandbox 	

	ts users and devices (Sandbox)	<ul style="list-style-type: none"> Merchant Operator Disablement 		<input type="checkbox"/> How Admin users can disable users <ul style="list-style-type: none"> Partner could send video evidence of the above 		
AF-8	<ul style="list-style-type: none"> Admin merchant can manage their Embedded Payments users and devices 	<ul style="list-style-type: none"> Merchant Admin Auth Flow - User/Device Management TAPTOPAY_READER_STATUS_UPDATED Create a Reader List Readers Merchant Operator Enablement Merchant Operator Disablement 	✓	<input type="checkbox"/> Can manage Devices <input type="checkbox"/> Can create Reader <input type="checkbox"/> Single Reader per device <input type="checkbox"/> Can deauthorise Merchant ID <ul style="list-style-type: none"> Partner could send video evidence of the above 	<ul style="list-style-type: none"> Production 	
AF-9	<ul style="list-style-type: none"> Only one Reader is used per Device 	<ul style="list-style-type: none"> Only one reader per device Get a Reader 	✓	<input type="checkbox"/> Check to see that this is happening through the device management process <ul style="list-style-type: none"> Partner could send video evidence of the above 	<ul style="list-style-type: none"> Production *as sandbox would only have 1 reader 	
AF-10	<ul style="list-style-type: none"> Deauthorise POS and Merchant ID on Tyro Integration Portal updates list of enabled Tap to Pay Locations 	<ul style="list-style-type: none"> Merchant Authentication Redirect to Tyro Integration Portal TAPTOPAY_MERCHANT_ID_DISABLED webhook List Tap to Pay Locations 	✓	<input type="checkbox"/> Displays the correct list of MIDs that are owned by the current Merchant <input type="checkbox"/> Displays the correct list of enabled locations for Embedded Payment <input type="checkbox"/> Check what was disabled on the Tyro Integration Portal reflects this list <ul style="list-style-type: none"> Partner could send video evidence of the above 	<ul style="list-style-type: none"> Production 	



POS App [🔗](#)

Test Case #	Test Case	Implementation Being Tested	Required (y/n)  	Test Verification	Test in (Sandbox/Prod/Both)	Test Results/Notes
PA-1	<ul style="list-style-type: none"> User must authenti 	<ul style="list-style-type: none"> POS app requires authentication to use the reader 	✓	<input type="checkbox"/> User required to authenticate before using POS App	<ul style="list-style-type: none"> Both 	




	cate in App to use Embedded Payments			<input type="checkbox"/> When Authenticated, user has access to POS App <input type="checkbox"/> When not Authenticated, user has restricted access to POS App <ul style="list-style-type: none"> • Tyro to test 		
PA-2	<ul style="list-style-type: none"> • App Should not be able to purchase with a 0 amount 	<ul style="list-style-type: none"> • <code>amountInCents</code> must be positive and non zero 	✓	<input type="checkbox"/> No ability to start Tap to Pay transaction (purchase) with a 0 dollar amount <ul style="list-style-type: none"> • Tyro to test 	<ul style="list-style-type: none"> • Both 	
PA-3	<ul style="list-style-type: none"> • App Should not be able to refund a 0 amount 	<ul style="list-style-type: none"> • <code>amountInCents</code> must be positive and non zero 	✓	<input type="checkbox"/> No ability to start Embedded Payments transaction (refund) with a 0 dollar amount <ul style="list-style-type: none"> • Tyro to test 	<ul style="list-style-type: none"> • Both 	
PA-4	<ul style="list-style-type: none"> • App should set the Order id as the transaction reference 	<ul style="list-style-type: none"> • <code>orderId</code> used as transaction ref • transaction ref must be unique 	✓	<input type="checkbox"/> Tyro to check logs/postman that the <code>orderId</code> is being set as the transaction reference <input type="checkbox"/> Tyro to check logs/postman that the reference being sent is unique <input type="checkbox"/> confirm between Partner and Tyro that these are matching up <input type="checkbox"/> Partner to confirm they are giving us a unique reference <ul style="list-style-type: none"> • Partner could send video evidence of the above 	<ul style="list-style-type: none"> • Both 	
PA-5	<ul style="list-style-type: none"> • App should display the amount customer paid including surcharges applied 	<ul style="list-style-type: none"> • Surcharging 	✓	Prerequisite: <ul style="list-style-type: none"> • surcharging enabled for Test MID on Tyro's side <input type="checkbox"/> Tyro to check final amount paid screen after processing a transaction with surcharging applied <ul style="list-style-type: none"> <input type="checkbox"/> Should see the amount as original total plus the surcharge applied 	<ul style="list-style-type: none"> • Both 	
PA-6	<ul style="list-style-type: none"> • App should 	<ul style="list-style-type: none"> • Surcharging 	✓	Prerequisite:	<ul style="list-style-type: none"> • Both 	

