

# **24x7 Scheduler™ 7.0**

## **Multi-platform Edition**

### **24x7 Enterprise Java Bean Reference**

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## About This Guide

This reference describes 24x7 Scheduler Enterprise Java Bean component and interface supported in 24x7 Scheduler Multi-platform Edition, an advanced cross-platform job scheduling and automation system. Information in this reference applies to the 24x7 Scheduler v5.1 running on all supported operating systems. This reference contains information for experienced users of the 24x7 Scheduler and assumes that you have a working knowledge of Java and EJB technologies and also understand basic concepts of your operation system.

## Conventions Used in This Document

This section describes the style conventions used in this document.

### *Italic*

An *italic* font is used for filenames, URLs, emphasized text, and the first usage of technical terms.

### Monospace

A monospaced font is used for code fragments and data elements.

### **Bold**

A **bold** font is used for important messages, names of options, names of controls and menu items, and keys.

### Graphical marks



- This mark is used to indicate product specific options and issues and to mark useful tips.



- This mark is used to indicate important notes.

## Abbreviations and Terms

This guide uses common abbreviations for many widely used technical terms including FTP, HTTP, RAS, SQL, DBMS, SSH and other.

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## 24x7 Scheduler Enterprise Java Bean

### Deployment

24x7 Scheduler Enterprise Java Bean has been developed to provide easy access to 24x7 Scheduler Multi-platform Edition from enterprise applications using Sun EJB standards. The EJB bean is provided ready-for-deployment to the following application servers:

- JBoss AS
- BEA Weblogic
- IBM WebSphere

The package for deployment can be found in the <installation dir>/ejb/ directory and named ejb24x7.jar. It has the following structure:

- com/softtreotech/jscheduler/ejb/\* - compiled java classes for the Session EJB
- cscheduler/jdpb24x7.jar, cscheduler/jgl3.1.0.jar – java libraries for connecting to 24x7 Scheduler Multi-platform Edition
- META-INF/ejb-jar.xml – common standard deployment descriptor for all the application servers
- META-INF/jboss.xml, META-INF/ejb-borland.xml, META-INF/sun-ejb-jar.xml, META-INF/weblogic-ejb-jar – deployment descriptors specific for different application servers.

### Minimal System Requirements

1. 24x7 Scheduler Multi-platform Edition v7.0 or later
2. 1.2 Mbytes free disk space
3. JDK 1.8 or later

### Security Issues

To secure access to the remote 24x7 Scheduler servers enable security options on these servers. For more information please see "Security" topic in the 24x7 Automation Suite User's Guide and on-line help files.

### Interface J24x7EJB

24x7 Scheduler is a Stateful Session EJB bean. Its interface named 'J24x7EJB' provides all the functionality needed to work with a remote 24x7 Scheduler. The usual scenario can look like the following:

- Check that 24x7 Scheduler, you are connecting to, is started and has remote control enabled in its network options.
- Startup application server.
- Deploy ejb24x7.jar and check that it was deployed successfully.
- Create InitialContext in your client program to connect to application server.

- Lookup 24x7 Scheduler object and cast it to J24x7EJBHome interface.
- Create a remote interface J24x7EJB with the help of the home interface.
- Call `openSession()` business method to connect to 24x7 Scheduler.
- Call needed business methods to work with jobs/folders/agents etc.
- Call `closeSession()` business method to disconnect from 24x7 Scheduler.
- Destroy EJB with the help of the remove method.



**Important Note:** All the examples in this documentation are written for JBoss application server. However, you can easily adapt them for your own application server. Here is an example how to connect to application server and obtain J24x7EJB interface.

#### Example:

```
// Properties to connect to application server
Properties props = new Properties();

props.put(Context.INITIAL_CONTEXT_FACTORY,
    "org.jnp.interfaces.NamingContextFactory");
props.put(Context.PROVIDER_URL, "localhost:1099");
props.put(Context.URL_PKG_PREFIXES, "org.jboss.naming:org.jnp.interfaces");

// Lookup home interface
InitialContext jndiContext = new InitialContext(props);
Object ref = jndiContext.lookup("24x7Scheduler");

J24x7EJBHome home = (J24x7EJBHome) PortableRemoteObject.narrow(ref,
    J24x7EJBHome.class);

// Create EJB bean and obtain remote interface
J24x7EJB j24x7EJB = home.create();
```

## Exceptions and Error Handling

All methods can throw `J24x7EJBException`. Two error codes are supported:

#### Error codes:

REMOTE_OPERATION_ERROR	Returned if <code>RemoteException</code> has occurred during remote call to 24x7 Scheduler
INVALID_DATA	Returned if the operation can't be executed successfully because of incorrect method parameters.

Exception's method `getMessage()` can be used to obtain the error message. See code examples in the following topics for more information on how to use this method.



## Constants

The following constants can be use in the code

Data Type	Name	Value	Comments
Integer	OPERATION_SUCCEEDED	Integer(1)	Method call return code
Integer	OPERATION_FAILED	Integer(-1)	Method call return code
Integer	NOT_FOUND	Integer(-4)	Method call return code
Integer	POSTPONED_SHUTDOWN	Integer(-100)	Method call return code
int	SECURITY_OFF	-1	User's security role assignment.
int	USER_ADMIN	0	User's security role assignment. Synonym ROLE_ADMIN
int	USER_POWER	1	User's security role assignment. Synonym ROLE_STANDARD
int	USER_OPER	2	User's security role assignment. Synonym ROLE_RESTRICTED
int	USER_GUEST	3	User's security role assignment. Synonym ROLE_GUEST
int	RC_INFO	0	Job event message severity
int	RC_WARNING	1	Job event message severity
int	RC_ERROR	2	Job event message severity
int	REMOTE_OPERATION_ERROR	1	Error code returned by J24x7EJBException
int	INVALID_DATA	2	Error code returned by J24x7EJBException

## J24x7EJB Public Methods

### addAgentProfile

**public void addAgentProfile ( String profileName, String comMethod, String location, String port, String options ) throws J24x7EJBException**

The **addAgentProfile** method creates new 24x7 Remote Agent profile.

