OZ Server

User Guide for OZ Server

FORCS

Table of Contents

What is OZ Server?

OZ Server is a high-performance multithreaded server engine that receives requests from OZ Viewer, creates result sets, and sends report forms and result sets.

OZ Server supports both the Java environment and Microsoft .NET Framework environment.

OZ Server provides the repository function. If you use the repository function, you can manage user/group permissions and version control of report files.

OZ Server guarantees optimal performance even in a simultaneous access environment with multiple users by adopting high-performance middleware-level performance enhancement technology such as multi-thread server engine, thread pooling, and cache manager.

Run OZ Java Server

To run OZ Java Server, you need to complete the tasks below:

1. Set OZ Java Server home path
Open the <u>ozserver.properties</u> file in %OZ_HOME%\classes folder with a text editor and set OZ Java Server home path. OZ Java Server home path can be set both absolute and relative paths. % OZ_RUNNING_PATH% is the OZ Java Server installation path.

```
path.oz.server.home=%OZ_RUNNING_PATH%/WEB-INF

...
```

2. Setup OZ Java Server license file

Copy the license file issued to you to ozlicense.xml in %OZ_HOME%\license folder. To change the path and name of the license file, change the "path.license.file" option in the ozserver.properties file in %OZ_HOME%\classes folder.

```
…

path.license.file=%OZ_HOME%/license/ozlicense.xml

…
```

3. Run OZ Java Server

Register OZ Java Server to WAS, start WAS, and run OZ Java Server URL. Click the Login button after entering the administrator account ID and password. OZ Java Server information will appear on the browser.

Run OZ .NET Server

To run OZ .NET Server, you need to complete the tasks below:

1. Set OZ .NET Server home path

Open the ozserver.properties file in %OZ_HOME% folder with a text editor and set OZ .NET Server home path. OZ .NET Server home path must be set to an absolute path.

```
path.oz.server.home=c:/OZServer

…
```

2. Setup OZ .NET Server license file

Copy the license file issued to you to ozlicense.xml in %OZ_HOME%\license folder. To change the path and name of the license file, change the "path.license.file" option in ozserver.properties file in %OZ_HOME% folder.

```
…

path.license.file=%OZ_HOME%/license/ozlicense.xml
```

...

3. Run OZ .NET Server

Create OZ .NET Server as the default website in IIS, set ASP.NET user permission, start IIS, and run OZ .NET Server URL. After entering the administrator account ID and password, click the Login button. The browser displays the OZ .NET Server information.

Setting up OZ Server options

Use the configuration file to set OZ Server operation options.

OZ Server provides the following configuration files:

- ozserver.properties
- repository.properties
- db.properties
- datasource.properties
- databind.properties
- log.properties
- monitor.properties
- mail.properties
- assembly.properties
- cachemngr.properties
- spmgr.properties
- sap.properties
- ozservice.properties
- ozudl.properties
- ozudr.properties
- uslmngr.properties
- srmngr.properties
- html5manager.properties
- html5managerhealthcheck.properties
- xml.properties

ozserver.properties

Set the OZ Server connection port and path of various configuration files. OZ Server must be restarted if this file has been changed.

> **Note**
>
> **%OZ_HOME%**: OZ Server home directory. It is the path set by path.oz.server.home option in ozserver.properties file.
>
> **%OZ_RUNNING_PATH%**: OZ Server execution path. It is used to set the OZ Server home path as a relative path.

---

path.oz.server.home

Set the OZ Server home path.

path.assembly.properties.file

Set the assembly.properties file path of OZ .NET Server.

path.cache.properties.file

Set the cachemngr.properties file path.

path.connpool.properties.file

Set the db.properties file path.

path.databind.properties.file

Set the databind.properties file path.

path.datasource.properties.file

Set the datasource.properties file path.

path.license.file

Set the ozlicense.xml file path.

path.log.properties.file

Set the [log.properties](#) file path.

path.mail.properties.file

Set the [mail.properties](#) file path.

path.monitor.properties.file

Set the [monitor.properties](#) file path.

path.ozservice.properties.file

Set the [ozservice.properties](#) file path.

path.ozudl.properties.file

Set the [ozudl.properties](#) file path.

path.ozudr.properties.file

Set the [ozudr.properties](#) file path.

path.repository.properties.file

Set the [repository.properties](#) file path.

path.sapclient.properties.file

Set the [sap.properties](#) file path.

path.schedule.properties.file

Set the [srmngr.properties](#) file path.

path.html5manager.properties.file

Set the [html5manager.properties](#) file path.

path.html5managerhealthcheck.properties.file

Set the html5managerhealthcheck.properties file path.

path.securitypolicy.properties.file

Set the spmgr.properties file path.

path.usl.properties.file

Set the uslmngr.properties file path.

path.xml.properties.file

Set the xml.properties file path.

7

repository.properties

Set the execution environment of the repository.

REPOSITORY_TYPE

Set the repository type.

Value	Description
RDB	Commercial database system. Set the database system information to be connected in the db.properties file. But, set the alias.vendor option to a value other than user.
HYBRID	Combination of RDB and NONE type. It is possible to use all functions of RDB type. If upload or check in category and item, it is back up in a particular path as NONE type.
BUILTIN	The database system provided by OZ Server.
NONE	File system. This type cannot use the functions of adding user/group and setting authority. The available user account is administrator. Items in the repository are always checked out. By default, Item history management is not supported. To use this function, set the REPOSITORY_NONE_BACKUP option to true.

REPOSITORY_DB_ALIAS

Set the alias name for the RDB type repository database. Set to the alias defined in db.properties.

REPOSITORY_FILE_PATH

Set the path for files created in the BUILTIN type repository or items uploaded in the NONE type repository.

