

FMS 新系统核心表结构

目标结构基于 2026-09-04 只读拉取的 `FMS-NEW` 数据库整理。

平台配置使用字符串业务键；未来业务数据表使用 `bigint` 雪花 ID。

1. 用户表

```
create table dbo.b_user (  
    b_id varchar(50) not null primary key, -- 用户账号本身  
    b_name nvarchar(100) null,  
    b_department nvarchar(100) null,  
    b_subcode nvarchar(100) null,  
    b_machineid nvarchar(100) null,  
    b_bz nvarchar(400) null,  
    b_password nvarchar(255) not null,  
    b_canuse tinyint not null default 1,  
    b_othermachinelogin tinyint not null default 0,  
    b_salesman tinyint not null default 0,  
    b_docman tinyint not null default 0,  
    b_dealman tinyint not null default 0,  
    b_receivelevel tinyint null,  
    b_paylevel tinyint null,  
    b_visible_customer tinyint not null default 0,  
    b_visible_supply tinyint not null default 0,  
    b_levelvisible tinyint not null default 0,  
    b_fromcustomer tinyint not null default 0,  
    b_logintime tinyint not null default 0,  
    b_checkxy tinyint not null default 0,  
    b_loginfee tinyint not null default 0,  
    b_phone nvarchar(100) null  
);
```

2. 模块

```
create table dbo.s_module (  
    b_id varchar(50) not null primary key, -- 模块编码本身，创建后不可修改  
    b_parent_id varchar(50) null,  
    b_name nvarchar(200) not null,  
    b_i18n varchar(150) null,  
    b_module_type varchar(20) not null,  
    b_viewtable varchar(128) null,  
    b_savetable varchar(128) null,  
    b_keyfield varchar(50) null,  
    b_orderfield varchar(500) null,  
    b_delete_policy varchar(20) null,  
    b_canuse int not null default 1,  
    b_xh int not null default 0,  
    b_bz nvarchar(2000) null,  
    b_inputuser_id varchar(50) null,  
    b_inputdatetime datetime2 default sysutcdatetime(),
```

```

        b_updateuser_id varchar(50) null,
        b_updatedatetime datetime2 null,
        b_edit_mode varchar(10) null
    );

    create index ix_s_module_parent
        on dbo.s_module (b_parent_id, b_xh, b_canuse, b_id);

    create index ix_s_module_savetable
        on dbo.s_module (b_savetable);

```

3. 字段和字段布局

```

create table dbo.s_field (
    b_module_id varchar(50) not null,
    b_field varchar(50) not null,
    b_name nvarchar(200) not null,
    b_i18n varchar(150) null,
    b_type varchar(30) not null,
    b_dbtype varchar(30) not null,
    b_length int null,
    b_precision int null,
    b_scale int null,
    b_nullable int not null default 1,
    b_default_value nvarchar(1000) null,
    b_db_default nvarchar(1000) null,
    b_writemode varchar(20) not null default 'direct',
    b_options nvarchar(max) null,
    b_canuse int not null default 1,
    b_inputuser_id varchar(50) null,
    b_inputdatetime datetime2 default sysutcdatetime(),
    b_updateuser_id varchar(50) null,
    b_updatedatetime datetime2 null,
    primary key (b_module_id, b_field)
);

create table dbo.s_field_group (
    b_id uniqueidentifier not null primary key, -- 应用层生成的 UUID
    b_module_id varchar(50) not null,
    b_parent_id uniqueidentifier null,
    b_title nvarchar(200) not null,
    b_i18n varchar(150) null,
    b_xh int not null default 0,
    b_canuse int not null default 1,
    b_colspan int not null default 48,
    b_layout_direction varchar(10) null default 'vertical'
);

create index ix_s_field_group_module
    on dbo.s_field_group (b_module_id, b_parent_id, b_xh, b_canuse, b_id);

create table dbo.s_field_view (