#### Parameters:

profileName	Name of the new Remote Agent Profile. This name must be unique.
comMethod	Name of the communication driver to be used for the connections to the Agent  Values are: <ul style="list-style-type: none"><li>• WinSock</li></ul>
location	The location of the Agent. Specify one of the following values: <ul style="list-style-type: none"><li>• The IP address (for example, 199.99.99.91)</li><li>• The host name of the remote computer (network computer name in workgroup)</li><li>• LocalHost (this indicates that the Agent resides on the local machine)</li></ul>
port	Specify the port number for the Agent (for example, 1096). Each server application requires a unique port number on the server machine. If you specify a port number, select a number that is greater than 4096 and less than 65536.
options	Reserved for future use.

#### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

#### See also:

updateAgentProfile  
deleteAgentProfile  
getAgentList

#### Example:

```
try
{
    j24x7EJB.addAgentProfile("AgentProfile Test", "WinSock",
                             "localhost", "1092", "");
}
```

```
}  
catch (J24x7EJBException e)  
{  
    System.out.println("J24x7EJBException " + e.toString());  
    System.out.println(e.getCode() + " " + e.getMessage());  
}
```

## addASGroup

**public Integer addASGroup(String name, String agents, IntegerHolder groupId) throws J24x7EJBException**

The **addASGroup** method creates new Auto-scaling group.

### Parameters:

Name	Name of the new Auto-scaling Group. This name must be unique.
agents	Comma-separated list of Remote Agent identifiers.
groupId	Reference variable for receiving unique identifier of the new auto-scaling group

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

- addAgentProfile
- deleteAgentProfile
- deleteASGroup
- getAgentList

### Example:

```
try  
{  
    IntegerHolder id = new IntegerHolder(0);  
    j24x7EJB.addASGroup("Group 1", "190,191,198", id);  
}  
catch (J24x7EJBException e)  
{  
    System.out.println("J24x7EJBException " + e.toString());  
    System.out.println(e.getCode() + " " + e.getMessage());  
}
```

## addCalendar

**public Integer addCalendar(String calendarName, Boolean exclusive ) throws J24x7EJBException;**

The **addCalendar** method creates a new calendar.



**Important Note:** This method is only valid for 24x7 Scheduler Multi-platform Edition.

**Return:** Returns Id of the new calendar.

**Parameters:**

calendarName	Name of the new calendar. This name must be unique.
exclusive	Type of the calendar. Two types of calendars are supported "Exclusive" and "Inclusive". "Exclusive" calendars define set of dates, which could be considered as exception dates or holidays. "Inclusive" calendars are the opposite.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addCalendarDay

**Example:**

```
try
{
    Integer id = j24x7EJB.addCalendar("Calendar Test1", new Boolean(true));
    System.out.println("Created calendar ID: " + id);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## addCalendarDay

**public Integer addCalendarDay(Integer calendarId, Integer year, Integer month, Integer day, String description) throws J24x7EJBException**

The **addCalendarDay** method adds a new day to the calendar.



**Important Note:** This method is only valid for 24x7 Scheduler Multi-platform Edition.

**Return:** Returns Id of the created calendar day.

calendarId,	Id of the calendar
year	Year part of the day date. Supported range 1900-3000
month	Month part of the day date. Supported range 1-12
day	Day part of the day date. Supported range 1-31. Day must be a valid day for the specified Year and Month.
description	Description of the day limited by 50 characters

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addCalendar

**Example:**

```
try
{
    Integer id = j24x7EJB.addCalendarDay(new Integer(38), new Integer(2005),
        new Integer(10), new Integer(24), "Description");
    System.out.println("Created calendar day id: " + id);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## addDatabaseProfile

**public void addDatabaseProfile(String profileName, String databaseDriver, String server, String databaseName, Boolean autoCommit, String user, String password) throws J24x7EJBException**

The **addDatabaseProfile** method creates a new database profile.

**Parameters:**

profileName	Name of the new Database Profile. This name should be unique.
databaseDriver	The name of the database driver that you want to use for connection. This name must much any supported DBMS name as they are specified in the Database Profiles dialog in 24x7 Scheduler (see Tools/Database Profiles menu).
server	(Optional) The database server name. The format for the name differs for different database systems. Specify an empty string "" if you connect to a local database and the server name is not required for connection. If you connect using ODBC (DatabaseDriver="ODBC") specify name of the desired ODBC profile as the Server name.
databaseName	(Optional) The name of the database. Specify an empty string "" if the database name is not required for connection.
autoCommit	AutoCommit mode. Some databases support AutoCommit mode. Specify TRUE to turn AutoCommit on or specify FALSE otherwise. If DBMS does not support AutoCommit then this parameter is ignored.
user	The name of the user to logon to the database.
password	The password to use to logon to the database.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- updateDatabaseProfile
- getDatabaseProfile
- deleteDatabaseProfile
- getDatabaseList

**Example:**

```
try
{
    j24x7EJB.addDatabaseProfile("Database Profile Test",
                               "MS SQL Server 7.x and later", "Neptune",
                               "warehouse", new Boolean(true), "sa", "*****");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## addHoliday

**public void addHoliday(Integer year, Integer month, Integer day, String description) throws J24x7EJBException**

**WARNING: Method addHoliday is deprecated and provided for backward compatibility only. Don't use this method in new applications.**

The **addHoliday** method adds a new holiday to the [default] calendar.

### Parameters:

Year	Year part of the holiday date. Supported range 1900-3000
month	Month part of the holiday date. Supported range 1-12
Day	Day part of the holiday date. Supported range 1-31. Day must be a valid day for the specified Year and Month.
description	Holiday name or description limited by 50 characters.

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

deleteHoliday  
getHolidays

### Example:

```
try
{
j24x7EJB.addHoliday(new Integer(2005), new Integer(11), new Integer(27),
    "Thanksgiving Day");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## addJobQueue

**public void addJobQueue(String queueName, Integer maxSize) throws J24x7EJBException**

The **addJobQueue** method creates a new job queue.