REPOSITORY_HYBRID_FILE_PATH

Set the path to save item and category to back up as NONE type in the HYBRID type repository.

REPOSITORY_DISTRIBUTE_PATH

Set the path to save the item when clicking the Distribute to the server path menu in the Repository Manager.

REPOSITORY_QUERY_MAXBACKUPINDEX

Set the maximum serial number of the backup log file for BUILTIN type repository.

REPOSITORY_QUERY_MAXFILESIZE

Set the maximum log file size for BUILTIN type repository. When the log file size exceeds the maximum size, the current log file is renamed with a serial number and a new log file is started.

REPOSITORY_QUERY_IMMEDIATEFLUSH

Set whether to immediately append the buffered logs to the log file in the BUILTIN type repository.

REPOSITORY_STORAGE_TYPE

Set the type of repository storage when the repository type is NONE. This option only supports Java server.

Value	Description
LOCAL	Local storage
WEBDAV	WEBDAV storage

REPOSITORY_STORAGE_ID

Set the User ID to log in to WEBDAV.

REPOSITORY_STORAGE_PASS

Set the User password to log in to WEBDAV.

REPOSITORY_NONE_BACKUP

Set whether to use the item backup function of the NONE type repository.

REPOSITORY_NONE_BACKUP_PATH

Set the backup path of the NONE type repository.

REPOSITORY_NONE_BACKUP_ITEM_COUNT

Set the number of items to backup in the NONE type repository.

REPOSITORY_NONE_BACKUP_ITEM_VALIDDAYS

Set the retention period of backup file in the NONE type repository.

REPOSITORY_ITEM_NUMBER_PER_DIRECTORY

Set the maximum number of items per directory.

REPOSITORY_HISTORY_ITEM_VALID_DAYS

Set the retention period of item history.

REPOSITORY_TEMP_DIRECTORY

Set path of temporary files(*.czo, *.obj_stream.zip, etc.).

DELETE_TEMP_DIRECTORY

Set whether to delete temporary files when the server is started. Temporary files are saved in the path set in the REPOSITORY_TEMP_DIRECTORY option.

REPOSITORY_ACCESS_BY_HTTP_GET

Set whether to get an item using the Get method.

REPOSITORY_HTTP_GET_CHECK_SESSION

Set whether to check the session when getting an item using the Get method.

REPOSITORY_RDB_BUILTIN_GUEST_ACCESS

Set whether to able to connect as a guest account in RDB or BUILTIN type repository. To avoid the inconvenience of manually setting item view/read permissions for the guest account, set this option value to true.

REPOSITORY_ITEM_CATEGORY_ACCESS_PERMISSIONS

Set whether or not general users and group administrator can grant the category/item usage permission to other users in the RDB or BUILTIN type repository. If the value is set to true, general users and group administrator who have the permission can grant the category/item usage permission to all users. If the value is set to false, general users cannot grant the permission while group administrator can grant the permission to only the users in their groups.

OZ_EXTERNAL_LOGIN.Active

Set whether to use the login function connected to external API. Not supported in the NONE type repository.

OZ_EXTERNAL_LOGIN.Class

Set the classes used when executing the login function connected to external API.

NETWORK_USER

Set the network connection account ID when the repository path is set to a network drive. This option only supports the .NET server.

NETWORK_PASSWORD

Set the network connection account password when the repository path is set to a network drive. This option only supports the .NET server.

db.properties

Set the database connection information options for OZ Server. OZ Server creates DB Connection Pool at the starting time and allows sharing it to improve performance.

---

alias.vendor

Set the database vendor name.

alias.driver

Set the JDBC/ADO.NET driver class name.

alias.url

Set the Connection URL of JDBC/ADO.NET driver.

alias.portNo

Set the database port number.

alias.serverAddress

Set the database server address.

alias.serverName

Set the database server name.

alias.user

Set the database user ID. If there is a leakage risk of db.properties file, encrypt the user ID first by using the ozencrypted.bat file and set this option.

alias.password

Set the database user password. If there is a leakage risk of db.properties file, encrypt the password first by using the ozencrypted.bat file and set this option.

13

alias.sid

Set the SID of the Oracle database.

alias.dsn

Set the ODBC database source name.

alias.fetchrow

Set the number of rows sent at once when returning result sets.

alias.timeout

Set the connection waiting timeout(sec).

alias.initconns

Set the initial connection count of the OZ Server.

alias.maxconns

Set the maximum connection count of the OZ Server.

alias.props

Set the connection property string of the JDBC/ADO.NET driver.

alias.dbName

Set the database name.

alias.encodecharset

Set the encoding character set. If this option is not set or equal to the value of alias.decodecharset, it is applied with the value set by the OZ Server. If the encoding character set is set in the ODI file, the value set in the ODI file is applied.

alias.decodecharset

Set the decoding character set. If this option is not set or equal to the value of alias.encodecharset, it is applied with the value set by the OZ Server. If the decoding character set is set in the ODI file, the value set in the ODI file is applied.

alias.doConnectionCheck

Set whether to run test queries every time when getting a connection from Connection Pool and set whether to create a new connection if the test query failed.

alias.doConnectionCheckMaxTime

Set the maximum time to check the connection status(sec).

alias.doConnectionCheckMinTime

Set the minimum time to check the connection status(sec).

alias.sessionQuery

Set the query to get the Session ID of the monitor log. For all DBMS with a query for session ID, you have to register session queries for each DBMS by alias.sessionQuery in db.properties. If a DBMS has no session query, it's session ID will be blank.

alias.testQueryString

Set the test query to run whenever getting a connection from the Connection Pool.

alias.querytimeout

Set the query execution timeout in seconds.

alias.ignoreQueryError

Set whether to ignore query errors. If an error occurs during query execution, it sends an empty data set.

datasource.properties

Set the options for data source information of XML, SOAP, file, HTTP store.

