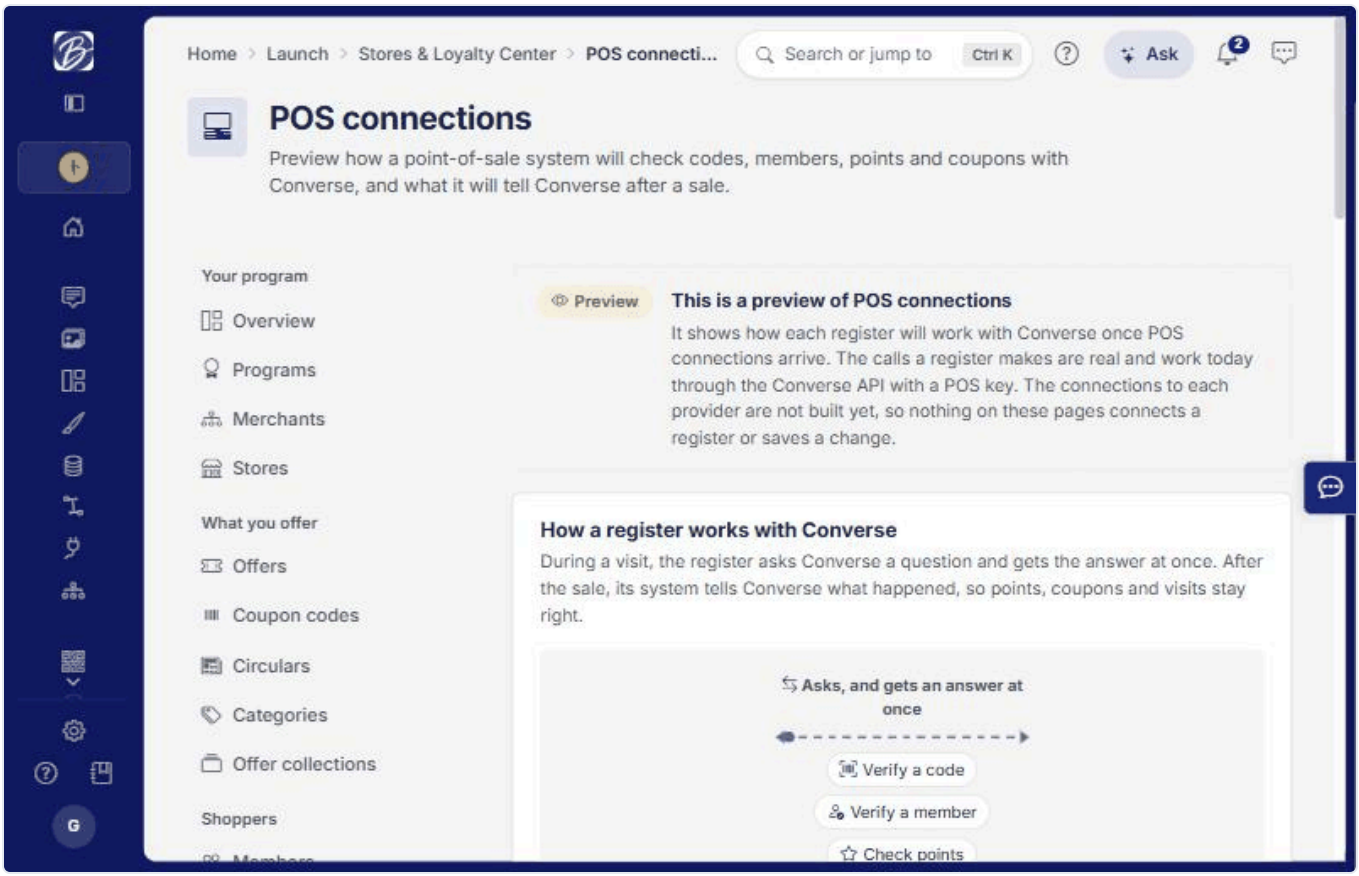
POS Integration Guide

This guide is for the developer who connects a point-of-sale system to the Listrak Converse **Stores & Loyalty Center**: a POS partner building an app for its marketplace, or a brand's own team wiring its register software. It walks through a visit at the register, shows each call the register makes with a real request and answer, and explains how your system tells Converse what happened after the sale.