	record the total amount plus the final surcharge if one was added			<ul style="list-style-type: none"> • surcharging enabled for Test MID on Tyro's side <input type="checkbox"/> Partner to provide evidence they are recording the total amount paid including surcharges applied. Can be in the form of: <ul style="list-style-type: none"> <input type="checkbox"/> Transaction history page <input type="checkbox"/> Code snippets 		
PA-7	<ul style="list-style-type: none"> • App should refund total amount plus any surcharges applied 	<ul style="list-style-type: none"> • Surcharging 	✓	Prerequisite: <ul style="list-style-type: none"> • surcharging enabled for Test MID on Tyro's side <input type="checkbox"/> Tyro to check when performing a refund for a transaction with a surcharge applied, that the total includes the surcharge amount	<ul style="list-style-type: none"> • Both 	
PA-8	<ul style="list-style-type: none"> • Surcharge Added to POS tax invoice 	<ul style="list-style-type: none"> • Surcharging 	✓	Prerequisite: <ul style="list-style-type: none"> • surcharging enabled for Test MID on Tyro's side <input type="checkbox"/> Partner to provide evidence that the surcharge has been added to the tax invoice	<ul style="list-style-type: none"> • Both 	






POS Server [🔗](#)

Test Case #	Test Case	Implementation Being Tested	Required (y/n)  	Test Verification	Test in (Sandbox/Prod/Both)	Test Results/Notes
PS-1	<ul style="list-style-type: none"> • Client ID and Client Secret stored securely on POS Server 	<ul style="list-style-type: none"> • Tyro Authentication Flow 	✓	<input type="checkbox"/> Partner to confirm they are storing these details on their server	<ul style="list-style-type: none"> • Both 	
PS-2	<ul style="list-style-type: none"> • POS saves sales receipts for 540 days 	<ul style="list-style-type: none"> • POS receipt compliance with scheme chargeback rules 	✓	<input type="checkbox"/> Partner to confirm they are storing sales receipts for at least 540 days. This is so that if a chargeback is filed, the merchant is able to provide proof of what was purchased at the time.	<ul style="list-style-type: none"> • n/a 	

Tap To Pay API [🔗](#)