---

alias.VENDOR

Set the vendor name.

alias.XMLURL

Set the XML address of XML store.

alias.SAMPLEXMLURL

Set the temporary XML file path for the XML store data set design.

alias.SCHEMAPATH

Set the DTD/XSD file path for the XML store data set design.

alias.FILENAMETOLOG

Set the OZ Server log file name for the CSV or XML data set added in XML & HTTP store.

alias.URLENCODE

Set whether to use URL encoding for the HTTP or XML store.

alias.DOPOST

Set whether to send POST for the HTTP or XML store.

alias.XMLPARSER

Set the XML parser of the XML store.

alias.URL

Set the user application address(URL) of the HTTP store.

alias.ERRORRETRYCOUNT

Set the retry count for the HTTP store.

alias.DESIGNTIMEFILENAME

Set the temporary CSV/XML file path for the CSV or XML data set design.

alias.DATASETNODENAME

Set the data set node name for the XML data set.

alias.RECORDNODENAME

Set the record set node name of the XML data set.

alias.STARTINDEX

Set the starting row number of the dynamic data set.

alias.FILENAME

Set the file path for the FILE store.

alias.FIELDDELIMITER

Set the field delimiter for the CSV data set.

alias.LINEDELIMITER

Set the line delimiter for the CSV data set.

alias.HASFIELDTYPE

Set whether to include field type information for the CSV data set.

alias.NULLMARK

Set the null mask for the CSV data set.

alias.CHECKERROR

Set the error code for the CSV data set.

alias.CHARACTERSET

17

Set the character set for the CSV data set. System character set is the default.

alias.ID

Set the user ID for HTTP authentication of the SOAP store web service.

alias.PASSWORD

Set the user password for HTTP authentication of the SOAP store web service.

alias.ENDPOINT

Set the web service endpoint for the SOAP store.

alias.WSDLURL

Set the WSDL location of the SOAP store.

databind.properties

Set the data binding options.

ConcurrentFetchSize

Set the stream buffer size(bytes) for concurrent type data transmission to the OZ Viewer. If an invalid value is set, the default size (4096) is applied. The minimum value is 256. If a value less than 256 is set, the minimum value 256 is applied.

ConcurrentFirstRow

When transmitting data to the viewer in concurrent type, set the number of rows in the result set to be sent at the first time.

NumericDecimalDisplayZero

Set whether to put a leading zero before decimal point for a value less than 1. This option applies only when the field type is "Numeric" or "Decimal". This option only supports Java server.

Value	Description
default	Follow the property value of the ODI data tree or database server.
true	Always put the leading zero.
false	Always not to put the leading zero.

log.properties

Set the log execution and log layout options. Write logs of Server error, OZ Server execution status, and transaction information. Also, write logs of errors occurred while binding the HTTP store data set and XML store. Logs can be written to the console or to the files. Also, the logs can be sent to Windows NT event, Unix system log, and to an email address.

General Option

Priority

Set the log level priority.

Value	Description
DEBUG	Error, warning, transaction information, and scheduler information.
ERROR	Error only.
INFO	Error, warning, and transaction information.
WARN	Error and warning.

CONSOLE Option

This option only supports Java server.

CONSOLE.Type

Set the console log type.

Value	Description
Stdout	Logging to the standard output.
RollingFile	Logging to a rolling file.

CONSOLE.Layout

Set the pattern of console log contents. The reserved words that can be set in the pattern are as follows:

Value	Description
c	Log the OZ Server category name. The category name has a hierarchical structure, and the output level can be set. For example, %c{2}.
d	Record the date and time. You can use a custom date format or Log4j date formatting options (ABSOLUTE, DATE, ISO8601).
m	Log the OZ Server event name.
n	Log the newline character.
p	Log the log level.
r	Log the time (in milliseconds) the OZ Server is running.
t	Log the name of the thread that has generated the logging event.
%	Log the percent sign.

CONSOLE.Async

Set whether to use the buffering function.

CONSOLE.File

Set the file path and name of the console log.

ROLLING_FILE Option

ROLLING_FILE.Type

Set the rolling file log type.

Value	Description
DailyRollingFile	Create a log file as defined by the ROLLING_FILE.DatePattern option.
RollingFile	Create a log file as defined by the ROLLING_FILE.File option.

ROLLING_FILE.DatePattern

Set the pattern of the log file name. The patterns that can be set are as follows:

Value	Description
yyyy-MM	The first day of each month
yyyy-ww	The first day of each week
yyyy-MM-dd	Midnight of every day
yyyy-MM-dd-HH	On time every day
yyyy-MM-ddt	12 and 24 o'clock every day
yyyy-MM-dd-HH-mm	Every minute

ROLLING_FILE.Layout

Set the rolling file log format. Please refer to the reserved words section of "CONSOLE.Layout".

ROLLING_FILE.File

Set the file path and name of rolling file log.

ROLLING_FILE.Append

Set whether to append the rolling file log to the log file.

ROLLING_FILE.MaxBackupIndex

Set the maximum serial number of backup log files. If the backup log files exceed the maximum serial number, the oldest backup log file is deleted.

ROLLING_FILE.MaxFilesize

Set the maximum file size of the rolling file log. When the size of log file exceeds the maximum size, the current log file is renamed with the serial number and a new log file is started. For example, if the log file name is server.log, it is changed to server.log.1 and new server.log is started.

ROLLING_FILE.MaxHistory

Set the maximum number of days to store log files. If the value is set to greater than 0, the log files created earlier than the maximum number of days to store are automatically deleted. The maximum number of days to store can be set up to 1,000. If the value is set to 0 or a negative number, then log files are not deleted.

