

PHASE 7 – Integration & External Access

Enabling HandsMenThreads to Connect With External Systems Securely

1. Introduction

Phase 7 explores how Salesforce integrates with external systems to expand HandsMenThreads' capabilities beyond the CRM. While Salesforce on its own provides powerful internal features, real-world retail environments often rely on multiple connected systems—payment gateways, delivery partners, messaging platforms, inventory management tools, and analytics engines. Proper integration enables HandsMenThreads to operate as a unified digital business rather than a collection of disconnected tools.

This phase covers Remote Site Settings, Apex callouts, external API prototypes, future integration roadmaps, security considerations, and benefits of establishing a foundation for seamless system communication.

2. Importance of Integration for HandsMenThreads

Modern retail businesses depend heavily on connected systems. HandsMenThreads plans to scale via omnichannel sales, automated messaging, and faster logistics. Integration enables the following:

a. Real-Time Notifications

Customers expect instant updates regarding:

- Order confirmations
- Shipping updates
- Delivery status
- Loyalty rewards

These require integration with WhatsApp, SMS gateways, or email services.

b. Payment Gateway Integration

For online orders, Salesforce must communicate with:

- Razorpay
- Paytm
- Stripe
- UPI services

This ensures seamless payment processing.

c. Delivery Partner Integration

Shipment tracking via:

- Delhivery
- BlueDart
- Shiprocket
- Ecom Express

Integrations allow storing tracking IDs and auto-updating delivery statuses.

d. Centralized Inventory Synchronization

If the business expands to:

- Shopify
- Amazon Seller Central
- Myntra Seller Portal
- POS retail systems

Salesforce must sync inventory with external retail channels.

Building this integration foundation prepares the CRM to scale into a multi-platform retail ecosystem.

3. Remote Site Settings Configuration

Before Salesforce can make any external HTTP callouts, the domain must be added to Remote Site Settings. This ensures Salesforce can securely send outbound requests.

Setup Steps

1. Navigate to *Setup* → *Remote Site Settings* → *New*.
2. Add the external URL (e.g., <https://handsmenthreads-api-prototype.com>).
3. Provide a label and save.

This configuration prevents unauthorized callouts and enhances API communication security.

4. Apex HTTP Callout Prototype

To demonstrate the integration capability, a sample Apex class was created to fetch product details from a mock external API. Although the example uses dummy data, the pattern is reusable for real integrations.

Use Case Demonstrated

Fetch latest product pricing from a third-party ERP or supplier system.

Apex Process

1. Define an HTTP request.
2. Add required headers.
3. Send GET request.
4. Parse JSON response.
5. Store values in Product__c fields.

Sample Response Format

```
{  
  "productName": "Men's Classic Shirt",  
  "sku": "HMT12345",  
  "latestPrice": 1499,  
  "supplierStock": 250  
}
```

The Apex class extracts this data and updates the corresponding Salesforce product.

5. Integration Use Cases for Future Roadmap

a. WhatsApp Messaging Integration

Using APIs from:

- Twilio
- Gupshup
- Interakt

Automated workflows could:

- Send order receipts
- Notify low loyalty points
- Announce new arrivals

b. Email Marketing Integration

Services like Mailchimp or SendGrid allow:

- Bulk marketing campaigns
- Automated segmentation
- Engagement analytics

Salesforce can pass customer segments to these platforms in real-time.

c. Payment Gateway Integration

When expanding to e-commerce:

- Orders created in Salesforce can trigger payment links.
- Payment status updates the Order Status field automatically.

This removes manual follow-ups and speeds up conversion.

d. Logistics Integration

Connecting to shipping APIs allows:

- Fetching tracking IDs
- Auto-updating delivery stages
- Displaying shipment timelines on Order record pages

This dramatically improves customer satisfaction.

e. Supplier Integration

When ordering new stock:

- Salesforce could communicate with suppliers
- Send auto-generated purchase orders
- Track supplier commitments

This type of seamless procurement is crucial for consistent product availability.

6. Security Considerations in Integration

Salesforce enforces strict security standards:

a. Named Credentials

Provides authenticated API calls without exposing passwords in code.

b. OAuth 2.0 Support

Allows secure token-based communication with external systems.

c. Encrypted Fields

Sensitive data, such as API keys, remain protected.

d. Callout Limits

Bulkified callouts were planned to reduce governor limit issues.

Security was prioritized to ensure HandsMenThreads' data remains protected across integrated systems.

7. Testing External Integrations

Because callouts cannot be made in tests without mocking:

- The `HttpCalloutMock` interface was used.
- Mock responses were created to simulate API behavior.
- Test coverage ensures reliability before production deployment.

8. Conclusion

Phase 7 establishes the technological backbone for HandsMenThreads' multi-system connectivity. Whether automating customer messages, syncing stock, integrating with logistics partners, or enabling online payments, Salesforce is now prepared for a connected retail future. This foundation ensures the brand can scale into new markets, channels, and digital opportunities without rebuilding backend workflows.