**Note:** This method has been deprecated. Use [addJobQueueEx](#) method.



**Note:** In 24x7 Scheduler Windows Edition, adding new job queue does not have an immediate effect. The new queue is available to jobs only after the 24x7 Scheduler is restarted. In 24x7 Scheduler Multi-platform Edition, the new queue is available immediately to run jobs.

#### Parameters:

queueName	Name of the new Job Queue. This name should be unique.
maxSize	Max queue size in Mbytes. 1 Mbytes should be sufficient in most cases.

#### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

#### See also:

updateJobQueue  
getJobQueue  
deleteJobQueue  
getJobQueueList

#### Example:

```
try
{
    j24x7EJB.addJobQueueEx("Payroll jobs",
        new Integer(1), new Integer(200), new Boolean(true)
        "alerter@domain.com", null, "helpdesk@domain.com");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## addJobQueueEx

**public void addJobQueueEx(String queueName, Integer maxSize, Integer maxJobs, Boolean nearCapacityAlerts, String emailSender, String emailPassword, String emailRecipients) throws J24x7EJBException**

The **addJobQueueEx** method creates a new job queue.



**Note:** In 24x7 Scheduler for Windows adding new job queue does not have an immediate effect. It takes effect only after the 24x7 Scheduler is restarted. In 24x7 Scheduler Multi-platform Edition new queue is available immediately to run the jobs.



**Parameters:**

queueName	Name of the Job Queue. This name should be unique.
maxSize	Max queue size in Mbytes. 1 Mbytes should be sufficient in most cases.
maxJobs	Maximum number of jobs allowed in a queue at any moment in time. The count includes both running and queued jobs, including jobs placed on hold. Specify zero value for unlimited number of jobs.
nearCapacityAlerts	Enables sending email alerts in case a queue is at or near its maximum capacity. The capacity is controlled by <b>MaxSize</b> and <b>MaxJobs</b> parameters
emailSender	Email account (for MAPI email protocol) or email address (for SMTP email protocol) to use for sending "near capacity" and "over capacity" email alerts.
emailPassword	Email password to use for authenticating email sender to the email server. Specify an empty string or null value if password is not required.
emailRecipients	Comma-separated list of email recipient addresses for "near capacity" and "over capacity" email alerts.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- updateJobQueueEx
- getJobQueue
- deleteJobQueue
- getJobQueueList

**Example:**

```
try
{
    j24x7EJB.addJobQueueEx("Payroll jobs",
        new Integer(1), new Integer(200), new Boolean(true)
        "alerter@domain.com", null, "helpdesk@domain.com");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## addMessage

**public void addMessage(String description, String defaultActionType, String messageType, Boolean enabled, Integer ownerJobId, String defaultMessage, String subscribers, IntegerHolder messageId) throws J24x7EJBException**

The addMessage method creates new message definition in the system settings.

### Parameters:

description	Message definition description. Use it as a message name reference.
defaultActionType	One of the following one character codes: <b>D</b> – do nothing, meaning do not automatically delete the message from the message queue after it's received. The message will expire and get purged automatically later. <b>B</b> – delete received message from the message queue before executing jobs listed in the message subscriber array.. <b>A</b> – delete received message from the message queue after executing jobs listed in the message subscriber array.
messageType	This parameter is reserved for future use. In the current version always specify <b>T</b> or null value.
enabled	Message state, enabled/disabled. Disabled messages are ignored and not processed automatically when they are received.
ownerJobId	The numeric identifier of the job that owns the message. This an optional property mostly for documentation purpose to make it easier to see when job is expected to send this type of messages.
defaultMessage	The default data sent with the message. The data format is user-defined, could be a plain text, XML, JSON, or anything else required.
subscribers	Comma-separated list of job identifiers or job names. The listed jobs get launched when the message is received.
messageId	The holder variable populated with the unique message identifier of the created message definition

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

deleteMessage

**Example:**

```
try
{
    IntegerHolder id = new IntegerHolder(0);
    j24x7EJB.addMessage("New message", "B", "T", true,
        "{ \"name\" : \"George\" }", "185,186,187", id);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## addTemplate

**public void addTemplate(String section, String name, String template, String text) throws J24x7EJBException**

The **addTemplate** method creates a new job template.

**Parameters:**

section	Name of the template section in the catalog. <b>addTemplate</b> automatically creates the specified <b>Section</b> if it does not yet exist.
name	Name of the new template. This name must be unique within the <b>Section</b> .
template	Name of the new template file. The file name must be unique.
Text	Template text.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- deleteTemplate
- setTemplate
- getTemplate
- getJobTemplateData
- getTemplateCatalog
- setJobTemplateData

**Example:**

```
try
{
    j24x7EJB.addTemplate("FTP jobs",
                        "Upload Monthly Reports",
                        "%HOME%\\Templates\\ftp_month_reports.ini",
                        "TEMPLATE_CODE");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## changeFolder

**public void changeFolder(String jobID, String targetFolderID) throws J24x7EJBException**

The **changeFolder** method moves a job with the specified **JobID** to a job folder specified by the **TargetFolderID** value.