ROLLING_FILE.ImmediateFlush

Set whether to immediately append the buffered logs to the log file.

NT_EVENT Option

This option only supports Java server.

23

NT_EVENT.Type

Set the NT event log type. The value can only be set to "NTEvent".

NT_EVENT.Layout

Set the NT event log format. Please refer to the reserved words section of "CONSOLE.Layout".

NT_EVENT.Threshold

Set the level of log to be sent to NT event. It log level should be higher than the level set by the Priority option.

SYSLOG Option

This option only supports Java server.

SYSLOG.Type

Set the Unix system log type. The value can only be set to "Syslog".

SYSLOG.Layout

Set the Unix system log format. Please refer to the reserved words section of "CONSOLE.Layout".

SYSLOG.Threshold

Set the level of log to be sent to Unix. It log level should be higher than the level set by the Priority option.

SYSLOG.SyslogHost

Set the IP address of Unix host.

SYSLOG.Facility

Set the Unix system log facility for the log message.

SYSLOG.FacilityPrinting

Set whether to enable adding facility.

HTTPSTORE_LOG_FILE Option

HTTPSTORE_LOG_FILE

Set the HTTP store logging file options.

Value	Description
AUTO	Logs all HTTP store data sets. If the server log file name is not set in Query Designer, a log file is created in the form of "OZ_HTTPSTATMENT.LOG.#". (# is serial number starting from 1)
MANUAL	Logs only data sets with a server log file name in Query Designer.
NONE	Do not log all HTTP store data sets.

HTTPSTORE_LOG_FILE.LOCATION

Set the path of the log file.

XMLSTORE_LOG_FILE Option

XMLSTORE_LOG_FILE

Set the XML store logging file options.

Value	Description
AUTO	Logs all XML store data sets. If the server log file name is not set in Query Designer, a log file is created in the form of "OZHTTP_XPATH.LOG.#". (#

Value	Description
	is serial number starting from 1)
MANUAL	Logs only data sets with a server log file name in Query Designer.
NONE	Do not log all XML store data sets.

XMLSTORE_LOG_FILE.MAXCOUNT

Set the maximum number of backup files.

XMLSTORE_LOG_FILE.LOCATION

Set the path of the log file.

BUILTIN_LOGGING OPTION

This option only supports Java server.

USE_BUILTIN_LOGGING_ENGINE

Set whether to use BUILTIN_LOGGING.

BUILTIN_LOGGING_CONSOLE

Set whether to output log to the console.

BUILTIN_LOGGING_CONSOLE.CharSet

Set the character set for console log. If you set no, the character set configured in the system is applied.

BUILTIN_LOGGING_FILE

Set whether to output the log to a file.

BUILTIN_LOGGING_FILE.TYPE

Set the log file type.

Value	Description
DailyRollingFile	Create a log file as defined by the BUILTIN_LOGGING_FILE.DatePattern option.
RollingFile	Create a log file as defined by the BUILTIN_LOGGING_FILE.LOCATION option.

BUILTIN_LOGGING_FILE.DatePattern

Set the pattern of the log file name. Please refer to the reserved words section of "ROLLING_FILE.DatePattern".

BUILTIN_LOGGING_FILE.CharSet

Set the character set for the log file. If you set no, the character set configured in the system is applied.

BUILTIN_LOGGING_FILE.Append

Set whether to append the log to a log file.

BUILTIN_LOGGING_FILE.MaxBackupIndex

Set the maximum serial number of the backup log file. If the backup log files exceed the maximum serial number, the oldest backup log file is deleted.

BUILTIN_LOGGING_FILE.MaxFileSize

Set the maximum size of log file. When the size of log file exceeds the maximum size, the current log file is renamed with the serial number and new log file is started. For example, if the log file name is server_oz.log, it is changed to server_oz.log.1 and new server_oz.log is started.

BUILTIN_LOGGING_FILE.MaxHistory

Set the maximum number of days to store log files. If the value is set to greater than 0, the log files created earlier than the maximum number of days to store are automatically deleted. The maximum number of days to store can be set up to 1,000. If the value is set to 0 or a negative number, then log files are not deleted.

BUILTIN_LOGGING_FILE.ImmediateFlush

Set whether to immediately append the buffered logs to the log file.

BUILTIN_LOGGING_FILE.LOCATION

Set the path to the log file.

Mail Option

Mail.alias

Set the alias, which is defined in email.properties. Use to set email information using email.properties other than log.properties.

Mail.active

Set whether to send the log via email.

Mail.fromSend

Set the email address of a person who sent the email.

Mail.toSend

Set the email address of a person to receive the email.

Mail.SMTPServer

Set the SMTP server address of the outbox.

Mail.SMTPServerPort

Set the SMTP server port of the outbox.

Mail.SMTPUserID

Set the user ID to connect to the SMTP server.

Mail.SMTPUserPassword

Set the password of the user ID to connect to the SMTP server.

Mail.SMTPUserID_encrypted

Set whether to encrypt the user ID to connect to the SMTP server.

Mail.SMTPUserPassword_encrypted

Set whether to encrypt the user password to connect to the SMTP server.

Mail.SendRetryCount

Set the number of retries to send an email.

Mail.SendRetryPeriodTime

Set the retry interval in seconds for sending emails.

Mail.PrefixSubjectMessage

Set the prefix of the email subject.

REQUEST-URI Option

REQUEST_URI.LOCATION

Set the path of the file that stores the REQUEST-URI information. And that the file name is created as the request_uri.log file.

monitor.properties

Set transaction log options.

MONITOR.Active

Set whether to write a transaction log.

