

# msaSDK Module

**.db.crud.base**

## Attributes

**\_\_version\_\_** module-attribute

```
__version__ = '0.1.1'
```

## Classes

### MSABaseCrud

Bases: MSARouterMixin

Register Router Base Class



#### Note



Database tables have and can only have one self-adding primary key.

#### Attributes

**list\_per\_page\_max** class-attribute

```
list_per_page_max: int = None
```

Maximum number of data per page to read in batches. Default: None, no limit.

**paginator** instance-attribute

```
paginator: Type[MSACRUDPaginator] = MSACRUDPaginator
```

**pk\_name** class-attribute

```
pk_name: str = 'id'
```

Current model primary key string, default: id.

Note: Database tables have and can only have one self-adding primary key.

router instance-attribute

```
router = router
```

schema\_create class-attribute

```
schema_create: Type[BaseModel] = None
```

Create data submission protocol, default: self.schema\_model

schema\_filter class-attribute

```
schema_filter: Type[BaseModel] = None
```

Batch query data filter submission protocol, default: self.schema\_model

schema\_list class-attribute

```
schema_list: Type[BaseModel] = None
```

Batch query data return protocol, default: self.schema\_model

schema\_model instance-attribute

```
schema_model = schema_model or self.schema_model
```

schema\_read class-attribute

```
schema_read: Type[BaseModel] = None
```

Read data return protocol, default: self.schema\_model

schema\_update class-attribute

```
schema_update: Type[BaseModel] = None
```

Update data submission protocol, default: self.schema\_model

## Functions

### `__init__`

```
__init__(
    schema_model: Type[BaseModel], router: APIRouter = None
)
```

### `error_data_handle`

```
error_data_handle(request: Request)
```

### `error_execute_sql`

```
error_execute_sql(request: Request, error: Exception)
```

### `has_create_permission` async

```
has_create_permission(
    request: Request, obj: Optional[BaseModel], **kwargs
) -> bool
```

Check for single create permission.

### `has_delete_permission` async

```
has_delete_permission(
    request: Request, item_id: Optional[List[str]], **kwargs
) -> bool
```

Check for single delete permission.

### `has_list_permission` async

```
has_list_permission(
    request: Request,
    paginator: Optional[MSACRUDPaginator],
    filters: Optional[BaseModel],
    **kwargs
) -> bool
```

Check for bulk query permission.

**has\_read\_permission** async

```
has_read_permission(
    request: Request, item_id: Optional[List[str]], **kwargs
) -> bool
```

Check for single read permission.

**has\_update\_permission** async

```
has_update_permission(
    request: Request,
    item_id: Optional[List[str]],
    obj: Optional[BaseModel],
    **kwargs
) -> bool
```

Check for single update permission.

**register\_crud**

```
register_crud(
    schema_list: Type[BaseModel] = None,
    schema_filter: Type[BaseModel] = None,
    schema_create: Type[BaseModel] = None,
    schema_read: Type[BaseModel] = None,
    schema_update: Type[BaseModel] = None,
    list_max_per_page: int = None,
    depends_list: List[Depends] = None,
    depends_read: List[Depends] = None,
    depends_create: List[Depends] = None,
    depends_update: List[Depends] = None,
    depends_delete: List[Depends] = None,
) -> MSABaseCrud
```

Register Crud routing.

**route\_create** property

```
route_create() -> Callable[..., Any]
```

Single/batch creation of routing functions. Support for synchronous/asynchronous functions.

**route\_delete** property

```
route_delete() -> Callable[..., Any]
```

Single/batch delete routing functions. Support for synchronous/asynchronous functions.

**route\_list** property

```
route_list() -> Callable[..., Any]
```

Batch read routing functions. Support for synchronous/asynchronous functions.

**route\_read** property

```
route_read() -> Callable[..., Any]
```

Single/batch read routing functions. Support for synchronous/asynchronous functions.

**route\_update** property

```
route_update() -> Callable[..., Any]
```

Single/batch update routing functions. Support for synchronous/asynchronous functions.

**router\_prefix** property

```
router_prefix()
```

**schema\_name\_prefix** property

```
schema_name_prefix()
```

## MSARouterMixin

Register Router

### Attributes

**router** instance-attribute

```
router = self.get_router()
```

**router\_permission\_depend** class-attribute

```
router_permission_depend: Callable = None
```

**router\_prefix** class-attribute

```
router_prefix: Optional[str] = None
```

## Functions

### `__init__`

```
__init__()
```

### `error_no_router_permission`

```
error_no_router_permission(request: Request)
```

### `get_router`

```
get_router() -> APIRouter
```

## Functions

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