**Parameters:**

jobID	Job ID converted to string or job name.
targetFolderID	Folder ID converted to string or folder name.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- createJob
- setJobProperty
- createFolder

**Example:**

```
try
{
    j24x7EJB.changeFolder("folder ejb", "folder ejb name change");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## closeSession

**public void closeSession( ) throws J24x7EJBException**

The **closeSession** method closes work session with the J24x7EJB and terminates the connection. The session must be previously opened using the **openSession** method.

The **closeSession** method does not destroy **J24x7EJB**.

**Parameters:** None

**Throws:**

Throws [J24x7EJBException](#) exception. The error code is REMOTE\_OPERATION\_ERROR. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

openSession

**Example:**

```
try
{
    // insert valid variable values here
    j24x7EJB.openSession(portNo, hostName, userID, userPass, serial);
    j24x7EJB.closeSession();
    System.out.println("session closed");
}
catch (J24x7EJBException e)
{
    System.out.println("InteractionException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## createFolder

**public Integer createFolder(String name, String description) throws J24x7EJBException**

The **createFolder** method creates a new job folder.

**Return:** Returns ID of the new folder.

**Parameters:**

folderName	The name of the new folder
------------	----------------------------

folderDescription	The description that you want to attach to the folder so other people can see how this folder should be used. You can specify an empty string if no description is needed.
-------------------	--

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

deleteFolder  
getFolderProperty  
setFolderProperty

**Example:**

```
try
{
    Integer id = j24x7EJB.createFolder("jobFolder 1 ", "Description 1");
    System.out.println("Created folder Id: " + id);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## createJob

**public Integer createJob(String jobDefinition) throws J24x7EJBException**

The **createJob** method creates a new job and adds it to the active job pool.

**Return:** Job ID of the created job

**Parameters:**

jobDefinition	The Job definition in JDL format. For a wide variety of examples see job templates available in the [24x7 install directory]\Template subdirectory.  For supported job properties and their JDL names see <a href="#">Job Properties in JDL Format</a> topic.
---------------	---

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the

operation can't be executed successfully because of an invalid parameter or data) the error code is `INVALID_DATA`. Use the `getMessage()` method of `Throwable` class to obtain the error message.

**See also:**

- `setJobProperty`
- `setJobTemplateData`
- `changeFolder`
- `updateJob`
- `disableJob`
- `protectJob`
- `runJob`

**Example:**

```
try
{
    String jobDefinition = "NAME=My Job 1\r\n" +
                           "COMMAND=c:\\winnt\\notepad.exe\r\n" +
                           "SCHEDULE_TYPE=D\r\n" +
                           "FRIDAY=Y\r\n" +
                           "SUNDAY=Y\r\n" +
                           "MONDAY=Y\r\n" +
                           "TUESDAY=Y\r\n" +
                           "WEDNESDAY=Y\r\n" +
                           "THURSDAY=Y\r\n" +
                           "SATURDAY=Y\r\n" +
                           "START_TIME=10:00\r\n" +
                           "ASYNC=N\r\n" +
                           "LOG=Y\r\n" +
                           "DESCRIPTION=job description\r\n" +
                           "JOB_TYPE=P\r\n" +
                           "FOLDER=1\r\n" +
                           "QUEUE=[default]";

    Integer id = j24x7EJB.createJob(jobDefinition);
    System.out.println("Created job Id: " + id);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteAgentProfile

**public void deleteAgentProfile(String profileName) throws J24x7EJBException**

The **deleteAgentProfile** method deletes specified profile of 24x7 Remote Agent.

**Parameters:**

profileName	Name of an existing Remote Agent Profile.
-------------	---

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addAgentProfile  
updateAgentProfile

**Example:**

```
try
{
    j24x7EJB.deleteAgentProfile("AgentProfileTest");
    System.out.println("agent profile deleted.");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteASGroup

**public void deleteASGroup(Integer groupId) throws J24x7EJBException**

The **deleteASGroup** method deletes specified auto-scaling group.

**Parameters:**

groupId	Auto-scaling group identifier
---------	-------------------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addASGroup  
addAgentProfile  
updateAgentProfile



**Example:**

```
try
{
    j24x7EJB.deleteASGroup(190);
    System.out.println("group deleted.");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteCalendar

**public void deleteCalendar(Integer calendarId) throws J24x7EJBException**

The **deleteCalendar** method deletes specified calendar.



**Important Note:** This method is only valid for 24x7 Scheduler Multi-platform Edition.

**Parameters:**

calendarId	Id of deleted calendar
------------	------------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**Example:**

```
try
{
    j24x7EJB.deleteCalendar(new Integer(35));
    System.out.println("calendar deleted. ");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteCalendarDay

**public void deleteCalendarDay(Integer calendarId, Integer year, Integer month, Integer day) throws J24x7EJBException**

The **deleteCalendar** method deletes specified calendar.



**Important Note:** This method is only valid for 24x7 Scheduler Multi-platform Edition.

**Parameters:**

calendarId,	Id of the calendar
year	Year part of the day date. Supported range 1900-3000
month	Month part of the day date. Supported range 1-12
day	Day part of the day date. Supported range 1-31. Day must be a valid day for the specified Year and Month.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**Example:**

```
try
{
    j24x7EJB.deleteCalendarDay(new Integer(33), new Integer(2005),
                               new Integer(9), new Integer(27));
    System.out.println("calendar day deleted.");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteDatabaseProfile

**public void deleteDatabaseProfile(String profileName) throws J24x7EJBException**

The **deleteDatabaseProfile** method deletes specified database profile.