MONITOR.File

Set the file path and name of the transaction log.

MONITOR.Append

Set whether to append a log to the log file.

MONITOR.MaxBackupIndex

Set the maximum serial number of the backup log files. If the backup log files exceed the maximum serial number, the oldest backup log file is deleted.

MONITOR.MaxFileSize

Set the maximum size of the log file. When the size of log file exceeds the maximum size, the current log file is renamed with the serial number and a new log file is started. For example, if the log file name is monitor.log, it is changed to monitor.log.1 and a new monitor.log is started.

MONITOR.ImmediateFlush

Set whether to immediately append the buffered logs to the monitor log file.

MONITOR.TimePattern

Set the pattern of time recorded in the log.

mail.properties

Set email options.

---

alias.active

Set whether to send the log via email.

alias.fromSend

Set the email address of a person who sent the email.

alias.toSend

Set the email address of a person to receive the email.

alias.SMTPServer

Set the SMTP server address of the outbox.

alias.SMTPServerPort

Set the SMTP server port of the outbox.

alias.SMTPUserID

Set the user ID to connect to the SMTP server.

alias.SMTPUserPassword

Set the password of the user ID to connect to the SMTP server.

alias.SMTPUserID_encrypted

Set whether to encrypt the user ID to connect to the SMTP server.

alias.SMTPUserPassword_encrypted

Set whether to encrypt the user password to connect to the SMTP server.

alias.EnableSSL

Set whether to use SSL.

alias.SendRetryCount

Set the number of retries to send an email.

alias.SendRetryPeriodTime

Set the retry interval in seconds for sending emails.

alias.PrefixSubjectMessage

Set the prefix of the email subject.

assembly.properties

Set the assembly information of the OZ .NET Server. To use the assembly file, you need to install the client tool, containing the assembly file, to the server machine and start the client listener.

---

home
Set the home path for assembly files.

alias.filepath
Set the path of the assembly files. Set the file path to an absolute or relative path. When this option is set, the alias.name, alias.version, alias.culture, and alias.publickey options are ignored.

alias.name
Set the name of the assembly.

alias.version
Set the version of the assembly.

alias.culture
Set the culture or language of the assembly.

alias.publickey
Set the public key token of the assembly.

e.g.sessionusl.filepath

Set the path of the OZUSLServer.dll file. Set the file path to an absolute path. Set only when the path of the OZUSLServer.dll file is different from the path of the OZServer.NET.dll file.

<ProtocolVersion>.isexternalmodule

Set whether the assembly is an external module.

<ProtocolVersion>.active

Set whether to use an external module.

<ProtocolVersion>.description

Set protocol description for the external module.

<ProtocolVersion>.filepath

Set the path of the external module files. Set the file path to an absolute or relative path. When this option is set, the <ProtocolVersion>.name, <ProtocolVersion>.version, <ProtocolVersion>.culture, and <ProtocolVersion>.publickey options are ignored.

<ProtocolVersion>.name

Set the name of the external module.

<ProtocolVersion>.version

Set the version of the external module.

<ProtocolVersion>.culture

Set the culture or language of the external module.

<ProtocolVersion>.publickey

Set the public key token of the external module.

<ProtocolVersion>.classname

Set the class name of the external module.

OZSAPConnector.filepath

Set the file path of the SAP integration module. When using the SAP NCO 3 version, set the version of the Microsoft .NET Framework connected with IIS to 4.0 or later.

sapnco.filepath

Set the file path of the SAP NCO module.

sapnco_utils.filepath

Set the file path of the SAP NCO utility module.

cachemngr.properties

Set cache manager options.

CACHE_FILE_PATH

Set the cache file path.

DM_CACHE_FILE_PATH

Set the cache file path for the data module.

target.active

Set whether to cache.

target.memoryCacheValidTime

Set the retention time (in seconds) for the cache stored in memory.

target.freeMemoryPercentage

When storing the cache in memory, set the amount of free memory (%). If the system's free memory capacity is less than the set value, the cache is saved to disk.

target.diskCacheValidTime

Set the retention time (in seconds) for the cache stored on the disk.

serverbind.active

Set whether to cache when the server binding function is executed. This option only supports Java server.

serverbind.validtime

Set the retention time (in seconds) for the cache created by the server binding function. This option only supports Java server.

---

spmgr.properties

Set the error message level, OZ Server information display level, and whether to allow accessing the OZ Server.

client_message_secure_level

Set the error message level.

Value	Description
high	The client sends only the error code, and the server does not output any information.
middle	The client sends the error code and exception name. The server outputs only the server version.
low	The client sends all error information, and the server output all information.

show_browser_secure_level

Set the OZ Server information display level to be displayed in a web browser. If this is not set, the value of the client_message_secure_level option is applied.

Value	Description
high	Do not show anything.
middle	The login button is displayed. When logged in, the OZ Server information is displayed.

