# **Phase 9: Musical Instrument Rental Application - Reporting, Dashboards & Security Review**

## **Project Overview**

**Application:** Musical Instrument Rental Management System  
 **Platform:** Salesforce  
 **Phase:** Security Configuration & Reporting Implementation

## **1. Sharing Settings Configuration**

### **1.1 Organization-Wide Defaults (OWD) Setup**

* **Instruments Object:** Private - Only instrument owners and managers can view
* **Rental Agreements Object:** Private - Restricted to rental parties and admins
* **Customers Object:** Private - Customer data protected for privacy compliance
* **Payments Object:** Private - Financial data secured with strict access controls

### **1.2 Role-Based Sharing Rules**

* **Store Managers:** Full access to all instruments and rental data in their location
* **Sales Representatives:** Read/Write access to customer records and rental agreements they own
* **Inventory Staff:** Read access to instrument inventory, Write access for maintenance updates
* **Finance Team:** Read-only access to payment records and rental revenue reports

### **1.3 Manual Sharing Implementation**

* Configured manual sharing for cross-department collaboration
* Set up sharing for seasonal rental managers during peak periods
* Enabled case-by-case sharing for special rental arrangements

## **2. Field Level Security Configuration**

### **2.1 Customer Data Protection**

* **SSN/Tax ID Fields:** Restricted to Finance and Management profiles only
* **Credit Card Information:** Hidden from all users except Payment Processing profile
* **Personal Phone Numbers:** Visible only to assigned sales representatives
* **Emergency Contacts:** Access limited to Store Managers and above

### **2.2 Financial Data Security**

* **Rental Rates:** Read-only for Sales Reps, editable by Managers only
* **Discount Percentages:** Restricted to Manager and Executive profiles
* **Payment Processing Details:** Finance team exclusive access
* **Late Fee Calculations:** Automated fields with restricted manual override

### **2.3 Instrument Inventory Security**

* **Purchase Costs:** Visible only to Inventory Managers and Executives
* **Vendor Information:** Restricted to Procurement and Management teams
* **Maintenance Costs:** Access limited to Inventory and Finance teams
* **Depreciation Values:** Executive and Finance profile access only

## **3. Login IP Ranges Implementation**

### **3.1 Office Location Restrictions**

* **Headquarters IP Range:** 192.168.1.0/24 - Full system access
* **Store Location IPs:** Individual ranges per store (192.168.10.0/24, 192.168.20.0/24, etc.)
* **Warehouse Facilities:** Restricted range 192.168.100.0/24 for inventory staff

### **3.2 Remote Access Configuration**

* **Management VPN Range:** 10.0.0.0/16 - Secure remote access for executives
* **Sales Team Mobile:** Dynamic IP allowlist with time-based restrictions
* **Customer Portal Access:** Public access with enhanced authentication requirements

### **3.3 Security Monitoring**

* **Failed Login Tracking:** Automated alerts for suspicious IP access attempts
* **Geographic Restrictions:** Blocked access from high-risk countries
* **Session Timeout:** 2-hour timeout for financial data access, 8-hour for general users

## **4. Reporting & Dashboard Implementation**

### **4.1 Rental Performance Reports**

* **Monthly Rental Revenue:** By instrument category, location, and sales rep
* **Instrument Utilization Rates:** Tracking which instruments rent most frequently
* **Customer Retention Analysis:** Repeat rental patterns and customer lifecycle
* **Seasonal Demand Trends:** Peak rental periods for different instrument types

### **4.2 Inventory Management Dashboards**

* **Real-time Instrument Availability:** Current rental status and return schedules
* **Maintenance Schedule Tracking:** Upcoming service requirements and costs
* **Procurement Recommendations:** Low inventory alerts and reorder suggestions
* **Asset Depreciation Reports:** Financial tracking of instrument value over time

### **4.3 Customer Service Analytics**

* **Rental Agreement Compliance:** On-time returns and contract violations
* **Customer Satisfaction Metrics:** Survey responses and service quality scores
* **Payment Processing Reports:** Outstanding balances and collection activities
* **Geographic Performance:** Rental patterns by customer location and demographics

## **5. Security Review Outcomes**

### **5.1 Access Control Validation**

* ✅ Principle of least privilege implemented across all user profiles
* ✅ Sensitive financial data properly restricted
* ✅ Customer privacy requirements met
* ✅ Multi-factor authentication enabled for admin accounts

### **5.2 Data Protection Compliance**

* ✅ PCI DSS compliance for payment processing
* ✅ Customer data retention policies configured
* ✅ Automated data backup and recovery procedures
* ✅ Audit trail enabled for all sensitive data access

### **5.3 Network Security Measures**

* ✅ IP allowlists properly configured for all office locations
* ✅ VPN access secured for remote users
* ✅ Geographic restrictions implemented
* ✅ Session management and timeout policies active

## **Key Deliverables Completed**

1. **Security Configuration**
   1. Organization-wide defaults configured for data privacy
   2. Field-level security implemented for sensitive information
   3. IP range restrictions deployed across all user profiles
2. **Reporting Framework**
   1. Comprehensive dashboard suite for business insights
   2. Automated reporting for rental performance and inventory
   3. Customer analytics and service quality metrics
3. **Compliance Documentation**
   1. Security policy documentation completed
   2. User access matrix and role definitions
   3. Data handling procedures and audit requirements