# Data Catalogue: Licensing Self-Certification Portal (LSCP) - Buildings Department

**Version:** 1.1 **Date:** January 21, 2025

? The Government of the Hong Kong Special Administrative Region

## 1. Introduction

This document provides a data catalogue for the Licensing Self-Certification Portal (LSCP) used by the Buildings Department. It outlines the data architecture, database specifications, and key data elements within the system.

## 2. Definitions

| Abbreviation | Definition | N/A | :----------- | :--------------------------------------------- | N/A |---|---| N/A | LSCP | Licensing Self-Certification Portal | N/A |---|---| N/A | RSE | Registered Structural Engineer | N/A |---|---| N/A | OTP | One-Time Password | N/A |---|---| N/A | LSO | Licensing Subject Officer | N/A |---|---| N/A | MongoDB | NoSQL document-oriented database | N/A |---|---| N/A | MSSQL | Microsoft SQL Server | N/A |---|---|

## 3. Data Architecture Overview

The LSCP system employs a dual-database architecture: MongoDB and Microsoft SQL Server.

### MongoDB Database

* **Purpose:** Handles frontend operational data and user sessions.
* **Key Database:** bd
* **Database Size:** 88.10 MB
* **Total Documents:** 1,278,983

### Microsoft SQL Server Database

* **Purpose:** Serves as the transactional database, storing structured data related to applications, submissions, and system reference data.
* **Key Database:** bd\_scs
* **Data Synchronization:** Occurs through application services between MongoDB and MSSQL.

## 4. Database Specifications

### 4.1 MongoDB Collections (Database: bd)

#### Database Statistics

* Database Size: 88.10 MB
* Collections: 12
* Total Documents: 1278983
* Total Data Size: 371.24 MB

#### Collections Overview

* tasks: 5523 documents, 0.99 MB
* eminutes: 133 documents, 0.03 MB
* submissions: 0 documents, 0.00 MB
* applications: 381 documents, 0.36 MB
* notifications: 1837 documents, 0.24 MB
* bsblocks: 98397 documents, 6.40 MB
* cases: 451 documents, 1.17 MB
* sysfilerefs: 601808 documents, 204.70 MB
* attachments: 370 documents, 0.13 MB
* adrblkfilerefs: 566948 documents, 154.89 MB
* users: 116 documents, 0.39 KB
* oauthtokens: 3019 documents, 2.29 MB

#### 4.1.1 tasks

* **Document Count:** 5523
* **Size:** 0.99 MB

| Field Name | Data Type | Description | N/A | :------------- | :-------- | :-------------------------------- | N/A |---|---|---| N/A | \_id | objectId | Unique identifier | N/A |---|---|---| N/A | createdAt | date | Creation timestamp | N/A |---|---|---| N/A | submissionCase | objectId | Reference to submission case | N/A |---|---|---| N/A | team | string | Team assigned to the task | N/A |---|---|---|

#### 4.1.2 eminutes

* **Document Count:** 133
* **Average Document Size:** 0.24 KB

| Field Name | Data Type | Description | N/A | :------------- | :------------ | :-------------------------------- | N/A |---|---|---| N/A | comment | string | Comment text | N/A |---|---|---| N/A | createdAt | date | Creation timestamp | N/A |---|---|---| N/A | eminuteId | string | Minute identifier | N/A |---|---|---| N/A | status | string | Status of the minute | N/A |---|---|---| N/A | submissionCase | objectId | Reference to submission case | N/A |---|---|---| N/A | to | objectId/string | Recipient reference | N/A |---|---|---|

#### 4.1.4 applications

* **Document Count:** 381
* **Size:** 0.36 MB

| Field Name | Data Type | Description | N/A | :------------------ | :------------ | :---------------------------------------- | N/A |---|---|---| N/A | \_id | objectId | Unique identifier | N/A |---|---|---| N/A | AddressOfPremiseCN| string | Premises address (Chinese) | N/A |---|---|---| N/A | ApplicationNo | string | Application number | N/A |---|---|---| N/A | NameOfSchoolCN | string | School name (Chinese) | N/A |---|---|---| N/A | assignedBS | objectId/string | Assigned Building Surveyor | N/A |---|---|---| N/A | assignedSBS | string | Assigned Senior Building Surveyor | N/A |---|---|---| N/A | updatedAt | date | Last update timestamp | N/A |---|---|---|