**Parameters:**

profileName	Name of an existing Database Profile.
-------------	---------------------------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addDatabaseProfile  
updateDatabaseProfile

**Example:**

```
try
{
    j24x7EJB.deleteDatabaseProfile("DatabaseProfileTest");
    System.out.println("database profile deleted.");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteFolder

**public void deleteFolder(String folderID)**

The **deleteFolder** method deletes job folder from 24x7 Job Database. If the specified folder contains jobs, all these jobs are also deleted.

**Parameters:**

folderID	Folder ID converted to string or folder name.
----------	---

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

createFolder  
setFolderProperty

**Example:**

```
try
{
```

```
j24x7EJB.deleteFolder("folder1");
System.out.println("folder deleted.");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteHoliday

**public void deleteHoliday(Integer year, Integer month, Integer day) throws J24x7EJBException**

**WARNING: Method deleteHoliday is deprecated and provided for backward compatibility only. Don't use this method in new applications.**

The **deleteHoliday** method deletes holiday record from the 24x7 Holiday Table.

### Parameters:

Year	Year part of the day date. Supported range 1900-3000
month	Month part of the day date. Supported range 1-12
day	Day part of the day date. Supported range 1-31. Day must be a valid day for the specified Year and Month.

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

addHoliday  
getHolidays

### Example:

```
try
{
    j24x7EJB.deleteHoliday(new Integer(2005), new Integer(10), new Integer(27));
    System.out.println(" holiday deleted.");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteJob

**public void deleteJob(String jobId) throws J24x7EJBException**

The **deleteJob** method deletes job from both the active job pool and the 24x7 Job Database.

### Parameters:

jobID	Job ID converted to string or job name.
-------	---

### Throws:

J24x7EJBException if RemoteException has occurred (code= REMOTE\_OPERATION\_ERROR) or if the operation can't be executed successfully, cause invalid data (code= INVALID\_DATA). Use the getMessage() method of Throwable class to obtain the error message.

### See also:

disableJob  
createJob  
deleteFolder

### Example:

```
try
{
    j24x7EJB.deleteJob("11");
    System.out.println("Job 11 deleted.");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteJobQueue

**public void deleteJobQueue(String queueName) throws J24x7EJBException**

The **deleteJobQueue** method deletes specified job queue.



**Note:** In 24x7 Scheduler for Windows deleting new job queue does not have an immediate effect. It takes effect only after the 24x7 Scheduler is restarted. In 24x7 Scheduler Multi-platform Edition queue can be deleted only if it is empty. The deletion takes immediate effect.

**Parameters:**

queueName	Name of an existing Job Queue.
-----------	--------------------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addJobQueue  
updateJobQueue  
getJobQueue  
getJobQueueList

**Example:**

```
try
{
    j24x7EJB.deleteJobQueue( "JobQueue1" );
    System.out.println( "Job queue deleted. " );
}
catch ( J24x7EJBException e )
{
    System.out.println( "J24x7EJBException " + e.toString() );
    System.out.println( e.getCode() + " " + e.getMessage() );
}
```

## deleteMessage

**public void deleteMessage(String messageName) throws J24x7EJBException**

The **deleteMessage** method deletes specified message definition.

**Parameters:**

messageName	Name of an existing Message.
-------------	------------------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addMessage

**Example:**

```
try
{
    j24x7EJB.deleteMessage("Pathing Trigger");
    System.out.println("Message deleted. ");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## deleteTemplate

**public void deleteTemplate(String section, String name, Boolean deleteFile) throws J24x7EJBException**

The **deleteTemplate** method deletes template from the template catalog (TEMPLATE.INI) and optionally deletes the template file.

**Parameters:**

Section	Name of the template section in the template catalog from which to delete the template specified by <b>Name</b> parameter.
Name	Name of the template to be deleted.
deleteFile	If <b>DeleteFile</b> parameter is set to true the template source file is also deleted. If <b>DeleteFile</b> is set to false the template name is deleted from the catalog, but the file is left on disk.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- addTemplate
- getTemplate
- getTemplateCatalog
- setTemplate
- setJobTemplateData

**Example:**

```
try
{
    j24x7EJB.deleteTemplate("Web reports", "FTP upload", new Boolean(false));
}
```

```
        System.out.println("template deleted.");
    }
    catch (J24x7EJBException e)
    {
        System.out.println("J24x7EJBException " + e.toString());
        System.out.println(e.getCode() + " " + e.getMessage());
    }
}
```

## disableJob

**public void disableJob(String jobID) throws J24x7EJBException**

The **disableJob** method disables job and removes it from both the active job pool. The job is not deleted from the 24x7 Job Database and can be later enabled again.

### Parameters:

JobID	Job ID converted to string or job name
-------	--

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

enableJob  
deleteJob

### Example:

```
try
{
    j24x7EJB.disableJob("11");
    System.out.println("Job 11 disabled.");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## enableJob

**public void enableJob(String jobID) throws J24x7EJBException**

The **enableJob** method enables job and places it backs to the active job pool.



