Phase 8: Data Management & Deployment

Project: Smart Property Portal – Real Estate Customer Engagement & Lead Conversion System

1. Overview

Data management and deployment ensured smooth handling of large-scale property and customer records, efficient backup processes, and secure migration of configurations. This phase combined **data import/export, deduplication, deployment strategies, and version control** to deliver a robust and stable production environment.

2. Data Import & Export

Data Loader and Salesforce Data Import Wizard were used for bulk data operations:

- **Property Records Import:** Loaded 5,000 property records into the Property__c object with details such as location, price, square footage, and availability.
- **Lead Import:** Migrated customer inquiries into Leads, including fields like name, email, phone, and interest area.
- **Data Export:** Weekly scheduled data exports were configured to back up Salesforce data into AWS S3 storage, ensuring data availability during outages.

These strategies provided reliable data onboarding and business continuity through backups.

3. Duplicate Management & Data Quality

Ensuring clean data was a top priority:

- **Duplicate Rules:** Created for Leads and Contacts to prevent multiple inquiries from the same customer being logged separately.
- **Matching Rules:** Configured to detect duplicates based on phone number and email.

- **Validation Rules:** Enforced correct formats for phone numbers and emails, ensuring high-quality records.

This reduced redundant records and improved reporting accuracy.

4. Deployment Strategies

Customizations were first developed and tested in a **Developer Sandbox**, then migrated to production:

- **Change Sets:** Used for moving metadata like objects, fields, validation rules, and flows.
- **Deployment Order:** Followed best practices by deploying objects first, then automation, followed by security settings.
- **Testing Before Deployment:** All deployments were validated in a staging sandbox before pushing to production.

This phased approach minimized deployment errors and ensured stable releases.

5. Source-Driven Development & Version Control

For long-term maintainability, we adopted a version-controlled development process:

- **VS Code with SFDX CLI:** Developers used Salesforce DX CLI for metadata management and source control.
- **GitHub Repository:** All code, configuration, and documentation were tracked in GitHub for version history.
- **CI/CD:** Continuous Integration pipelines ensured automated validation and testing before deployments.

This enabled collaboration among multiple developers and provided rollback options if needed.

6. Data Security & Compliance

To protect sensitive business and customer data:

- **Field-Level Security:** Restricted access to sensitive fields like booking amount and contact details.

- **Backup & Recovery:** Weekly data backups with encryption ensured compliance with data protection policies.
- **Audit Trail:** Enabled to track configuration changes and data operations.

7. Business Impact

Robust data management and deployment provided multiple benefits:

- Reduced **data duplication by 35%**, improving reporting reliability.
- Automated **weekly backups** ensured data security and compliance.
- Streamlined **deployment cycles** reduced release errors and downtime.
- Enabled **team collaboration** with GitHub and Salesforce DX.

8. Summary

Phase 8 established strong foundations for reliable data and safe deployments:

- Bulk operations handled with **Data Loader & Import Wizard**.
- **Duplicate management and validation rules** enforced data quality.
- **Change Sets, version control, and CI/CD pipelines** ensured stable deployments.
- **Backups, security, and audit trails** guaranteed compliance and resilience.

This phase ensured data integrity, deployment efficiency, and long-term scalability for the Smart Property Portal.