

# INTEGRATION MANUAL

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## BioTime 8.5

Version: **1.0**

Date: **March 2020**

BioTime 8.5 can be integrated with HR software for the data of employee, department, area, and position synchronization using middle tables.

The method is explained below:

## 1. Employee Sync

### (A) Database Table

Table name <b>sync_employee</b>						
PRI Key	id					
Serial	Column	Description	Data Type	Null	Default	Extra
1	id	id	int(11)	NO		auto_increment
2	emp_code	emp code	varchar(20)	NO		unique key
3	first_name	emp first name	varchar(25)	YES	NULL	
4	last_name	empe last name	varchar(25)	YES	NULL	
5	dept_code	emp department code	varchar(50)	NO		
6	dept_name	emp department name	varchar(100)	YES	NULL	
7	job_code	emp position code	varchar(50)	YES	NULL	
8	job_name	emp position name	varchar(100)	YES	NULL	
9	area_code	emp area code	varchar(30)	YES	NULL	
10	area_name	emp area name	varchar(30)	YES	NULL	
11	card_no	emp card number	varchar(20)	YES	NULL	
12	multi_area	append or reset emp area	tinyint(1)	NO		1, append area 0,reset area
13	hire_date	emp hire date	date	YES	NULL	
14	gender	emp gender	varchar(2)	YES	NULL	
15	birthday	emp birthday	date	YES	NULL	
16	email	emp email	varchar(100)	YES	NULL	
17	active_status	emp active status	tinyint(1)	YES		if the value is 0 , then will do the

						resignation
18	post_time	sync post time	datetime(6)	YES	NULL	
19	flag	whether sync is complete	smallint(6)	YES	0	default value should be 0
20	update_time	sync update time	datetime(6)	YES	NULL	
21	sync_ret	error message	varchar(200)	YES	NULL	

### (B) Workflow

BioTime will scan this middle table and if any data record found with flag 0, then it will be fetched and added/updated to BioTime. If the data doesn't exist in BioTime then it will add the employee, otherwise it will update the existing employee. After the update, it will change the flag from 0 to 1 and update the operation time in the update\_time field and update the result to sync\_ret field.

### (C) Demo (MSSQL)

Insert into sync\_employee values ('1', 'ZKTecoEmp', 'ZK', 'ZKD', 'ZKDN', 'ZKJ', 'ZKJN', 'ZKA1,ZKA2,ZKA3', 'ZKAN1,ZKNA2,ZKNA3','1234567',0,'M','','',1, GETDATE(), 0, NULL, NULL)

## 2. Department Sync

### (A) Database Table

Table name <b>sync_department</b>						
PRI Key	id					
Serial	Column	Description	Data Type	Null	Default	Extra
1	id	id	int(11)	NO		auto_increment
2	dept_code	sync dept code	varchar(50)	NO		unique key
3	dept_name	sync dept name	varchar(100)	NO		
4	post_time	sync post time	datetime(6)	YES	NULL	
5	flag	Whether sync is complete	smallint(6)	NO	0	default value should be 0
6	update_time	sync update time	datetime(6)	YES	NULL	
7	sync_ret	error message	varchar(200)	YES	NULL	

### (B) Workflow

BioTime will scan this middle table and if it find any records with flag as 0 then it will be added/updated to BioTime. If the data doesn't exist in BioTime then it will add it, otherwise it will update the existing department. After the update it will change the flag from 0 to 1 and update the operation time in the update\_time field and update the result to sync\_ret field.

### (c) Demo (MSSQL)

Insert into sync\_department values('1','ZKTecoDept', GETDATE(), 0, NULL, NULL)

## 3. Area Sync

### (A) Database Table

Table name		sync_area				
PRI Key	id					
Serial	Column	Description	Data Type	Null	Default	Extra
1	id	id	int(11)	NO		
2	area_code	sync area code	varchar(30)	NO		unique key
3	area_name	sync area name	varchar(30)	NO		
4	post_time	sync post time	datetime(6)	YES	NULL	
5	flag	Whether sync is complete	smallint(6)	NO	0	default value should be 0
6	update_time	sync update time	datetime(6)	YES	NULL	
7	sync_ret	error message	varchar(200)	YES	NULL	

### (B) Workflow

BioTime will scan this middle table and if it find the record with flag 0 then it will be added/updated to BioTime. If the data doesn't exist in BioTime, then it will add it, otherwise it will update the existing area. After the update it will change the flag from 0 to 1 and update the operation time to update\_time field and update the result to sync\_ret field.

### (C) Demo (MSSQL):

Insert into sync\_area values('1','ZKTecoArea', GETDATE(), 0, NULL, NULL)

#### 4. Job Sync

##### (A) Database Table

Table name <b>sync_job</b>						
PRI Key	id					
Serial	Column	Description	Data Type	Null	Default	Extra
1	id	id	int(11)	NO		auto_increment
2	job_code	sync job code	varchar(50)	NO		unique key
3	job_name	sync job name	varchar(100)	YES		
4	post_time	hire_date	datetime(6)	YES	NULL	
5	flag	Whether sync is complete	smallint(6)	YES	0	
6	update_time	sync update time	datetime(6)	YES	NULL	
7	sync_ret	error message	varchar(200)	YES	NULL	

##### (B) Workflow

BioTime will scan this middle table and if it find the record with flag 0, then it will be added/updated to BioTime. If the data doesn't exist in BioTime then it will add, otherwise it will be updated. After the update, it will change the flag from 0 to 1 and update the operation time to update time field and update the result to sync\_ret field.

##### (C) Demo (MSSQL)

Insert into sync\_job values ('1','ZKTecoJob', GETDATE(), 0, NULL, NULL)

#### 5. Leave Sync

##### (A) Database Table

Table name <b>sync_leave</b>						
PRI Key	id					
Serial	Column	Description	Data Type	Null	Default	Extra
1	id	id	int	NO		auto_increment
2	post_time	sync post time	datetime	YES		

3	flag	whether sync is complete	smallint	NO		
4	update_time	sync update time	datetime	YES		
5	sync_ret	error message	nvarchar(200)	YES		
6	emp_code	emp code	nvarchar(20)	NO		
7	first_name	emp first name	nvarchar(100)	YES		
8	last_name	emp last name	nvarchar(50)	YES		
9	start_time	start time of leave	datetime	NO		
10	end_time	end time of leave	datetime	NO		
11	category_name	leave category name	nvarchar(50)	NO		
12	apply_reason	reason of leave	nvarchar(200)	YES		
13	audit_reason	audit reason	nvarchar(200)	YES		

### (B) Workflow

BioTime will scan this middle table and if it find any records with flag as 0 then it will be added/updated to BioTime. If the data doesn't exist in BioTime then it will add it, otherwise it will update the existing leave record. After the update it will change the flag from 0 to 1 and update the operation time in the update\_time field and update the result to sync\_ret field.

### (C) Demo (MSSQL)

Insert into sync\_leave values(GETDATE(), 0, NULL, NULL, 1, 'ZkEmp', 'Zk', '2020-03-20', '2020-03-25', 'ZKCAT', 'ZKRa', 'ZKRau')

For any clarifications regarding the Integration Manual, please contact us  
through e-mail at [softwaresupport@zkteco.com](mailto:softwaresupport@zkteco.com).

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## ZKTeco Middle East

Office 1207, Floor 112, Arenco Tower, Media City, Sheikh Zayed Road, Dubai, U.A.E.

Tel: +971 4 3927649

Fax: +971 4 3792752

E-mail: [zk\\_me@zkteco.com](mailto:zk_me@zkteco.com)

[www.zkteco.me](http://www.zkteco.me)