> **Status (2026-11-06).** The calls in this guide are **live today**: every one is a Converse door you can call now with a POS key, and the examples are the doors' own shapes. **Claim a deal is coming** - deals are bought, never handed out, and buying a deal arrives with the deals release. The provider connections themselves (a Square app, a Toast integration and so on) are **not built yet**: the Portal's **POS connections** page (`/loyalty/pos`) is a preview of how each one will work, and the event mapping in the second half of this guide is that preview's design, not a shipped feature.



The reference for every loyalty door is Loyalty API developer sign-in; the internals are `docs/claude/LOYALTY.md` (section 4 for the doors, 5.7 for the preview).

Before you call

- **Address.** `https://api.rcsbuilder.com` - every loyalty door is a `POST` to `/api/v1/loyalty/...` with a JSON body. JSON is camelCase both ways and every date is UTC with a trailing `Z`.
- **The POS key.** Every call carries `Authorization: Bearer <key>`. A register uses a **POS key**: an API key that holds the **Store redeemer** role and nothing else, made on the Portal's **API Keys** page. Only a POS key moves value over REST - a key with any other role is refused `403 key-not-for-value` when it tries to redeem, void or mark used. An AI agent never moves value (`403 machine-never-moves-value`), whatever key it holds.
- **Loyalty must be switched on.** A workspace turns the Stores & Loyalty Center on with the **Loyalty** skill. While it is off, every read answers `moduleOn: false` with an empty result and every write answers `409 loyalty-off`. Your first call should be `POST /api/v1/loyalty/status`, which says whether it is on, which programs run and what your key reaches.
- **Refusals** are `{ "error": "<stable word>", "message": "<a sentence>" }` with the HTTP status. Program against the `error` word, never the sentence.
- **Look-ups are rate-limited** per caller - an integration's key 600 a minute (`429 slow-down`).

A visit at the register

1. The shopper shows their member card, a coupon on their phone or a printed code, or gives their phone number.
2. The register **verifies the member** and sees what they can use at this store - or **verifies the code** it scanned.
3. The clerk asks for the balance: the register **checks points**.
4. Before taking anything off, the register **verifies the coupon** against the basket. Nothing is written.
5. The register **adjudicates the coupon**: it redeems it exactly once (Converse works out the discount), or records a discount it already applied itself. A redemption made in error is undone.
6. After the sale, your system **tells Converse what happened** - the order completed, a refund, a voided order - so points and coupons stay right.

The six calls

Call	Converse door	MCP tool	Who may make it	Status
Verify a code	`POST /api/v1/loyalty/codes/get`	`get_loyalty_code`	Store redeemer or Loyalty manager	Live today
Verify a member	`POST /api/v1/loyalty/members/get`, `POST /api/v1/loyalty/redemptions/lookup`	`get_loyalty_member`, `lookup_loyalty_wallet`	Store redeemer or Loyalty manager	Live today

Call	Converse door	MCP tool	Who may make it	Status
Check points	`POST /api/v1/loyalty/members/state`	`get_loyalty_member_state`	Store redeemer or Loyalty manager	Live today
Verify a coupon	`POST /api/v1/loyalty/redemptions/check`	`check_loyalty_redemption`	Store redeemer or Loyalty manager	Live today
Adjudicate a coupon	`POST /api/v1/loyalty/redemptions/redeem`, `.../redemptions/void`, `.../redemptions/mark-used`	`redeem_loyalty_item`, `void_loyalty_redemption`, `mark_loyalty_item_used`	A POS key (Store redeemer), a person, or the store's paired device - never an AI agent	Live today
Claim a deal	Arrives with deals	-	Decided when deals arrive	Coming

The MCP tool is the same door for an AI agent working on the program (the copilot, or any client of the Converse MCP server). It reads and checks; it never redeems, voids or marks used.

1. Verify a code

The register scans or types a coupon code and learns what it is.

```
POST /api/v1/loyalty/codes/get
{ "code": "SAVE10-7QK2" }

200 { "moduleOn": true,
      "code": { "codeId": 5512, "poolId": 14, "poolKind": "generated", "symbology": "code128",
"offerId": 31,
                "value": "SAVE10-7QK2", "status": "issued", "walletItemId": 301, ... } }
```

A QR or Code 128 code matches exactly; other symbologies also match in their normalised form. A code of an offer your key does not reach answers `404 code-not-found`, exactly as a code that does not exist.