Test Case #	Test Case	Implementation Being Tested	Required (y/n)  	Testing Steps Partner/Tyro	Test in (Sandbox/Production/Both)	Test Results/Notes
TA-1	<ul style="list-style-type: none"> App can fetch a Tap to Pay Transaction by transaction ID 	<ul style="list-style-type: none"> Fetch a Tap to Pay Transaction 		<input type="checkbox"/> Check with Partner if they are using this - Tyro will document the usage 1. Check if this can be visually confirmed in App UI <input type="checkbox"/> Perhaps it displays a previous transaction? <input type="checkbox"/> Other use cases? Describe <input type="checkbox"/> Tyro to check logs to see these calls are successful i.e. returns 200 <ul style="list-style-type: none"> Tyro to test on Production build 	<ul style="list-style-type: none"> Production 	
TA-2	<ul style="list-style-type: none"> App can list Tap to Pay Transactions by reference 	<ul style="list-style-type: none"> List Tap to Pay Transactions 		<input type="checkbox"/> Check with Partner if they are using this - Tyro will document the usage 1. Check if this can be visually confirmed in App UI <input type="checkbox"/> Perhaps it displays a list of previous transactions? <input type="checkbox"/> Other use cases? Describe <input type="checkbox"/> Tyro to check logs to see these calls are successful i.e. returns 200 <ul style="list-style-type: none"> Tyro to test on Production build 	<ul style="list-style-type: none"> Production 	
TA-3	<ul style="list-style-type: none"> App can list Tap to Pay Transactions by locationID 	<ul style="list-style-type: none"> List Tap to Pay Transactions 		<input type="checkbox"/> Check with Partner if they are using this - Tyro will document the usage 1. Check if this can be visually confirmed in App UI <input type="checkbox"/> Perhaps it displays a list of previous transactions? <input type="checkbox"/> Other use cases? Describe <input type="checkbox"/> Tyro to check logs to see these calls are successful i.e. returns 200 <ul style="list-style-type: none"> Tyro to test on Production build 	<ul style="list-style-type: none"> Production 	



Tap To Pay SDK Functions [🔗](#)


Test Case #	Test Case	Implementation Being Tested	Required  	Test Verification	Test in (Sandbox/Prod/Both)	Test Results/Notes
TS-1	<ul style="list-style-type: none"> Initialise App 	<ul style="list-style-type: none"> ConnectionProvider() Create Tap to Pay Connection TapToPaySdk.createInstance(tyroEnv) tapToPaySdk.init(activity, callback) onInitResult() tapToPaySdk.registerTransactionResultHandler(activity, callback) 		<input type="checkbox"/> Tap to Pay launches successfully No Errors such as: <input type="checkbox"/> Attestation error <input type="checkbox"/> Invalid connection secret error <ul style="list-style-type: none"> Tyro to test 	<ul style="list-style-type: none"> Both 	
TS-2	<ul style="list-style-type: none"> App is setting POS Info correctly 	<ul style="list-style-type: none"> TapToPaySdk.createInstance(tyroEnv) PosInfo 		<input type="checkbox"/> Partner to send screen shots of code that shows the values being set for PosInfo and used accordingly <input type="checkbox"/> posName matches expected Partner's POS Name <input type="checkbox"/> posVendor matches what is expected of POS Vendor <input type="checkbox"/> posVersion matches a versioning format e.g. x.xx.xx or x.x <input type="checkbox"/> siteReference has some location reference <input type="checkbox"/> Tyro to check this matches what is expected for this POS Example PosInfo <pre> 1 val POS_INFO = 2 PosInfo(3 posName = "Demo", 4 posVendor = "Tyro 5 Payments", 6 posVersion = 7 "1.0", 8 siteReference = 9 "Sydney", 10) </pre>	<ul style="list-style-type: none"> Both 	
TS-3	<ul style="list-style-type: none"> Process Payment - Success 	<ul style="list-style-type: none"> TransactionRequest(type, amount, reference) tapToPaySdk.startTransaction(activity, transactionRequest - 		<input type="checkbox"/> Payment can be processed <input type="checkbox"/> Can tap card to pay <input type="checkbox"/> Success (App to display) <input type="checkbox"/> Tyro to check logs	<ul style="list-style-type: none"> Sandbox 	

