

Calendar

Calendar

Calendar and calendar event retrieval via `/calendar/v1`. Includes key management for encrypted calendar data.

Operations

Calendars

```
// List all calendars
calendars, err := c.GetCalendars(ctx)

// Get a single calendar
cal, err := c.GetCalendar(ctx, calendarID)

// Get encryption keys for a calendar
keys, err := c.GetCalendarKeys(ctx, calendarID)

// Get shared calendar members
members, err := c.GetCalendarMembers(ctx, calendarID)

// Get passphrase for calendar key decryption
passphrase, err := c.GetCalendarPassphrase(ctx, calendarID)
```

Calendar Events

```
// Count events
count, err := c.CountCalendarEvents(ctx, calendarID)

// Paginated listing with optional filters
events, err := c.GetCalendarEvents(ctx, calendarID, page, pageSize, filter)
```

```
// Auto-paginating - get all events
allEvents, err := c.GetAllCalendarEvents(ctx, calendarID, filter)

// Single event by ID
event, err := c.GetCalendarEvent(ctx, calendarID, eventID)
```

Decryption

Calendar events use **two-layer encryption**:

1. Calendar keys (passphrase-locked)
2. Shared events add a second layer of sharing key packets

```
// Unlock calendar keys with passphrase
keyRing, err := keys.Unlock(passphrase)

// Decrypt individual event parts
decoded, err := eventPart.Decode(calKR, addrKR, keyPacket)

// Handles both two-layer decryption and PGP signature verification
```

Key Types

| Type | Description |
|---------------------------------|-----------------------------------------------------------------------------------------------|
| <code>Calendar</code> | ID, name, description, color, display flag, type (normal/subscribed), flags |
| <code>CalendarKey</code> | Encrypted private key with <code>Unlock(passphrase)</code> returning <code>*crypto.Key</code> |
| <code>CalendarKeys</code> | Slice of keys with <code>Unlock(passphrase)</code> returning <code>*crypto.KeyRing</code> |
| <code>CalendarMember</code> | ID, permissions, email, color, display, calendarID |
| <code>CalendarPassphrase</code> | Encrypted passphrase with <code>Decrypt(memberID, addrKR)</code> for decryption |
| <code>CalendarEvent</code> | UID, start/end times, timezone, full-day flag, author, attendees, encrypted parts |
| <code>CalendarEventPart</code> | Individual part with type (clear/encrypted/signed), data, signature, author |

| Type | Description |
|-------------|-------------------------------------|
| EventAction | Delete, Create, Update, UpdateFlags |

PGP Signature Verification

Encrypted calendar parts can also be signed. The `Decode` method verifies signatures using the address keyring.

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