Value	Description
low	The login button is displayed. When logged in, the OZ Server information and system information is displayed.

user.multilogin

Set whether to enable multiple logins of a single user.

user.sessionTimeout

Set the session timeout (in seconds). Applies only when the value of the user.multilogin option is false.

enable_service_repository

Set whether to enable designer to access OZ Server using repository pane

allow_service_qd

Set whether to allow OZ Query Designer to run a query for ODI file in the server repository. Applies only when the value of the enable_service_repository option is true.

allow_service_em

Set whether to allow OZ Enterprise Manager to access OZ Server

allow_service_rm

Set whether to allow OZ Repository Manager to access OZ Server.

allow_service_rv

Set whether to allow OZ Report Viewer to preview for the OZR file in OZ Server Repository. Applies only when the value of the enable_service_repository option is true.

allow_service_api

Set whether to allow OZ Server API to connect to OZ Server.

allow_service_sh

Set whether to allow OZ Scheduler to connect to OZ Server.

allow_exportbind_service

Set whether to allow server binding function. This option only supports Java server.

exportbind_sessionkey

Set the session key for server binding. To set multiple session keys, add comma (,) as a separator. At this time, the session is checked with the OR condition. This option only supports Java server.

guest_account_sessionkey

Set the session key for a guest account to connect to OZ Server. To set multiple session keys, add comma (,) as a separator. At this time, the session is checked with the OR condition.

guest_account_session_allow_ip

Set the guest account IP that can access the OZ Server regardless of the guest_account_sessionkey option. To set multiple session keys, add semicolon (;) as a separator.

webservice_sessionKey

Set the session key when using a web service or data service function. To set multiple session keys, add comma (,) as a separator. At this time, the session is checked with the OR condition.

svgviewerbind_sessionkey

Set the session key when working with the HTML5SVG viewer. To set multiple session keys, add comma (,) as a separator. At this time, the session is checked with the OR condition.

svgviewerbind_encryptToken

Set whether to encrypt tokens when connecting with HTML5SVG Viewer. If there is no session or an incorrect value is set, tokens are not encrypted.

odiparam_usersecurity.Active

Set whether to encrypt ODI parameter value.

odiparam_usersecurity.Class

Set the class name to encrypt the ODI parameter value.

odiparam_usersecurity.InitParam

Set the file path that the required parameters are declared when driving the class to encrypt the ODI parameter value.

datafield_usersecurity.Active

Set whether to decrypt data field encrypted with external modules. This option only supports Java server.

datafield_usersecurity.Class

Set the class name to decrypt the data field. This option only supports Java server.

datafield_usersecurity.InitParam

Set the file path that the required parameters are declared when driving the class to decrypt the data field. This option only supports Java server.

repository_access_allow_ip

Set IP to allow access to the OZ Server repository. To set multiple session keys, add semicolon (;) as a separator.

sap.properties

Set the SAP connection information.

\<alias\>.proxy

Set the SAP Proxy class name. This option only supports the .NET server.

\<alias\>.client

Set the SAP client information.

\<alias\>.user

Set the SAP user ID.

\<alias\>.password

Set the SAP user password.

\<alias\>.language

Set the SAP language.

\<alias\>.host

Set the SAP host name.

\<alias\>.sysno

Set the SAP system number.

\<alias\>.r3name

Set the SAP system name. This option only supports Java server.

\<alias\>.group

Set the group name of the application server.

41

\<alias>.gwhost

Set the SAP gateway host name. This option only supports Java server.

\<alias>.gwserv

Set the SAP gateway service number. This option only supports Java server.

\<alias>.tpname

Set the program ID registered in the JCO Server program. This option only supports Java server.

\<alias>.tphost

Set the host name of the external Server. This option only supports Java server.

\<alias>.maxcnt

Set the maximum SAP connection count. This option only supports Java server.

\<alias>.timeout

Set the SAP timeout (in milliseconds). This option only supports Java server.

\<alias>.timeoutcheckperiod

Set SAP timeout check interval (in milliseconds). This option only supports Java server.

\<alias>.istrace

Set whether to write to the SAP log file.

\<alias>.doConnectionCheck

Set whether to automatically establish a connection without restarting the OZ server if the connection is invalid when SAP is restarted. This option only supports Java server.

\<alias>.assembly

Assembly for the SAP connection. Set to the assembly alias defined in the assembly.properties file. This option only supports the .NET server.

\<alias>.sid

Set SID of SAP Netweaver Server. This option works when OZ Server is Java type, SAP Netweaver Server version is 7.0 or higher, and sapjco version is 3.0 or higher.

`<alias>.props`

Set the SAP property value.

43

ozservice.properties

Set whether to use Server service and Web service.

---

enable_ozserver

Set whether to use the OZ Server service

enable_webservice

Set whether to use a Web service

dataservice_defaulttype

Set whether to use ODI data service. This option applies only to ODI files whose enable_webservice option value is true and the "Allow DataService" property value is Default.

ozudl.properties

Set whether to use the user defined log and set the wclass file path. This option is only supported in the RDB store.

OZ_USER_DEFINED_LOG.Active

Set whether to use user defined log.

OZ_USER_DEFINED_LOG.Class

Set the class file path of user defined log interface.

OZ_UDL_MONITOR.Active

Set whether to use user defined monitor log.

OZ_UDL_MONITOR.Class

Set the class file path of the user defined monitor log interface.

ozudr.properties

Set the database information to synchronize with the resource fields of the report.

---

alias.active

Set whether to use resource synchronization.

alias.class

Set the class name that has information to synchronize.

alias.dbaliasname

Set alias of a database with resource information. It must be set with the alias set in db.properties.

alias.props

Set the value to be passed at resource synchronization time.

uslmngr.properties

Set options for the USL security.

UseUserSecurityLogicVer30

Set whether to use USL.

OZDefault_SERVER

Set the default USL name of OZ Server.

OZDefault_CLIENT

Set the default USL name of OZ Client.

47

srmngr.properties

Set options for using the SDM file by OZ Scheduler.

---

use_scheduled_data

Set whether to use the SDM file created by OZ Scheduler. If the SDM file created by the scheduler is in the path set in datamodule_path, the SDM file is used without data binding.

datamodule_path

Set a path to save the SDM file.

html5manager.properties

Set the information for OZ Scheduler to work with HTML5 Viewer.