	(Sandbox)	PURCHASE transaction type) <ul style="list-style-type: none"> tapToPaySdk.registerTransactionResultHandler(activity, callback) Result Displayed 		<ul style="list-style-type: none"> Tyrol to test 		
TS-4	<ul style="list-style-type: none"> Process Payment - Success (Prd) 	<ul style="list-style-type: none"> Same as above TAPTOPAY_TRANSACTION_SUCCESS sent from Tyro 	✓	<input type="checkbox"/> Payment can be processed <ul style="list-style-type: none"> <input type="checkbox"/> Can tap card to pay <input type="checkbox"/> Success (App to display) <input type="checkbox"/> Tyrol to check logs <ul style="list-style-type: none"> Tyrol to test 	<ul style="list-style-type: none"> Production 	
TS-5	<ul style="list-style-type: none"> Process Payment - Failed (Sandbox) 	<ul style="list-style-type: none"> TransactionRequest(type, amount, reference) tapToPaySdk.startTransaction(activity, transactionRequest - PURCHASE transaction type) tapToPaySdk.registerTransactionResultHandler(activity, callback) Result Displayed 	✓	<input type="checkbox"/> Processing payment with \$666.xx <ul style="list-style-type: none"> <input type="checkbox"/> Failed status (App to display) <input type="checkbox"/> Tyrol to check logs <ul style="list-style-type: none"> Tyrol to test 	<ul style="list-style-type: none"> Sandbox 	
TS-6	<ul style="list-style-type: none"> App has option to provide customer with a Receipt 	<ul style="list-style-type: none"> Provide customer with receipt 	✓	<input type="checkbox"/> Check after a transaction processes that there is an option to provide the customer with a receipt either digital or physical	<ul style="list-style-type: none"> Sandbox 	
TS-7	<ul style="list-style-type: none"> App Can provide Digital or Physical Receipt 	<ul style="list-style-type: none"> tapToPaySdk.sendDigitalReceipt(transactionId, email) - For Digital Receipt Provide customer with receipt 	✓	<input type="checkbox"/> Check after a transaction processes that there is an option to provide the customer with a receipt either digital or physical <input type="checkbox"/> Ensure receipt is using Tyrol's customerReceipt content returned in the transaction result <ul style="list-style-type: none"> Tyrol to test <p>If Digital Receipt:</p> <ol style="list-style-type: none"> After transaction: <ul style="list-style-type: none"> <input type="checkbox"/> Digital receipt option shown that takes an email <input type="checkbox"/> Sending Digital receipt results in the given email receiving the Digital receipt <p>If Physical Receipt:</p>	<ul style="list-style-type: none"> Production 	





				1. After transaction: <ul style="list-style-type: none"> <input type="checkbox"/> Physical receipt option shown that can print a receipt <input type="checkbox"/> Printing Physical receipt results in the receipt being printed Partner could send video evidence of the above 		
TS-8	<ul style="list-style-type: none"> Refund Payment (Sandbox) - Success 	<ul style="list-style-type: none"> TransactionRequest(type, amount, reference) tapToPaySdk.startTransaction(activity, transactionRequest - REFUND transaction type) tapToPaySdk.registerTransactionResultHandler(activity, callback) Display Transaction Result 	✓	<input type="checkbox"/> Refund option exists <input type="checkbox"/> Processing refund results in <input type="checkbox"/> Success status (App to display) <input type="checkbox"/> Tyro can check logs <ul style="list-style-type: none"> Tyro to test 	<ul style="list-style-type: none"> Sandbox 	
TS-9	<ul style="list-style-type: none"> Refund Payment (Prd) - Success 	<ul style="list-style-type: none"> Same as above TAPTOPAY_TRANSACTION_REFUNDED webhook 	✓	<input type="checkbox"/> Refund option exists <input type="checkbox"/> Processing refund results in <input type="checkbox"/> Success status (App to display) <input type="checkbox"/> Tyro can check logs <ul style="list-style-type: none"> Tyro to test 	<ul style="list-style-type: none"> Production 	
TS-10	<ul style="list-style-type: none"> Refund Payment - Failed (Sandbox) 	<ul style="list-style-type: none"> TransactionRequest(type, amount, reference) tapToPaySdk.startTransaction(activity, transactionRequest - REFUND transaction type) tapToPaySdk.registerTransactionResultHandler(activity, callback) Display Transaction Result 	✓	<input type="checkbox"/> Refund option exists <input type="checkbox"/> Processing refund results in <input type="checkbox"/> Failed status (App to display) <input type="checkbox"/> Tyro can check logs <ul style="list-style-type: none"> Tyro to test 	<ul style="list-style-type: none"> Sandbox 	

Tyro Onboarding Check [🔗](#)