2. Verify a member

Find the member by their number - or by phone with the program - and, in the same visit, what they can use at this store.

```
POST /api/v1/loyalty/members/get
{ "memberNumber": "400123456" }

200 { "moduleOn": true,
      "member": { "memberId": 41, "programId": 1, "memberNumber": "400123456", "firstName": "Dana",
"status": "active",
                  "trimmed": true, ... } }
```

```
POST /api/v1/loyalty/redemptions/lookup
{ "memberNumber": "400123456", "storeId": 7 }

200 { "moduleOn": true, "found": true, "storeId": 7, "member": { ... },
      "items": [ { "walletItemId": 301, "offerId": 31, "verdict": { "eligible": true, ... } } ] }
```

`redemptions/lookup` also takes a scanned `code`, a signed coupon `qr` or a `walletItemId`. A member card a shopper keeps in Apple Wallet or Google Wallet carries the member number as its barcode, so a register that scans it sends `memberNumber`. At the register a member is **trimmed**: you see the number, the first name, the status, the tier and the balance - never the phone, the email, the last name or the birthday. Name the member by `memberNumber` or `phone` + `programId`; a bare `memberId` from a register is refused `403 name-the-member`.

3. Check points

```
POST /api/v1/loyalty/members/state
{ "memberNumber": "400123456" }

200 { "moduleOn": true,
      "state": { "memberId": 41, "programId": 1, "pointsBalance": 1250, "lifetimePoints": 4100,
"visits": 18,
                 "tier": { "tierId": 2, "name": "Gold", "rank": 2 },
                 "progress": { "measure": "lifetimePoints", "next": "platinum", "toNext": 900,
"words": "..." } } }
```

4. Verify a coupon

Ask whether this coupon applies here, now and to this basket, and what it is worth. Nothing is written.

```
POST /api/v1/loyalty/redemptions/check
{ "walletItemId": 301, "storeId": 7, "registerCode": "K7Q2-91",
  "basket": { "totalMinor": 4599, "currency": "USD" } }

200 { "moduleOn": true, "walletItemId": 301, "offerId": 31, "storeId": 7, "usable": true,
      "verdict": { "eligible": true, "needsConfirmation": false, "reasons": [ ... ],
                   "discountMinor": 920, "currency": "USD", ... } }
```

- **Send the basket, with its currency.** A condition the basket decides (a minimum spend, a category) cannot be judged without it, and the answer says `needsConfirmation: true`. Amounts are in minor units (cents).
- **Presence is proved, never said.** Send the register's rotating `registerCode` to prove the member is at this checkout. The only presence you may simply state is `"presence": "claimed"`.

5. Adjudicate a coupon - redeem, record, undo

Redeem - exactly once, by idempotency key:

```
POST /api/v1/loyalty/redemptions/redeem
{ "idempotencyKey": "square-store7-r3-000182", "walletItemId": 301, "storeId": 7, "method": "scan",
  "basket": { "totalMinor": 4599, "currency": "USD" }, "registerCode": "K7Q2-91", "receiptRef":
"000182" }

200 { "moduleOn": true, "redeemed": true, "replayed": false, "redemptionId": 9001, "discountMinor":
920, "currency": "USD",
      "verdict": { ... }, "points": [ ... ], "notes": [ ... ] }
```

Record a discount the register already applied - your system gave the discount itself and tells Converse:

```
POST /api/v1/loyalty/redemptions/mark-used
{ "idempotencyKey": "square-store7-r3-000183", "code": "SAVE10-7QK2", "storeId": 7, "method":
"pos",
  "basket": { "totalMinor": 2999, "currency": "USD" }, "discountMinor": 300, "currency": "USD",
"receiptRef": "000183" }
```

Undo - by reversal, never a delete:

```
POST /api/v1/loyalty/redemptions/void
{ "redemptionId": 9001, "reason": "Rang up twice", "restoreItem": true }

200 { "moduleOn": true, "voided": true, "redemptionId": 9001, "restoredItem": true,
"pointsReversed": [ ... ], "notes": [ ... ] }
```

A void reverses exactly the points the redemption wrote and, with `restoreItem: true`, gives the coupon back. A paired register device undoes only its own redemptions within 10 minutes; a store's admin may undo one at any time.

Idempotency keys

- **One key per redemption, the same key on every retry.** A retry answers the first redemption (`replayed: true`) and nothing is redeemed twice or earns points twice - even after the register code has rotated.

- **Keys are shared across the workspace.** Begin each with the register's own name - the provider, the store and the register - then the receipt number: `square-store7-r3-000182`. A key another register already used is refused `409 idempotency-key-reused`.
- At most 100 characters, and never a vertical bar.