---

alias.active
Set whether to use the OZ Scheduler.

alias.html5manager_ip
Set the OZ Scheduler IP address. To improve the speed when binding large reports, set multiple OZ Scheduler using an alias.

alias.html5manager_port
Set the OZ Scheduler port number.

alias.serverURL
Set the URL of the OZ server, which creates report images when executing the HTML5 viewer. To use this option, delete the ServerURL option of the html5manager.properties file in the OZ Scheduler.

html5managerhealthcheck.properties

Set the option to check whether OZ Scheduler linked with HTML5 viewer is running.

---

healthcheck.active

Set whether to check the OZ Scheduler that is set in html5manager.properties is running.

healthcheck.interval

Set the interval (in seconds) to check the health. Set a value to 1 and 60. If an invalid value is set, the default value 2 is applied.

healthcheck.retry

Set the number of retries when fail to connect to the server. Set a value to 1 and 10. If an invalid value is set, the default value 3 is applied.

healthcheck.timeout

Set the connection timeout (in seconds). Set a value to 1 and 60. If an invalid value is set, the default value 1 is applied.

xml.properties

Set options for the xml parser of OZ Java Server.

---

sax.parser

Set the parser to process the OZR file. Set to one of SUN, CRIMSON, XERCES, and SYSTEM_DEFAULT.

dom.parser

Set the parser to process the license or XML data file. Set to one of SUN, CRIMSON, XERCES, and SYSTEM_DEFAULT.

xpath.parser

Set the parser to process XPath of the XML data set. Set to one of XERCES and DOM4J.

OZ Server additional functions

OZ Server provides the following additional functions:

- Encrypt user ID and password

- Convert the BUILTIN type repository to RDB type

- Shell command

Encrypt user ID and password

OZ Server provides a function to convert the user ID and password to access the DB server and SAP into an encrypted string.

OZ Java Server

Use the ozencrypted.bat file on the Java server.

User ID of DB server

Encrypt the value of the user entered in the db.properties file and save it back to the db.properties file. Set the db.properties file path to an absolute path.

> ozencrypted.bat *DBAlias*　user*UserID db.propertiesFilePath*

User password of DB server

Encrypt the value of the password entered in the db.properties file and save it back to the db.properties file. Set the db.properties file path to an absolute path.

> ozencrypted.bat *DBAlias*　password*Password db.propertiesFilePath*

User ID of SAP

Encrypt the value of user value entered in the db.properties file and display it in the command window.

> ozencrypted.bat *SAPAlias*　user*UserID*

User password of SAP

Encrypt the value of password value entered in the db.properties file and display it in the command window.

```
ozencrypted.bat SAPAlias    password Password
```

OZ .NET Server

Use the OZEncryptor.exe file on the .NET server.

User ID

Run the OZEncryptor.exe file. Enter the command as *DBAlias/SAPAlias* .user *UserID* in the text box. Clicking the Encrypt button will copy the encrypted user ID to the clipboard.

User password

Run the OZEncryptor.exe file. Enter the command as *DBAlias/SAPAlias* .password *UserID* in the text box. Clicking the Encrypt button will copy the encrypted password to the clipboard.

Convert BUILTIN type repository to RDB type

OZ Server provides a function to convert user information, categories, items, and usage rights when converting a repository type from BUILTIN to RDB.

OZ Java Server

Use the BuiltinToRDBConvert.bat or BuiltinToRDBConvert.sh file on the Java server.

After setting the BUILTIN type item path and DB server information to store the RDB type item in BuiltinToRDBConvert.bat/BuiltinToRDBConvert.sh file, execute BuiltinToRDBConvert.bat/BuiltinToRDBConvert.sh file.

The options that can be set are as follows:

Option	Description
JAVA_HOME	Java platform installed path.
USER_CLASSPATH	User classpath.
MAX_MEMORY	Maximum memory the JVM can use.
MIN_MEMORY	Minimum memory the JVM can use.
JAVA_OPTION	Java options to be set in addition to memory options.

Option	Description
PATH	Path to the built-in type repository item.
DRIVER	JDBC driver class name of RDB type repository.
URL	JDBC driver connection URL of RDB type repository.
ID	DB server user ID of the RDB type repository.
PWD	DB server user password for the RDB type repository.
DATEFIELDTYPENAME	Date type of the RDB type repository. (MSSQL/SYBASE:: DATETIME, ORACLE: DATE, DB2: TIMESTAMP)

OZ .NET Server

Use the BuiltinToRDBConvert.exe file on the .NET server.

Run the BuiltinToRDBConvert.exe file. Click the Convert button after entering the option value.

The options that can be set are as follows:

Option	Description
Built-in Path	Path to the built-in type repository item.
Assembly Config Path	Path to the assembly.properties file.
Driver Name	ADO.NET driver class name of RDB type repository.

Option	Description
URL	ADO.NET driver connection URL of RDB type repository.
DATE Field Type Name	Date type of RDB type repository.(MSSQL/SYBASE:: DATETIME, ORACLE: DATE, DB2: TIMESTAMP)

Shell command

OZ Java Server provides a shell command to control the server and check the operation result.

Display the shell command help.

```
ozcntrl -help
```

Display version information of the OZ Server and the system where the OZ Server is installed.

```
ozcntrl -version
```

Save the data contents of the SDM file as sdmtest.xml file. The SDMfilepath file path can be set to relative as well as absolute path.

```
ozcntrl -testsdm -fn SDMfilepath -xml
```

Get Java property value of the system where OZ Server is installed.

```
ozcntrl -property JavaPropertyName
```

Get OZ Repository Server configuration information.

```
ozcntl -repository.getcfg
```

Download items in OZ Repository Server.

```
ozcntl -repository.dn
```

Get cache manager configuration information.

```
ozcntl  -cache.getcfg
```

Get the database connection pool settings and current state.

```
ozcntrl  -cp.status
```

Get log manager configuration information.

```
ozcntrl  -log.getcfg
```

Download log files.

```
ozcntrl  -log.dn
```

Display logs in real time.

```
ozcntrl  -log.realtime
```

Download monitor log files.

```
ozcntrl  -mntr.dn
```

Display thread dump.

```
ozcntrl  -threaddump
```

Restore the BUILTIN type repository.

```
ozcntrl  -builtin.repair
```

Get the value of an option set in the databind.properties file.

```
ozcntrl  -databind.getcfg
```

Running preferences

This chapter describes the OZ .NET Server execution environment and how to link the OZ Java/.NET Server and web services.