Test Case #	Test Case	Implementation Being Tested	Required (y/n)  	Test Verification	Test in (Sandbox/Production/Bot h)	Test Results/Notes

TO -1	<ul style="list-style-type: none"> • Provided App id and Public certificate to Tyro 	<ul style="list-style-type: none"> • Tyro onboarding • Correct Verification Data 		<input type="checkbox"/> Partner to tick this off before going Live	<ul style="list-style-type: none"> • Both 	
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iOS SDK Cases [🔗](#)

SDK Functionality iOS 🔗						
Test Case #	Test Case	Implementation Being Tested	Required   (y/n)	Test Verification	Test in (Sandbox/Production/Bot h)	Test Results/Notes
SF-1	<ul style="list-style-type: none"> • Initialise App 	<ul style="list-style-type: none"> • ConnectionProvider() • Create instance of TyroTapToPay • Create Tap to Pay Connection • TyroTapToPaySdk.connect() • Terms and conditions Presented/Accepted (If first time) • Reader Configuration Update (If update required) 		<input type="checkbox"/> Tap to Pay launches successfully No Errors such as: <input type="checkbox"/> Attestation error <input type="checkbox"/> Invalid connection secret error <ul style="list-style-type: none"> • Tyro to test 	<ul style="list-style-type: none"> • Both 	
SF-2	<ul style="list-style-type: none"> • App is setting POS Information correctly 	<ul style="list-style-type: none"> • POSInformation 		<input type="checkbox"/> Partner to send screen shots of code that shows the values being set for POSInformation and used accordingly <input type="checkbox"/> name matches expected Partner's POS Name <input type="checkbox"/> vendor matches what is expected of POS Vendor <input type="checkbox"/> version matches a versioning format e.g. x.xx.xx or x.x <input type="checkbox"/> siteReference has some location reference <input type="checkbox"/> Tyro to check this matches what is expected for this POS Example POSInformation <pre> 1 private let posInformation = 2 POSInformation(</pre>	<ul style="list-style-type: none"> • Both 	

				<pre> 3 name: 4 "SampleApp POS", 5 vendor: "Tyro", 6 version: "0.4.0", 7 siteReference: "Sydney") </pre>		
SF-3	<ul style="list-style-type: none"> Incompatible Tap to Pay device throws error 	<ul style="list-style-type: none"> TyroTapToPaySdk.connect() - failure 	✓	<p>1. Use an iPhone that does not support Tap to Pay (< iOS 16.4, < iPhone XS)</p> <p><input type="checkbox"/> Should see error when trying to start Tap to Pay</p> <p><input type="checkbox"/> Handled by App UI</p> <ul style="list-style-type: none"> Tyro to test 	<ul style="list-style-type: none"> Both 	
SF-4	<ul style="list-style-type: none"> Process Payment (Sandbox) - Success 	<ul style="list-style-type: none"> create instance of PosInformation Create a TransactionDetail tapToPaySDK.startPayment(transactionDetail) Display Transaction Result 	✓	<p><input type="checkbox"/> Process Tap to Pay transaction with some amount > 0</p> <p><input type="checkbox"/> App informs user transaction was successful</p> <p><input type="checkbox"/> Tyro to check logs</p> <ul style="list-style-type: none"> Tyro to test 	<ul style="list-style-type: none"> Sandbox 	
SF-5	<ul style="list-style-type: none"> Process Payment (Prd) - Success 	<ul style="list-style-type: none"> Same as above TAPTOPAY_TRANSACTION_SUCCESS webhook sent from Tyro 	✓	<p><input type="checkbox"/> Process Tap to Pay transaction with some amount > 0</p> <p><input type="checkbox"/> App informs user transaction was successful</p> <p><input type="checkbox"/> Tyro to check logs</p> <ul style="list-style-type: none"> Tyro to test 	<ul style="list-style-type: none"> Production 	
SF-6	<ul style="list-style-type: none"> Process Payment - Failed (Sandbox) 	<ul style="list-style-type: none"> create instance of PosInformation Create a TransactionDetail tapToPaySDK.startPayment(transactionDetail) Display Transaction Result 	✓	<p><input type="checkbox"/> Process Tap to Pay transaction with some amount > 0</p> <p><input type="checkbox"/> App informs user transaction Failed</p> <p><input type="checkbox"/> Tyro to check logs</p> <ul style="list-style-type: none"> Tyro to test 	<ul style="list-style-type: none"> Sandbox 	
SF-7	<ul style="list-style-type: none"> App has option to provide customer with a Receipt 	<ul style="list-style-type: none"> Provide customer with receipt 	✓	<p><input type="checkbox"/> Check after a transaction processes that there is an option to provide the customer with a receipt either digital or physical</p>	<ul style="list-style-type: none"> Sandbox 	
SF-8	<ul style="list-style-type: none"> App Can 	<ul style="list-style-type: none"> Provide customer with receipt 	✓	<p><input type="checkbox"/> Ensure receipt is using Tyro's customerReceipt content</p>	<ul style="list-style-type: none"> Production 	