#### 4.1.6 bsblocks

* **Document Count:** 98397
* **Size:** 6.40 MB

| Field Name | Data Type | Description | N/A | :------------- | :-------- | :-------------------------------- | N/A |---|---|---| N/A | \_id | string | Unique identifier | N/A |---|---|---| N/A | blockId | string | Block Identifier | N/A |---|---|---|

#### 4.1.8 oauthtokens

* **Document Count:** 3019
* **Size:** 2.29 MB

| Field Name | Data Type | Description | N/A | :------------- | :-------- | :-------------------------------- | N/A |---|---|---| N/A | \_id | objectId | Unique identifier | N/A |---|---|---| N/A | accessToken | string | Access Token | N/A |---|---|---| N/A | refreshToken | string | Refresh Token | N/A |---|---|---|

#### 4.1.10 attachments

* **Document Count:** 370
* **Size:** 0.13 MB

| Field Name | Data Type | Description | N/A | :------------- | :-------- | :-------------------------------- | N/A |---|---|---| N/A | \_id | objectId | Unique identifier | N/A |---|---|---| N/A | application | objectId | Application Reference | N/A |---|---|---| N/A | file | string | File Name | N/A |---|---|---|

#### 4.1.12 adrblkfilerefs

* **Document Count:** 566948
* **Size:** 154.89 MB

| Field Name | Data Type | Description | N/A | :------------- | :-------- | :-------------------------------- | N/A |---|---|---| N/A | \_id | objectId | Unique identifier | N/A |---|---|---| N/A | adrBlkFileRefId | string | Address Block File Reference ID | N/A |---|---|---| N/A | createdDt | date | Created Date | N/A |---|---|---|

#### 4.1.14 sysfilerefs

* **Document Count:** 601808
* **Size:** 204.70 MB

| Field Name | Data Type | Description | N/A | :------------- | :-------- | :-------------------------------- | N/A |---|---|---| N/A | \_id | objectId | Unique identifier | N/A |---|---|---| N/A | display | string | Display Name | N/A |---|---|---| N/A | createdName | string | Created By | N/A |---|---|---|

#### 4.1.16 notifications

* **Document Count:** 1837
* **Size:** 0.24 MB

| Field Name | Data Type | Description | N/A | :------------- | :-------- | :-------------------------------- | N/A |---|---|---| N/A | \_id | objectId | Unique identifier | N/A |---|---|---| N/A | createdAt | date | Created Date | N/A |---|---|---| N/A | notificationType | string | Notification Type | N/A |---|---|---|

#### 4.1.18 cases

* **Document Count:** 451
* **Size:** 1.17 MB

| Field Name | Data Type | Description | N/A | :------------- | :-------- | :-------------------------------- | N/A |---|---|---| N/A | \_id | objectId | Unique identifier | N/A |---|---|---| N/A | application | objectId | Application Reference | N/A |---|---|---| N/A | Category | string | Case Category | N/A |---|---|---|

#### 4.1.20 users

* **Document Count:** 116
* **Size:** 0.39 KB

| Field Name | Data Type | Description | N/A | :------------- | :-------- | :-------------------------------- | N/A |---|---|---| N/A | \_id | objectId | Unique identifier | N/A |---|---|---| N/A | email | string | User Email | N/A |---|---|---| N/A | role | string | User Role | N/A |---|---|---|

### 4.2 MSSQL Tables (Database: bd\_scs, Schema: dbo)

#### 4.2.1 \_\_EFMigrationsHistory

| Column Name | Data Type | Length | Nullable | PK | Description | N/A | :---------- | :-------- | :----- | :------- | :-: | :------------------- | N/A |---|---|---|---|---|---| N/A | MigrationId | nvarchar | 300 | No | Yes | Migration identifier | N/A |---|---|---|---|---|---|