When the answer is a refusal

HTTP	`error`	What to do at the register
409	`not-eligible`	The coupon does not apply - show the verdict's reasons (in `detail`).
409	`needs-confirmation`	The basket could not decide it - the clerk checks, then send `"confirmed": true`.
409	`offer-not-running`	The offer is paused, ended or retired - a use already given is still recorded with `mark-used`.
409	`idempotency-key-reused`	That key recorded a different redemption - send a fresh key for a new one.
409	`presence-not-proved`	Nothing sent proves the member is here - send the register code.
409	`not-enough-points`	A reward costs more points than the member holds.
400	`currency-required`	An amount with no currency - send the basket's.
403	`key-not-for-value`	Your key holds more than Store redeemer - make a POS key.
429	`slow-down`	Too many look-ups this minute - wait and try again.
500	`points-not-given-back`	Retry with the SAME key.

A gift certificate is tender. Apply it after any discounts. Look its code up as you would any code: the answer is `found: "giftCertificate"` with the certificate's own facts - `walletItemId`, `status`, `statusWords`, `balanceMinor`, `currency` and `reference` - and `presentedBy: "bearer"` when the code was scanned or typed. It names no member, because whoever holds the code spends it. Redeem it with `amountToTakeMinor` (at most the balance; leave it out to take the smaller of the basket's total and the balance):

```
POST /api/v1/loyalty/redemptions/redeem
{ "idempotencyKey": "square-store7-r3-000183", "code": "7Q2K9M4X8B3T6W1", "storeId": 7, "method":
"scan",
  "amountToTakeMinor": 2500, "receiptRef": "000183" }
```

The answer adds `balanceLeftMinor` and `balanceLeftWords`, writes no points (the notes say `presentedByBearer` and `giftCertificateEarnsNoPoints`), and the redemption records the amount drawn as stored value, never as a discount. Undo works as for any redemption: the amount goes back onto the certificate. A certificate that was passed on, refunded or spent in full is refused before anything moves.

6. Claim a deal - coming

A deal is a voucher the member buys (a GroupOn-style offer). The register will sell it and put the voucher in the member's wallet. Today a deal cannot be granted or clipped (`409 deal-needs-purchase`); the purchase and its door arrive with the deals release, and this guide will show it then.

What your system tells Converse - a preview

After the sale, your system sends Converse an **event**. In the connected design, each POS registration gets its own **inbound webhook address** on the workspace:

```
https://api.rcsbuilder.com/api/v1/inbound/{tenantId}/{endpointKey}
```

Converse makes the `endpointKey` when the registration is real and checks the signature of every delivery - the signing schemes, the dedupe and the replay rules are the inbound door's, documented in Inbound webhooks developer sign-in. Converse does **one thing** with each event. The suggested mapping is below; on the Portal's provider page a Loyalty manager can try a different action for each event in place (those changes are not saved - it is a preview).