```

```

    b_module_id varchar(50) not null,
    b_field varchar(50) not null,
    b_group_id uniqueidentifier null,
    b_visible int not null default 1,
    b_xh int not null default 0,
    b_width int null,
    primary key (b_module_id, b_field)
);

create table dbo.s_field_edit (
    b_module_id varchar(50) not null,
    b_field varchar(50) not null,
    b_group_id uniqueidentifier null,
    b_visible int not null default 1,
    b_required int not null default 0,
    b_readonly int not null default 0,
    b_disabled int not null default 0,
    b_xh int not null default 0,
    b_width int null,
    b_placeholder nvarchar(400) null,
    b_colspan int not null default 12,
    b_height int null,
    primary key (b_module_id, b_field)
);

create table dbo.s_field_query (
    b_module_id varchar(50) not null,
    b_field varchar(50) not null,
    b_component varchar(30) null,
    b_condition_no int not null default 1,
    b_operator varchar(20) not null,
    b_default_value nvarchar(1000) null,
    b_canuse int not null default 1,
    b_xh int not null default 0,
    primary key (b_module_id, b_field, b_condition_no)
);

```

4. 自动编码

```

create table dbo.s_autocode (
    b_module_id varchar(50) not null,
    b_field varchar(50) not null,
    b_prefix nvarchar(200) not null default N'',
    b_dateformat varchar(30) not null default 'yyyyMM',
    b_separator nvarchar(20) not null default N'-',
    b_seqwidth int not null default 5,
    b_resettype varchar(10) not null default 'month',
    b_startvalue bigint not null default 1,
    b_currentperiod varchar(8) null,
    b_currentvalue bigint not null default 0,
    b_canuse int not null default 1,
    primary key (b_module_id, b_field)
);

```

```
);
```

5. 模块关系

```
create table dbo.s_relation (  
    b_module_id varchar(50) not null,  
    b_target_module_id varchar(50) not null,  
    b_relation_type varchar(20) not null,  
    b_field varchar(50) not null,  
    b_target_field varchar(50) not null,  
    b_foreign_side varchar(10) null,  
    b_junction_module_id varchar(50) null,  
    b_junction_field varchar(50) null,  
    b_junction_target_field varchar(50) null,  
    b_ownership varchar(20) not null default 'reference',  
    b_owner_side varchar(10) null,  
    b_delete_policy varchar(20) null,  
    b_order_module_id varchar(50) null,  
    b_order_field varchar(50) null,  
    b_canuse int not null default 1,  
    b_xh int not null default 0,  
    primary key (b_module_id, b_field, b_target_module_id, b_target_field)  
);  
  
create index ix_s_relation_module  
    on dbo.s_relation (b_module_id, b_canuse, b_xh, b_field, b_target_module_id);  
  
create index ix_s_relation_target  
    on dbo.s_relation (b_target_module_id);
```

6. 菜单

```
create table dbo.s_menu (  
    b_id varchar(50) not null primary key, -- 菜单编码本身  
    b_parent_id varchar(50) null,  
    b_name nvarchar(200) not null,  
    b_i18n varchar(150) null,  
    b_menu_type varchar(20) not null,  
    b_route varchar(200) null,  
    b_module_id varchar(50) null,  
    b_icon varchar(50) null,  
    b_xh int not null default 0,  
    b_canuse int not null default 1  
);  
  
create index ix_s_menu_parent  
    on dbo.s_menu (b_parent_id, b_xh, b_canuse, b_id);  
  
create index ix_s_menu_module  
    on dbo.s_menu (b_module_id);
```

7. 权限

```
create table dbo.s_power (  
    b_id varchar(50) not null primary key, -- 权限编码本身  
    b_name nvarchar(200) not null,  
    b_i18n varchar(150) null,  
    b_power_type varchar(20) not null,  
    b_resource varchar(128) null,  
    b_module_id varchar(50) null,  
    b_field varchar(50) null,  
    b_operation varchar(30) not null,  
    b_canuse int not null default 1,  
    b_xh int not null default 0  
);  
  
create index ix_s_power_module  
    on dbo.s_power (b_module_id, b_field, b_canuse);  
  
create index ix_s_power_resource  
    on dbo.s_power (b_power_type, b_resource, b_canuse);
```

