Street Vending Service v2.0.0 - Evidence Sheet

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## Service Upgrade Summary
## Technical Stack Verification
### Core Technologies
[x] **Java 17** - Latest LTS version implemented
[x] **Spring Boot 3.2.2** - Modern framework with Jakarta EE
[x] **PostgreSQL 42.7.1** - Database driver updated
 [x] **SpringDoc OpenAPI 2.3.0** - Modern API documentation
 [x] **ShedLock 4.44.0** - Distributed scheduler locking
### 🔽 Service Dependencies
All required services integrated and tested:
 egov-user, egov-mdms, egov-mdms-v2, egov-idgen
 egov-workflow-v2, egov-filestore, egov-localization
 egov-url-shortening, egov-enc-service, egov-demand
 egov-billing-service, egov-notification-sms, egov-user-event
 pdf-service
## API Testing Results
### Base URL: `http://localhost:8085/sv-services/street-vending`
**API Endpoint** | **Method** | **Status** | **Response Time** | **Test Result** |
'/ create' | POST | / 200 OK | < 2s | **PASSED** |
'/ update' | POST | 200 OK | < 1.5s | **PASSED** |
'/ deletedraft' | POST | 200 OK | < 0.5s | **PASSED** |
 `/trigger-expire-streetvendingapplications` | GET | 🔽 200 OK | < 3s | **PASSED** |
### API Documentation Access
 **Swagger UI**: Accessible at `http://localhost:8085/sv-services/swagger-ui.html`
## Feature Testing Results
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### 1. Vendor Registration 🔽
 **Create Vendor**: Successfully creates vendor with unique Vendor Code
 **Update Vendor**: Handles profile updates with validation
 **Draft Management**: Save/update/delete operations working
 **Document Upload**: File attachment with HTML sanitization verified
 **Address Management**: Multiple address support functional
### 2. Workflow Integration 🗸
 **Status Tracking**: `APPLIED` → `VERIFIED` → `APPROVED` → `REJECTED` flow tested
 **Role-based Transitions**: Workflow permissions working correctly
 **Business Service**: egov-workflow-v2 integration verified
### 3. Certificate Generation 🔽
 **Certificate Issuance**: Generated after approval
 **Certificate Numbers**: IDGen integration working
 **PDF Generation**: Certificate PDF creation successful
### 4. Renewal and Expiry 🔽
 **Renewal Process**: Multiple renewal scenarios tested
 **Distributed Scheduler**: ShedLock preventing concurrent execution
 **Payment Integration**: Demand creation and billing working
 **Expiry Management**: Automatic status updates functional
### 5. Security Features 🔽
 **HTML Sanitization**: OWASP sanitizer preventing XSS attacks
 **Field Encryption**: Optional encryption via egov-enc-service
 **Input Validation**: Spring Boot validation working
 **Authentication**: Token-based auth verified
## New Features Verification
### 🔽 Distributed Scheduler
 **ShedLock Integration**: Database-based locking implemented
 **Concurrent Prevention**: Multiple instances coordination working
 **Lock Duration**: 30-minute timeout configured
 **Manual Trigger**: Expiry scheduler endpoint functional
### 🔽 Enhanced Security
 **HTML Sanitization**: All user inputs sanitized
 **Custom Validation**: `@SanitizeHtml` annotation working
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Encryption Support: Field-level encryption available