#### 4.2.2 AdrBlk

**Description:** Stores building address information.

| Column Name | Data Type | Length | Nullable | PK | Description | N/A | :-------------- | :-------- | :----- | :------- | :-: | :------------------------------ | N/A |---|---|---|---|---|---| N/A | BLK\_TYPE\_ID | bigint | 8 | Yes | No | Block type ID | N/A |---|---|---|---|---|---| N/A | BLDG\_USAGE\_ID | bigint | 8 | Yes | No | Building usage ID | N/A |---|---|---|---|---|---| N/A | SYS\_DISTRICT\_ID| bigint | 8 | Yes | No | System district ID | N/A |---|---|---|---|---|---| N/A | BLK\_DESC\_E\_ID | bigint | 8 | Yes | No | Block description English ID | N/A |---|---|---|---|---|---| N/A | BLK\_NO\_ALPHA | nvarchar | 20 | Yes | No | Block number (alphanumeric) | N/A |---|---|---|---|---|---| N/A | BLDG\_NAME\_E2 | nvarchar | 90 | Yes | No | Building name English 2 | N/A |---|---|---|---|---|---| N/A | BLDG\_NAME\_C1 | nvarchar | 160 | Yes | No | Building name Chinese 1 | N/A |---|---|---|---|---|---| N/A | BLDG\_NAME\_C3 | nvarchar | 160 | Yes | No | Building name Chinese 3 | N/A |---|---|---|---|---|---| N/A | CreatedAt | datetime2 | 8 | Yes | No | Creation timestamp | N/A |---|---|---|---|---|---|

#### 4.2.3 AdrBlk\_Temp

**Description:** Temporary table for building address information.

| Column Name | Data Type | Length | Nullable | PK | Description | N/A | :-------------- | :-------------- | :----- | :------- | :-: | :------------------------------ | N/A |---|---|---|---|---|---| N/A | BLK\_TYPE\_ID | bigint | 8 | Yes | No | Block type ID | N/A |---|---|---|---|---|---| N/A | updatedAt | datetimeoffset | 10 | No | No | Last update timestamp | N/A |---|---|---|---|---|---|

#### 4.2.4 ApplicationCases

| Column Name | Data Type | Length | Nullable | PK | Description | N/A | :---------- | :-------- | :----- | :------- | :-: | :------------------- | N/A |---|---|---|---|---|---| N/A | Id | bigint | 8 | No | Yes | Case ID (identity) | N/A |---|---|---|---|---|---| N/A | CreatedAt | datetime2 | 8 | Yes | No | Creation timestamp | N/A |---|---|---|---|---|---| N/A | UpdatedAt | datetime2 | 8 | Yes | No | Last update timestamp | N/A |---|---|---|---|---|---| N/A | FromId | bigint | 8 | Yes | No | Source ID | N/A |---|---|---|---|---|---|

#### 4.2.6 ApRse

**Description:** Stores application file information.

| Column Name | Data Type | Length | Nullable | PK | Description | N/A | :---------- | :-------- | :----- | :------- | :-: | :------------------- | N/A |---|---|---|---|---|---| N/A | FileName | nvarchar | 200 | Yes | No | File name | N/A |---|---|---|---|---|---| N/A | SignType | nvarchar | 60 | Yes | No | Sign type | N/A |---|---|---|---|---|---| N/A | CreatedAt | datetime2 | 8 | Yes | No | Creation timestamp | N/A |---|---|---|---|---|---| N/A | RemoveStatus| nvarchar | 100 | Yes | No | Remove status | N/A |---|---|---|---|---|---|

#### Other MSSQL Tables

The following tables are also present in the bd\_scs database:

* BackendUpdate
* GenOtp
* LogEvents
* SchoolApp\_Submission
* ScsMasterTable
* Sys\_Meta\_Data