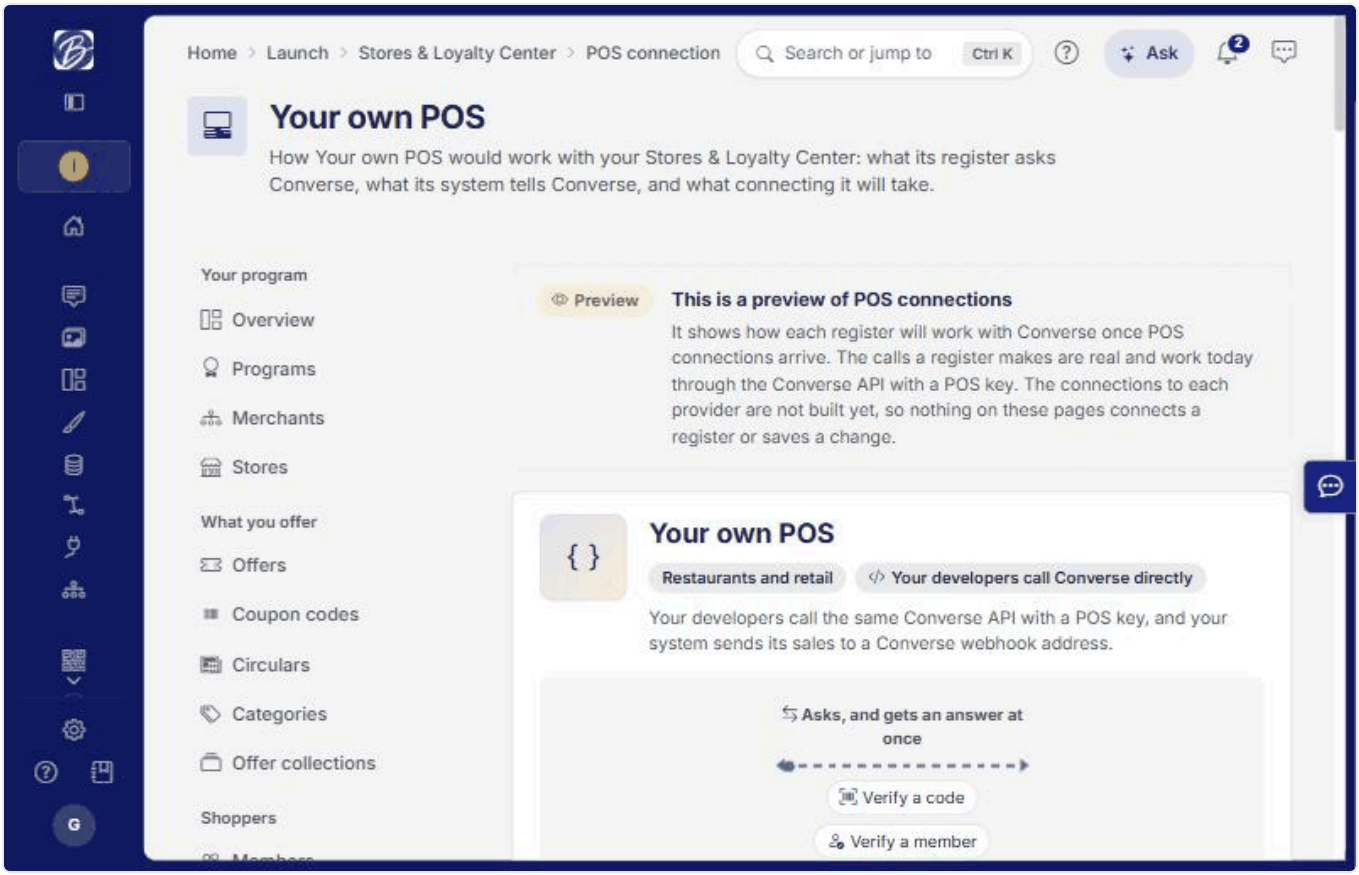
The event names are **illustrative**, in plain words: each provider names and shapes its own events, and the connection maps them.

When your system says	Converse does	Through
Customer identified at the register (a restaurant: guest identified at the table)	Look up the member's wallet	`POST /api/v1/loyalty/redemptions/lookup`
Discount applied	Mark the coupon used	`POST /api/v1/loyalty/redemptions/mark-used`
Order completed (a restaurant: check closed)	Award points for the purchase	`POST /api/v1/loyalty/points/append` (reason `purchase`, priced from `basketTotalMinor` + `currency`)
Refund issued	Give the points back	`POST /api/v1/loyalty/points/append` (reason `reversal`, with the signed points to take back)
Order voided (a restaurant: check voided)	Undo the redemption	`POST /api/v1/loyalty/redemptions/void`
Customer checked in at the store	Record a visit	`POST /api/v1/loyalty/checkins/record`
Deal voucher sold	Claim a deal	Coming with deals

Until the connections ship, your system can make these same calls itself: the register's calls with its POS key, and the after-sale calls (points and visits) with a sync key - an API key that holds **Loyalty manager** and nothing else.

What a registration will record

When POS connections arrive, registering a provider in the Portal will record:



- **The stores it covers** - every store, or the ones its registers sit in.
- **Its POS key** - Store redeemer, and no other role.
- **Its webhook address** - the inbound address above, with its own key and signing secret.
- **How its idempotency keys are written** - the provider, the store and the register first.

Today **Register** on the provider page opens a message that says this is a preview; nothing is connected and nothing is saved.

Live and coming at a glance

	Status
Verify a code, verify a member, check points, verify a coupon	Live today
Redeem, record a discount already given, undo a redemption	Live today
Points and visits from your own system (`points/append` , `checkins/record`)	Live today
Hear each redemption and void as it lands (`loyalty.redeemed` , `loyalty.voided` , at a callback the brand registers)	Live today - the picture

	Status
Claim a deal	Coming - with deals
Provider connections (apps, partner integrations) and the registration	Coming - the Portal shows a preview
The event mapping from a provider's webhook to Converse's action	Coming - the Portal shows a preview