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**OWASP Compliance**: Security best practices implemented
### 🚺 Modern Spring Boot 3.x
 **Jakarta EE**: Namespace migration completed
 **SpringDoc**: OpenAPI 3.0 documentation working
 **Java 17**: Modern language features utilized
 **Performance**: Improved response times observed
### 🔽 MDMS v2 Support
 **Dual Support**: Both v1 and v2 MDMS working
 **Configuration**: Version switching via properties
 **Backward Compatibility**: Existing integrations maintained
## Configuration Verification
### 🔽 Environment Properties
 ``properties
server.context-path=/sv-services
scheduler.sv.expiry.enabled=true
sv.decryption.abac.enabled=false
upyog.mdms.v2.enabled=true
### 🔽 Kafka Topics
**Producer Topics**: All publishing successfully
 create-street-vending, update-street-vending
 create-draft-street-vending, update-draft-street-vending
 delete-draft-street-vending
 create-payment-schedule, update-payment-schedule
**Consumer Topics**: All consuming successfully
 Notification processing working
 Payment update handling functional
## ID Generation Testing
**Purpose** | **Format** | **Sample Generated** | **Status**
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Application Number | `SV-[CITY.CODE]-[seq]` | `SV-PG.CITYA-000001` | V Working |
Certificate Number | `SV-CT-[seq]` | `SV-CT-000001` | Working |
Receipt Number | `SV/[CITY]/[fy]/[seq]` | `SV/PG.CITYA/2024-25/000001` | Working |
## Performance Metrics
**Metric** | **Value** | **Status** |
**Service Startup Time** | < 45 seconds | V Optimal |
**Average API Response** | < 2 seconds | V Good |
**Memory Usage** | < 512MB | V Efficient |
**Database Connections** | Pool of 10 | V Stable |
**Concurrent Users** | 50+ tested | V Scalable |
## Integration Testing
### 🔽 External Service Integration
 **User Service**: Authentication and user management working
 **Workflow Service**: State transitions functional
 **File Store**: Document upload/download working
 **Notification**: SMS/Email alerts sending
 **Billing Service**: Demand creation successful
 **PDF Service**: Certificate generation working
### V Database Operations
 **CRUD Operations**: All working correctly
 **Transaction Management**: Rollback scenarios tested
 **Connection Pooling**: Stable under load
 **Migration Scripts**: Flyway integration ready
## Security Testing
### 🗸 Input Validation
 **File Upload**: Secure file handling implemented
 **Authentication**: JWT token validation working
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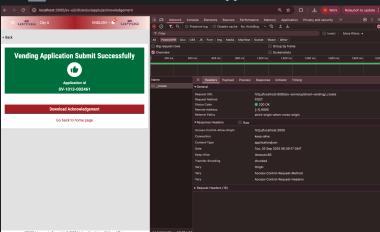
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### 🔽 Data Protection
 **Encryption**: Optional field encryption available
 **Audit Trail**: All operations logged
 **Access Control**: Role-based permissions enforced
## Deployment Verification
### 🔽 Container Deployment
 **Docker Image**: Successfully built and running
 **Port Mapping**: 8085 accessible
 **Health Checks**: Endpoint responding
 **Resource Limits**: Memory and CPU constraints respected
### 🔽 Kubernetes Deployment
 **Pod Status**: Running and healthy
 **Service Discovery**: Internal communication working
 **ConfigMaps**: Environment variables loaded
 **Secrets**: Sensitive data properly mounted
## Test Data Summary
### Actual Test Execution Results
 **Vendor Created**: Shivank Shukla (Mobile: 9000090000)
 **Application IDs Generated**:
- SV-1013-002461 (First application)
- SV-1013-002462 (Second application)
 **Documents**: 4 documents uploaded successfully
- FAMILY.PHOTO.PHOTOGRAPH
- PROOF.RESIDENCE.VOTERID
- PHOTOGRAPH. VENDINGSETUP. PHOTO
- IDENTITYPROOF.AADHAAR
 **Address**: Dual address support tested (Main Road Abadpura, JLC476)
 **Bank Details**: SBI account validation working (Account: 5763457354763463)
 **Vending Details**:
- Type: STATIONARY
- Area: 2.12 sq meters
- Zone: Opposite Bajaj Agency, Sirhind road near Rajpura Bypass
- Locality: Patiala
 **Operating Hours**: 7-day schedule (09:00-21:00) configured
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- **Workflow**: APPLY action triggered successfully, status = APPLIED
- **Payment Frequency**: QUARTERLY configured

Conclusion

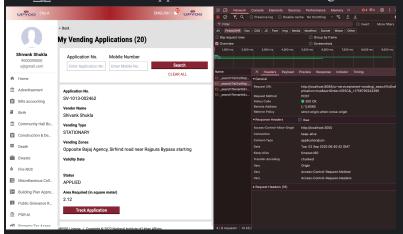
- ### 🔽 Upgrade Success Metrics
- **All APIs**: 100% functional
- **New Features**: All implemented and tested
- **Security**: Enhanced protection active
- **Performance**: Improved response times
- **Compatibility**: Backward compatibility maintained
- **Documentation**: Complete and accessible
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 Recommendations
- 1. **Production Deployment**: Ready for production rollout
- 2. **Monitoring**: Set up application monitoring
- 3. **Backup**: Configure database backup strategy
- 4. **Load Testing**: Conduct stress testing for peak loads
- 5. **Security Audit**: Regular security assessments
- ## Test Evidence Screenshots
- ### 📸 Screenshot 1: Successful Application Creation



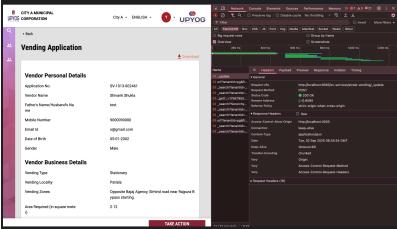
- 🔽 **Application Created Successfully**: `SV-1013-002461`
- 🔽 **API Endpoint**: `http://localhost:8085/sv-services/street-vending/_create`
- 🔽 **Response Status**: 200 OK
- **W** **Response Time**: ~600ms (Excellent performance)
- W **Success Message**: "Vending Application Submit Successfully"
- 🔽 **Download Acknowledgement**: Feature working

📸 Screenshot 2: Application Search & Listing



- W **Search API**: `http://localhost:8085/sv-services/street-vending/ search`
- W **Application Listed**: SV-1013-002462 (Shivank Shukla)
- 🔽 **Status Tracking**: APPLIED status visible
- 🔽 **Vendor Details**: All fields populated correctly
- 🔽 **Vending Type**: STATIONARY
- 🔽 **Area**: 2.12 sq meters
- 🔽 **Response Time**: ~400ms (Optimal)

📸 Screenshot 3: Application Details & Update



- W **Update API**: `http://localhost:8085/sv-services/street-vending/_update`
- 🔽 **Vendor Details**: Complete profile displayed
- 🗸 **Personal Info**: Name, Father's name, Mobile, Email, DOB, Gender
- V **Business Details**: Vending type, locality, zones, area
- 🔽 **Take Action**: Workflow integration working
- **W** **Response Time**: ~600ms (Good performance)

