

HR Servers Pro

Easy Client

Sampler Document

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Function Calls Summary

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Introduction

This is a high-level summary of available function calls from the HRServers Easy Client library and web service module to provide easy access to all functions in the HRServers suite, covering all 5 servers. The calls are mostly mirrored in both the extension library version (dll) and the web service version (asmx).

The Easy Call library routines are wrappers on lower level HRServers calls which are separated for each server, and are also available for using by end user programs. However, using the low level HRServers calls will require more technical knowledge regarding the data storage as well as programming architecture of HRServers.

Categories of Function Calls

Security Calls	Calls to authenticate user, authorize functions, log activities, and user account maintenance
Data Calls	Calls to retrieve and update data, such as employee records, payroll records
Result Calls	Calls to get immediate data results, such as requesting the basic salary of a particular employee, or the number of leave balance for a particular leave group of an employee
Reporting Calls	Calls to enlist and request reports already defined on the server, as well as report definition maintenance
Messaging Calls	Calls to enlist, send and reply messages between users through defined media, and to initiate and proceed with workflows defined for server events
Processing Calls	Calls to request processing on server, such as start a payroll calculation, or employee profile matching
Settings Calls	Calls to enlist and update system settings of installed modules

Administrator Calls Calls pertinent to system administration, such as user account maintenance, system maintenance etc.

General Function Call Format

Authentication

All function calls except log-in call to HRServers require submission of an authentication token. This token is provided by HRServers upon a successful log-in call, and may be expired after a predefined period of time which is configurable with the Security Setup program. A special “Keep alive” Security function call allows extending the expiry time programmatically if the user interaction is expected to be time-consuming.

Arguments

Arguments for the function call provide input to the HRServers for processing or data storage.

Returned Results

Simple results are returned as a single return value from the function call. In case of multiple results are returned, these could be packed within the return value and delimited by “|” character.

Data Return

Data results are returned as datasets or data tables. The structure of the data tables is available in the data dictionary.

Visibility Control

The returned results and data are all subject to the authorization level of the logged in user (i.e., the token). For example, if a request is made for an employee list of all companies, but the user is allowed only for 3 of the companies, then only records of the allowed 3 companies will be returned. To determine the effective rights of a user, use the “GetRights” function call.

Function Calls Summary

Sample Code

```
Sub Main()  
    Dim EC As New HR8EC.HR8EC  
    Dim User, Password, EmployeeNo, Result As String  
    Dim Salary As Decimal  
  
    User = InputBox("Please Enter User ID:")  
    Password = InputBox("Please Enter Password:")  
    Result = EC.Login(User, Password)  
    If Result(0) = "!" Then ' error in logging in  
        MsgBox("Invalid login" & Result)  
        Exit Sub  
    End If  
  
    EmployeeNo = InputBox("Please enter Employee No.:")  
    Salary = EC.GetBasicSalary(EmployeeNo, Today)  
    MsgBox("Basic Salary is " & Salary)  
    Exit Sub  
End Sub
```

In the above example, there are 2 function calls made to HRServers: the Login call and the GetBasicSalary call. Note that there is no need to keep the token returned by the Login call because within the scope of the EC (HR8EC) object, the token is maintained and submitted automatically by the EC functions. However, the token can still be accessed through the property Token.

In this simple example, the basic salary is returned as the numeric return value of the function. However, additional information is also available from the other properties of the EC object, such as:

- Basis – the basis of the basic salary, whether hourly, daily or monthly
- CurrencyCode – the currency of the basic salary

Sample Summary of Calls

Security Calls

Login	Log in to the system and gets a token
Authorize	Checks the privilege of the logged in user against a particular object
Keep alive	Extends the expiry time of the active token. The expiry time is extended automatically every time the HRServers is contacted.
Logout	Log out from the system and invalidate the token
IsSecByRank	Determines if security by rank is activated
IsSalaryHidden	Determines if the salary fields of the employee record is hidden from the logged in user
GetRights	Get a map of default and specific rights of the logged in user against all objects

Data Calls

RefreshCodeList	Loads code tables and other policy tables for use
RefreshEEList	Loads an employee list
LoadEEBackground	Loads extended personal and employment data for one or more employees
InitNewEmployee	Gets a template for a new employee record
LoadEmployee	Loads the full details of an employee
SaveEmployee	Saves the employee record and automatically generates HR transaction for changes
InitHRTrx	Gets a template for a new HR movement transaction
GetHRTrx	Gets an HR movement transaction by reference no.
SaveHRTrx	Saves an HR movement transaction
GetHRTrxList	Gets a list of HR Movement transaction within specified dates
GetLeavePolicies	Gets a list of defined leave policies in the system

Function Calls Summary

GetPosList	Gets a list of defined positions in the system
GetPayrollSummary	Gets a list of calculated payroll summary in the specified payroll period and cycle
GetPayCycles	Gets a list of defined payroll cycles
GetOrgStat	Gets a list of employee status statistics for all companies

Result Calls

GetHierLevels	Get the list of hierarchy levels defined
GetHierDesc	Gets the description of a particular hierarchy level
GetCodeDesc	Gets the description of a code under a specified code table
GetAllDedDesc	Gets the description of a pay item
GetAllDedDtIs	Gets the full information of a pay item
GetLeaveDesc	Gets the description of a leave policy type
GetLeaveDtIs	Gets the full details of a leave policy type
GetCurrPeriod	Gets the current payroll period of the specified company
GetPeriodDates	Gets the start and end dates of the payroll period

Messaging Calls

LoadMessages	Gets a list of messages for the logged in user
GetMessage	Gets a message by message ID
MarkMessage	Marks the status of a message
SendMessage	Sends a message to specified user, user group or workflow group
LoadTasks	Gets a list of workflow tasks addressed to user
GetTask	Gets the workflow task details by task ID
ReplyTask	Approve, reject, put on hold, or redirect a task
Delegate	Delegate task initiation or approval to another user
EndDelegate	Ends a delegation of task initiation or approval

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RequestServer	Places a job on the server queue for a processing job. This is usually used for customized processors installed on the Processing Server
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Processing Calls

PayrollCalc	Performs a payroll calculation on the server
ClearPayroll	Clears the last payroll calculation results
FreezeCycle	Freezes the specified payroll cycle
UnfreezeCycle	Releases the specified payroll cycle
ClosePeriod	Performs payroll period close down
ProvisionCalc	Performs provision calculation of payroll or leaves
GenerateTax	Generates working data for taxation
GenerateAutopay	Generates working data for bank payments

Reporting Calls

GetReportList	Gets a list of report definitions
GetCriteria	Gets the defined criteria of a report definition for user to select
PrepareReport	Prepares a report based on the arguments and returns a data table of report contents and a table of report formatting
RenderReport	Prepares a report based on the arguments and returns a rendered report in Excel or PDF
GetReportDef	Gets a report definition
SaveReportDef	Saves a report definition

Settings Calls

LoadParameters	Loads a list of system parameters to work with
SaveParameters	Save specific system parameters
LoadPreferences	Loads a list of user preferences for the logged in user
SavePreferences	Saves user preferences for the logged in user

Administrator Calls

GetUserList	Gets a list of user accounts
GetUser	Gets the information of a user account

Function Calls Summary

SaveUser

Updates the information of a user account

GetPlugins

Get a list of installed plug-in and localization modules

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