	provide Digital or Physical Receipt	<ul style="list-style-type: none"> tapToPaySdk.requestDigitalReceipt(transactionId, email) 		<p>returned in the transaction result</p> <p>If Digital Receipt:</p> <p>1. After transaction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Digital receipt option shown that takes an email <input type="checkbox"/> Sending Digital receipt results in the given email receiving the Digital receipt Tyro to test <p>If Physical Receipt:</p> <p>1. After transaction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Physical receipt option shown that can print a receipt <input type="checkbox"/> Printing Physical receipt results in the receipt being printed Partner could send video evidence of the above 		
SF-9	<ul style="list-style-type: none"> Refund Payment (Sandbox) - Success 	<ul style="list-style-type: none"> create instance of PosInformation Create a TransactionDetail tapToPaySDK.startRefund(transactionDetail) Display Transaction Result 	✓	<ul style="list-style-type: none"> <input type="checkbox"/> Refund option exists <input type="checkbox"/> Processing refund results in Success status (App to display) <input type="checkbox"/> Tyro to check logs Tyro to test 	<ul style="list-style-type: none"> Sandbox 	
SF-10	<ul style="list-style-type: none"> Refund Payment (Prd) - Success 	<ul style="list-style-type: none"> Same as above TAPTOPAY_TRANSACTION_REFUNDED webhook 	✓	<ul style="list-style-type: none"> <input type="checkbox"/> Refund option exists <input type="checkbox"/> Processing refund results in Success status (App to display) <input type="checkbox"/> Tyro to check logs Tyro to test 	<ul style="list-style-type: none"> Production 	
SF-11	<ul style="list-style-type: none"> Refund Payment - Failure (Sandbox) 	<ul style="list-style-type: none"> create instance of PosInformation Create a TransactionDetail tapToPaySDK.startRefund(transactionDetail) Display Transaction Result 	✓	<ul style="list-style-type: none"> <input type="checkbox"/> Refund option exists <input type="checkbox"/> Processing refund results in Failed status (App to display) <input type="checkbox"/> Tyro to check logs Tyro to test 	<ul style="list-style-type: none"> Sandbox 	

Other iOS Cases [🔗](#)