**Parameters:**

jobID	Job ID converted to string or job name.
-------	---

**See also:**

disableJob  
deleteJob

**Example:**

```
try
{
    j24x7EJB.enableJob("15");
    System.out.println("Job 15 enabled.");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getAgentList

**public String getAgentList(Boolean htmlFormat) throws J24x7EJBException**

The **getAgentList** method obtains list of names of configured 24x7 Remote Agent Profiles. If the method succeeds, returned variable is populated with the agent list. If **htmlFormat** is true, the returned variable is populated with a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line.

**Return:** Returns the name list. If **htmlFormat** is true, name list is a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line.

**Parameters:**

htmlFormat	The output format in which you want to obtain the list of 24x7 Remote Agent Profiles.
------------	---

**Value Meaning:**

true - format output as HTML text  
false - format output as plain text

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addAgentProfile  
deleteAgentProfile  
getAgentProfile

**Example:**

```
try
{
    String agentList = j24x7EJB.getAgentList(new Boolean(true));
    System.out.println(agentList);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getAgentProfile

**public AgentProfileContent getAgentProfile(String profileName) throws J24x7EJBException**

The **getAgentProfile** method retrieves properties of an existing 24x7 Remote Agent profile.

**Return:** Returns the object of **AgentProfileContent** type, that has following fields: comMethod (name of the communication driver), location (location of the agent), port (the communication port number), options(additional communications options)

**Parameters:**

profileName	Remote Agent profile name.
-------------	----------------------------

**Throws:**

J24x7EJBException if RemoteException has occurred (code= REMOTE\_OPERATION\_ERROR) or if the operation can't be executed successfully, cause invalid data (code= INVALID\_DATA). Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addAgentProfile  
updateAgentProfile  
deleteAgentProfile  
getAgentList

**Example:**

```
try
{
    AgentProfileContent agentProfileContent =
        j24x7EJB.getAgentProfile("AgentProfile Test");
    System.out.println(" ComMethod " + agentProfileContent.getComMethod());
    System.out.println(" Location " + agentProfileContent.getLocation());
    System.out.println(" Port " + agentProfileContent.getPort());
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getCalendar

**public CalendarContent getCalendar(Integer calendared) throws J24x7EJBException**

The **getCalendar** method retrieves properties of an existing Business Calendar.

**Return:** Returns the object of **CalendarContent** type, that has following fields: name (name of the calendar) and exclusive (type of calendar)

**Parameters:**

calendarID	Numeric ID of the business calendar whose properties to return.
------------	---

**Throws:**

J24x7EJBException if RemoteException has occurred (code= REMOTE\_OPERATION\_ERROR) or if the operation can't be executed successfully, cause invalid data (code= INVALID\_DATA). Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- addCalendar
- getCalendarList
- deleteCalendar
- getCalendarDays

**Example:**

```
try
{
    CalendarContent calendarContent =
        j24x7EJB.getCalendar( new Integer(55) );
    System.out.println(" Name " + calendarContent.getName());
    System.out.println(" Is Exclusive " + calendarContent.getExclusive());
}
catch (J24x7EJBException e)
```

```
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getCalendarDays

**public String getCalendarDays(Integer calendarId, Integer year, Boolean htmlFormat) throws J24x7EJBException**

The **getHolidays** method obtains list of calendar days for the specified **year**. If the method succeeds, it returns the list of days. If **htmlFormat** is true, the returned variable is populated with a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line. Each line contains yes, month, day, and description separated by tab characters.



**Important Note:** This method is only valid for 24x7 Scheduler Multi-platform Edition.



**Note:** You can use `split()` or `getToken()` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

**Return:** Returns the list of holidays.

### Parameters:

calendarID	Numeric ID of the business calendar whose days to return.
year	The year for which you want to obtain the list of days.
htmlFormat	The output format in which you want to obtain the list of days.

### Value Meaning:

true - format output as HTML text

false - format output as plain text

### Example:

```
try
{
    String list = j24x7EJB.getCalendarDays(new Integer(21), new Integer(2005),
                                           new Boolean(true));
    System.out.println(list);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

```
}
```

## getCalendarList

**public String getCalendarList(Boolean htmlFormat) throws J24x7EJBException**

The **getCalendarList** method obtains list of names of configured Business Calendars. If the method succeeds, returned variable is populated with the list of calendars. If **htmlFormat** is true, the returned variable is populated with a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line.



**Important Note:** This method is only valid for 24x7 Scheduler Multi-platform Edition.



**Note:** You can use `split()` or `getToken()` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

**Return:** Returns the list of database profile names.

### Parameters:

htmlFormat	The output format in which you want to obtain the list of Business Calendars
------------	--

### Value Meaning:

true - format output as HTML text

false - format output as plain text

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the `getMessage()` method of Throwable class to obtain the error message.

### See also:

`addCalendar`

`deleteCalendar`

`getCalendar`

`getCalendarDays`

### Example:

```
try
{
    String list = j24x7EJB.getCalendarList(new Boolean(false));
    System.out.println(list);
}
```

```
}  
catch (J24x7EJBException e)  
{  
    System.out.println("J24x7EJBException " + e.toString());  
    System.out.println(e.getCode() + " " + e.getMessage());  
}
```

## getDatabaseList

**public String getDatabaseList(Boolean htmlFormat) throws J24x7EJBException**

The **getDatabaseList** method obtains list of names of configured Database Profiles. If the method succeeds, returned variable is populated with the list of database profiles. If **htmlFormat** is true, the returned variable is populated with a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line.



**Note:** You can use `split()` or `getToken()` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

**Return:** Returns the list of database profile names.

### Parameters:

htmlFormat	The output format in which you want to obtain the list of Database Profiles.
------------	--

### Value Meaning:

true - format output as HTML text

false - format output as plain text

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the `getMessage()` method of Throwable class to obtain the error message.

### See also:

- addDatabaseProfile
- deleteDatabaseProfile
- getDatabaseProfile

**Example:**

```
try
{
    String list = j24x7EJB.getDatabaseList(new Boolean(false));
    System.out.println(list);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getDatabaseProfile

**public DatabaseProfileContent getDatabaseProfile(String profileName) throws J24x7EJBException**

The **getDatabaseProfile** method retrieves properties of an existing database profile.