- [Setting up OZ .NET Server execution environment](#)
- [How to link OZ Server and web service](#)

Setting up OZ .NET Server execution environment

The OZ .NET server needs Microsoft .NET Framework 3.0 or later, Microsoft Internet Information Server(IIS) 6.0 or later, and ASP.NET.

The OZ .NET server execution environment settings are as follows:

Add a role to ASP.NET

Platform without role provider

Run the command prompt, move to Microsoft .NET Framework installation folder, move to the folder which has the aspnet_regiis.exe file, and run a command as below:

```
aspnet_regiis.exe -i
```

Platform with role provider

Add server role "IIS" using Add Roles service Wizard.

If the platform provides IIS Roles Service wizard, check "Application Development" and all sub items. If the platform provides the Application Program Server option dialog, check "use ASP.NET" and click Next.

Add OZ .NET Server directory to IIS default web site

IIS version earlier than 7.0

Add OZ .NET Server directory to IIS default web site as a virtual directory.

1. In the Internet Information Service dialog, right click on "Default Web Site", select New and Virtual directory.
2. Enter an alias for the virtual directory. The alias is a name indicating the OZ .NET Server, and the alias is used as the OZ .NET Server URL(http://IP/alias/Server.aspx).
3. Set the location of contents to %OZ_HOME% path of OZ .NET Server.
4. Virtual directory access rights check all supported rights.
5. Click OK and close the dialog.

IIS version 7.0 or later

Add OZ .NET Server to IIS default web site as an application.

1. In IIS Manager, right-click "Default Web Site", and select "Add Application".
2. In Add Application dialog, enter alias. The alias is a name indicating the OZ .NET Server, and the alias is used as the OZ .NET Server URL(http://IP/alias/Server.aspx).
3. Set path to %OZ_HOME% path of OZ .NET Server.
4. Click OK and close the dialog.

Add access permission to OZ .NET Server folder

IIS version earlier than 7.0

Open the Properties dialog of the OZ .NET Server installation directory, move to the Security tab, add ASPNET, NETWORK SERVICE to user, and allow all permissions to ASPNET, NETWORK SERVICE.

IIS version 7.0 or later

Open the Properties dialog of the OZ .NET Server installation directory, move to the Security tab, add IIS_IUSRS to user, and allow all permissions to IIS_IUSRS.

How to link OZ Server and web service

OZ Server provides web services as below:

- Post – provides DataModule web service for SOAP request
- Post – provides DataAction web service for SOAP request
- Provides WSDL for Get requests

OZ Java Server

To use the Apache Axis web service, the following settings are required:

1. Set ozservice.properties
Open the ozservice.properties file and set the enable_ozserver and enable_webservice option to true.

2. Copy library files
Copy the soap2_3_1.jar, mail.jar, and activation.jar files to the same path as the ozsfw80.jar file.

3. Obtain a license file
Obtain a license file that supports web service function from the OZ customer center and copy it to the license folder of the OZ Server.

4. Create wsdl2.java.bat file
After writing the following contents, save it as a wsdl2.java.bat file and copy it to the lib folder of Apache Axis.

```
@echo off
```

```
set JAVA_HOME=C:\jdk1.4.2_12

set PATH=%JAVA_HOME%\bin;.


set WEBSERVICE_CLASSPATH=wsdl4j-1.5.1.jar;commons-logging-1.0.4.jar;commons-discovery-

0.2.jar;log4j-1.2.8.jar;saaj.jar;jaxrpc.jar;axis.jar


echo WSDL2Java is beginning...

%JAVA_HOME%/bin/java -class path "%WEBSERVICE_CLASSPATH%"

org.apache.axis.wsdl.WSDL2Java -o . -d Application -s

http://127.0.0.1:8080/oz/server/ODISERVICE?wsdl

pause
```

5. Run wsdl2.java.bat file

Run the wsdl2.java.bat file to generate the source for the client.

6. Import required files

Import the client's source into the client project and add all the lib files in the lib folder and servlet2_3.jar file to the classpath so that they can be loaded when the client program is run.

7. Write script and run

Write a script that execute DataAction and get DataModule, and run it through Eclipse etc. For how to write the script, contact OZ customer center.

OZ .NET Server

To use the IIS web service, perform the following settings:

1. Set ozservice.properties

Open the ozservice.properties file and set the enable_ozserver and enable_webservice option to true.

2. Obtain a license file

Obtain a license file that supports web service function from the OZ customer center and copy it to the license folder of the OZ Server.

3. Run wsdl.exe file

After installing the .NET Framework SDK, run the wsdl.exe file as shown below to create the ODIServiceService.cs file.

```
wsdl http://hostServer/WebserviceRoot/WebServiceName.asmx?WSDL
```

4. create a new project

Launch Visual studio 2010 to set up the .NET Framework 3.0 and select Console Application to create a new project.

5. Add file and reference

Add the ODIServiceService.cs file to the project, and add a System.Web.Services reference.

6. Write script and run

Write a script that executes DataAction and get DataModule, and run the project. For how to write the script, and contact OZ customer center.