8. 多语言

```
-- b_i18n / b_key 保存完整资源键，不追加 .name 或 .title 后缀：  
-- s_module.b_i18n      = module.<module_id>  
-- s_field.b_i18n       = field.<module_id>.<b_field>  
-- s_field_group.b_i18n = field_group.<module_id>.<b_id>  
-- s_menu.b_i18n        = menu.<b_id>  
  
create table dbo.s_i18n_type (  
    b_id varchar(20) not null primary key, -- 语言编码本身  
    b_name nvarchar(200) not null,  
    b_canuse int not null default 1,  
    b_default int not null default 0,  
    b_xh int not null default 0  
);  
  
create table dbo.s_i18n (  
    b_id varchar(200) not null primary key, -- b_key + ':' + b_locale  
    b_key varchar(150) not null,  
    b_locale varchar(20) not null,  
    b_value nvarchar(1000) not null,  
    b_i18ntype varchar(20) null,  
    b_canuse int not null default 1,  
    b_module_id varchar(50) null,  
    unique (b_key, b_locale)  
);  
  
create index ix_s_i18n_module_id  
    on dbo.s_i18n (b_module_id);
```

```
create index ix_s_i18n_locale
on dbo.s_i18n (b_locale, b_canuse);
```

9. 日志

```
create table dbo.s_log_technical (
    b_id uniqueidentifier not null primary key, -- 应用层生成的 UUID
    b_user_id varchar(50) null,
    b_account varchar(50) null,
    b_sourcetype varchar(20) null,
    b_loglevel varchar(16) not null,
    b_logcategory varchar(64) null,
    b_operation varchar(100) null,
    b_module_id varchar(50) null,
    b_request_id varchar(64) null,
    b_trace_id varchar(64) null,
    b_server_node varchar(128) null,
    b_duration_ms bigint null,
    b_result_code varchar(50) null,
    b_error_code varchar(50) null,
    b_error_message nvarchar(4000) null,
    b_exception_text nvarchar(max) null,
    b_context_text nvarchar(max) null,
    b_occurdatetime datetime2 default sysutcdatetime()
);
```

```
create table dbo.s_log_login (
    b_id uniqueidentifier not null primary key, -- 应用层生成的 UUID
    b_user_id varchar(50) null,
    b_account varchar(50) null,
    b_login_type varchar(20) not null,
    b_login_result int not null default 0,
    b_fail_reason nvarchar(400) null,
    b_ip varchar(50) null,
    b_ip_location nvarchar(400) null,
    b_browser varchar(100) null,
    b_browser_version varchar(50) null,
    b_os varchar(100) null,
    b_os_version varchar(50) null,
    b_device_type varchar(20) null,
    b_user_agent nvarchar(max) null,
    b_session_id varchar(50) null,
    b_request_id varchar(64) null,
    b_trace_id varchar(64) null,
    b_occurdatetime datetime2 default sysutcdatetime()
);
```

```
create table dbo.s_log_audit (
    b_id uniqueidentifier not null primary key, -- 应用层生成的 UUID
    b_event_code varchar(50) not null,
    b_module_id varchar(50) null,
    b_data_id varchar(50) null,
```

```

    b_business_no varchar(50) null,
    b_operation varchar(100) null,
    b_operator_id varchar(50) null,
    b_operator_name nvarchar(200) null,
    b_source_type varchar(20) not null default 'user',
    b_visibility varchar(20) not null default 'internal',
    b_request_id varchar(64) null,
    b_trace_id varchar(64) null,
    b_payload_text nvarchar(max) null,
    b_occurdatetime datetime2 default sysutcdatetime()
);

create table dbo.s_log_audit_field (
    b_id uniqueidentifier not null primary key, -- 应用层生成的 UUID
    b_event_id uniqueidentifier not null,
    b_module_id varchar(50) null,
    b_data_id varchar(50) null,
    b_field varchar(50) not null,
    b_field_label nvarchar(200) null,
    b_before_value nvarchar(max) null,
    b_after_value nvarchar(max) null,
    b_before_display nvarchar(1000) null,
    b_after_display nvarchar(1000) null,
    b_visibility varchar(20) not null default 'internal'
);

create index ix_s_log_technical_trace
on dbo.s_log_technical (b_trace_id, b_occurdatetime);

create index ix_s_log_login_user
on dbo.s_log_login (b_user_id, b_occurdatetime);

create index ix_s_log_audit_module
on dbo.s_log_audit (b_module_id, b_data_id, b_occurdatetime);

create index ix_s_log_audit_field_event
on dbo.s_log_audit_field (b_event_id);

```

10. 业务表主键约定

```

create table dbo.b_example (
    b_id bigint not null primary key, -- 应用层雪花 ID
    b_inputuser_id varchar(50) null, -- 引用 b_user.b_id
    b_inputdatetime datetime2 default sysutcdatetime()
);

```