**Return:** Returns the object of **DatabaseProfileContent** type. It has following fields: databaseDriver (name of the database driver), server (name of the database server), databaseName (name of the database), autoCommit (state of the AutoCommit mode), user (name of the user to logon), password (password used to logon to the database)

**Parameters:**

profileName	Database profile name.
-------------	------------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- addDatabaseProfile
- updateDatabaseProfile
- deleteDatabaseProfile

**Example:**

```
try
{
    DatabaseProfileContent databaseProfileContent =
        j24x7EJB.getDatabaseProfile("Database Profile Test");
    System.out.println(" AutoCommit " + databaseProfileContent.getAutoCommit());
    System.out.println(" DatabaseDriver " +
        databaseProfileContent.getDatabaseDriver());
    System.out.println(" DatabaseName " +
        databaseProfileContent.getDatabaseName());
}
```

```
        System.out.println(" Password " + databaseProfileContent.getPassword());
        System.out.println(" Server " + databaseProfileContent.getServer());
        System.out.println(" User " + databaseProfileContent.getUser());
    }
    catch (J24x7EJBException e)
    {
        System.out.println("J24x7EJBException " + e.toString());
        System.out.println(e.getCode() + " " + e.getMessage());
    }
}
```

## getFolderList

**public String getFolderList(Boolean htmlFormat) throws J24x7EJBException**

The **getFolderList** method obtains list of all job folders. If the method succeeds, returned variable is populated with the list of job folder IDs and names.



**Note:** You can use `split()` or `getToken()` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

**Return:** Returns with the list of job folder IDs and names. If **htmlFormat** is true, the list of job folder IDs is a text formatted as a HTML table; otherwise it a plain text containing each entry on a new line. Each line contains folder ID and name separated by a tab character.

### Parameters:

htmlFormat	The output format in which you want to obtain the result.
------------	---

### Value Meaning:

true - format output as HTML text

false - format output as plain text

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the `getMessage()` method of Throwable class to obtain the error message.

### See also:

createFolder  
deleteFolder  
setFolderProperty  
getFolderProperty



**Example:**

```
try
{
    String list = j24x7EJB.getFolderList(new Boolean(false));
    System.out.println(list);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getFolderProperty

**public String getFolderProperty(String folderID, String propertyName) throws J24x7EJBException**

The **getFolderProperty** method obtains value of the specified job **propertyName** for the specified **folderID**. The **propertyName** must be a valid JDL job property name. The following folder properties are supported: "FOLDER\_NAME", "DESCRIPTION", "FOLDER", "MODIFY\_TIME", "MODIFY\_USER", "MODIFY\_TERMINAL" If the method succeeds, it returns the value of the folder property.

**Return:** Returns the value of the folder property.

**Parameters:**

FolderID	Folder ID converted to string or Folder name.
PropertyName	The folder property name.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

createFolder

setFolderProperty

**Example:**

```
try
{
    String value = j24x7EJB.getFolderProperty("1", "DESCRIPTION");
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
}
```

```
    System.out.println(e.getCode() + " " + e.getMessage());  
}
```

## getForecast

**public String getForecast(Boolean htmlFormat) throws J24x7EJBException**

The **getForecast** method obtains 7-days job forecast.

**Return:** Returns String with job forecast report. If **htmlFormat** is true, returned variable is populated with a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line.

**Parameters:**

htmlFormat	The output format in which you want to obtain the list of forecasted jobs.
------------	--

**Value Meaning:**

true - format output as HTML text

false - format output as plain text

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

getMonitor

getJobQueueMonitor

**Example:**

```
try  
{  
    String value = j24x7EJB.getForecast(new Boolean(true));  
    System.out.println(value);  
}  
catch (J24x7EJBException e)  
{  
    System.out.println("J24x7EJBException " + e.toString());  
    System.out.println(e.getCode() + " " + e.getMessage());  
}
```

## getGlobalVariable

**public String getGlobalVariable(String variableName) throws J24x7EJBException**

The **getGlobalVariable** method obtains value of the global variable on the target 24x7 Remote Agent or 24x7 Master Scheduler.



**Important Note:** This method is only valid for 24x7 Scheduler Windows Edition.

**Return:** Returns value of the specified global variable converted to String format.

**Parameters:**

variableName	The name of the global variable that must exist on the target 24x7 Agent or Master Scheduler. Variable names are case-insensitive.
--------------	--

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

setGlobalVariable

**Example:**

```
try
{
    String value = j24x7EJB.getGlobalVariable("test_var");
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getHolidays

**public String getHolidays(Integer year, Boolean htmlFormat) throws J24x7EJBException**

**WARNING: Method getHolidays is deprecated and provided for backward compatibility only. Don't use this method in new applications.**

The **getHolidays** method obtains list of holidays for the specified **year**. If the method succeeds, it returns the list of holidays. If **htmlFormat** is true, the returned variable is populated with a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line. Each line contains holiday date and description separated by tab characters.



**Note:** You can use `split( )` or `getToken( )` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

**Return:** Returns the list of holidays.

**Parameters:**

Year	The year for which you want to obtain the list of holidays.
htmlFormat	The output format in which you want to obtain the list of Holidays.

**Value Meaning:**

true - format output as HTML text

false - format output as plain text

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the `getMessage()` method of Throwable class to obtain the error message.