Test	Test Case	What is Being Tested	Required (y/n)  	Test Verification	Test in (Sandbox/Prd)	Test Results/Notes
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Case #					Education/Bot h)	
OI-1	<ul style="list-style-type: none"> In-app merchant education provided 	<ul style="list-style-type: none"> Apple Requirements 	✓	<input type="checkbox"/> App has education materials present Education Material may be in the form: <ul style="list-style-type: none"> <input type="checkbox"/> in-app merchant education video <input type="checkbox"/> In-app payment acceptance tutorials <input type="checkbox"/> Online training guides <input type="checkbox"/> In-person, online, or in-app training <input type="checkbox"/> Help center guidelines Partner could send video or screen shot evidence of the above 	<ul style="list-style-type: none"> Both 	
OI-2	<ul style="list-style-type: none"> Apple terms and conditions accepted using Apple ID 	<ul style="list-style-type: none"> Using valid Apple ID to accept the terms 	✓	<input type="checkbox"/> Tyro to tick if App appears to launch Embedded Payments	<ul style="list-style-type: none"> Both 	
OI-3	<ul style="list-style-type: none"> Reader reconnects upon app resume 	<ul style="list-style-type: none"> iOS requires readers to be reconnected on app resume 	✓	1. From a suspended state: <ul style="list-style-type: none"> <input type="checkbox"/> App reconnects/resumes Embedded Payments <input type="checkbox"/> Tyro can see logs connection created/verified? Tyro to test 	<ul style="list-style-type: none"> Both 	
OI-4	<ul style="list-style-type: none"> Reader updates are handled 	<ul style="list-style-type: none"> iOS can handle reader updates 	✓	Reader Updates happen: <ul style="list-style-type: none"> <input type="checkbox"/> in the background <input type="checkbox"/> Progress/Completion status verifiable <input type="checkbox"/> Other? Describe Partner could send video or screen shot evidence of the above 	<ul style="list-style-type: none"> Both 	
OI-5	<ul style="list-style-type: none"> Apple Entitlement 	<ul style="list-style-type: none"> Entitlements have been applied/issued 	✓	<input type="checkbox"/> Partner to confirm they have entitlements from Apple	<ul style="list-style-type: none"> Both 	

Error Handling Check List [🔗](#)

Test Case #	Test Case	Implementation Being Tested	Required  (y/n) 	Test Verification	Test in (Sandbox/Production/Bot h)	Test Results/Notes
EH-1	<ul style="list-style-type: none"> Partner is aware of below errors and acknowledges they are handling them 	<ul style="list-style-type: none"> Error Handling 		<input type="checkbox"/> Partner to tick this off before going Live <input type="checkbox"/> Tyro to tick this off after testing in Sandbox and no unexpected errors <input type="checkbox"/> Tyro to tick this off after testing in Production and no unexpected errors	<ul style="list-style-type: none"> Both 	

SDK Errors [🔗](#)

You should be aware of the below errors and handle them accordingly.

- InvalidTransactionParamException**
 - `amountInCents` must be positive and non zero
 - `amountInCents` length cannot exceed 8 digits
 - `reference` must not be blank
- INVALID_CONNECTION**
 - Connection Secret is invalid
- SDK_VERSION_MISSING**
- SDK_UPGRADE_REQUIRED**
 - Current App version is < supported version

API Errors [🔗](#)

You should be aware of the below errors but your integration should not trigger these.

- Create Tap to Pay Connection
 - 400** - When the provided payload is not valid.
 - 403** - When you don't have the right permissions to create a Connection for the provided Reader ID
 - 404** - When the provided `readerId` does not exist in our system
- Create a Reader
 - 400** - When the provided payload is not valid
 - 403** - When you don't have the right permissions to create a Reader for the provided location or Merchant ID
- List Readers
 - 403** - When you don't have the right permissions to retrieve the Readers for the provided location or Merchant ID
- Get a Reader
 - 403** - When you don't have the right permissions to retrieve a Reader for the provided location or Merchant ID
- Fetch a Tap to Pay Transaction
 - 403** - When you don't have the right permissions to access the transactions

- List Tap to Pay Transactions
 - 403 - When you don't have the right permissions to access the transactions
- List Tap to Pay Locations
 - 403 - When you don't have the right permissions to fetch the locations
 - 404 - When the provided `merchantId` does not exist in our system
- List Tap to Pay Merchants
 - 403 - When you don't have the right permissions to fetch the merchants
- Fetch a Tap to Pay Merchant
 - 400 - When the provided `merchantId` is not valid
 - 403 - When you don't have the right permissions to fetch the merchants
 - 404 - When the provided `merchantId` does not exist in our system

Postman Collection [↗](#)

The attached Postman collection contains examples of the Embedded Payments API that will need to be implemented on your server.