**See also:**

`addHoliday`

`deleteHoliday`

**Example:**

```
try
{
    String list = j24x7EJB.getHolidays(new Integer(2005), new Boolean(true));
    System.out.println(list);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobDefinition

**public String getJobDefinition(String jobId, Boolean htmlFormat) throws J24x7EJBException**

The **getJobDefinition** method obtains values of all job properties for the specified **jobID**. If the method succeeds, returned variable is populated with the job definition. If **htmlFormat** is true, the returned variable is populated with a text formatted as an HTML table. When displayed in a Web browser the table looks like the Job Properties View presented in the 24x7 GUI. If **htmlFormat** is false, the returned variable is populated with a plain text containing all job properties in JDL file format. The returned data is compatible with the createJob method.

**Return:** Returns job definition.

**Parameters:**

jobID	Job ID converted to string or job name.
htmlFormat	The output format in which you want to obtain the result.

**Value Meaning:**

true - format output as HTML text

false - format output as plain text

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- createJob
- getJobProperty
- getFolderProperty
- getJobTemplateData
- updateJob

**Example:**

```
try
{
    String value = j24x7EJB.getJobDefinition("2", new Boolean(true));
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobList

**public String getJobList(Boolean htmlFormat) throws J24x7EJBException**

The **getJobList** method obtains list of all jobs.

If the **htmlFormat** is true, returned variable is populated with a text formatted as an HTML table; otherwise the returned variable is populated with a plain text containing all job IDs and names. Each job appears on a new line. Job IDs and names are separated by tab characters.



**Note:** You can use `split( )` or `getToken( )` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

Sample output (with **htmlFormat** set to false):

```
1 test job 1
5 Backup job
4 Database export
27 Database replication
```

**Return:** Returns list of all jobs.

### Parameters:

htmlFormat	The output format in which you want to obtain the result.
------------	---

### Value Meaning:

true - format output as HTML text

false - format output as plain text

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the `getMessage()` method of Throwable class to obtain the error message.

### See also:

`getJobListEx`

`getFolderList`

**Example:**

```
try
{
    String list = j24x7EJB.getJobList(new Boolean(false));
    System.out.println(list);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobListEx

**public String getJobListEx(Boolean htmlFormat, String propertyList) throws J24x7EJBException**

The **getJobListEx** method obtains list of all jobs and optionally their properties. The **getJobListEx** is an extended version of **getJobList** method. **getJobListEx** allows specifying additional job properties for inclusion in the returned job list. This generally provides much better performance as compared to first calling **getJobList** and then calling **getJobProperty** method for every returned job in order to obtain job properties.

Job ID and Job Name properties are always included in the returned list that is why they need not be specified in the **propertyList** parameter. Use **propertyList** parameter to specify additional JDL properties. Separate multiple properties by commas. For example: "FOLDER\_NAME,DISABLED,MODIFY\_TIME". For a list of supported properties see [Job Properties in JDL Format](#) topic.

If the **htmlFormat**, is true returned variable is populated with a text formatted as an HTML table; otherwise the returned variable is populated with a plain text containing all job IDs and names and other job parameters specified by **propertyList** . Each job appears on a new line. Job IDs, names and additional properties are separated by tab characters.



**Note:** You can use `split()` or `getToken()` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

Below is a sample output (with **htmlFormat** set to false and **propertyList** parameter set to "FOLDER\_NAME,DISABLED"):

1	test job 1	Backup jobs folder	Y
5	Backup job	Backup jobs folder	N
4	Database export	Database jobs	N
27	Database replication	Database jobs	N

**Return:** Returns of all jobs and optionally their properties.

**Parameters:**

htmlFormat	The output format in which you want to obtain the result.
propertyList	parameter is used to specify additional JDL properties. Separate multiple properties by commas. For example: "FOLDER_NAME,DISABLED,MODIFY_TIME". For a list of supported

	properties see <a href="#">Job Properties in JDL Format</a> topic.
--	--

**Value Meaning:**

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true - format output as HTML text

false - format output as plain text

propertyList - A comma separated list of job property names.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

getJobList

getFolderList

getJobProperty

getJobPropertyEx

**Example:**

```
try
{
    String list = j24x7EJB.getJobListEx(new Boolean(true), "JOB_TYPE,DISABLED");
    System.out.println(list);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobLog

**public String getJobLog(String jobID, Boolean htmlFormat) throws J24x7EJBException**

The **getJobLog** method obtains all log records for the specified **jobID**. If the **htmlFormat** is true, returned variable is populated with a text formatted as an HTML table. When displayed in a Web browser the table looks like the Job Log in the 24x7 GUI. If **htmlFormat** is false, the returned variable is populated with a plain text containing log records. Each record appears on a new line with columns separated by tab characters. The format of the text is the same as format of the job log file SCHEDULE.LOG.

**Notes:**

- To obtain the entire log for all jobs specify "0" for the **jobID** parameter.



- You can use `split()` or `getToken()` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **`getToken`** method.

**Return:** Returns all log records.

**Parameters:**

jobID	Job ID converted to string or job name
htmlFormat	The output format in which you want to obtain the result.

**Value Meaning:**

true - format output as HTML text

false - format output as plain text

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (`RemoteException`) the error code is `REMOTE_OPERATION_ERROR`. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is `INVALID_DATA`. Use the `getMessage()` method of `Throwable` class to obtain the error message.

**See also:**

`getForecast`

`getMonitor`

**Example:**

```
try
{
    String value = j24x7EJB.getJobLog("61", new Boolean(true));
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobQueueSize

**public Integer getJobQueueSize(String queueName) throws J24x7EJBException**

The **`getJobQueueSize`** method retrieves maximum size of an existing job queue.

**Return:** Returns size of an existing job queue.

**Parameters:**

queueName	Job Queue name.
-----------	-----------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addJobQueue  
updateJobQueue  
deleteJobQueue

**Example:**

```
try
{
    Integer value = j24x7EJB.getJobQueueSize("Job Queue Test");
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobQueueList

**public String getJobQueueList(Boolean htmlFormat) throws J24x7EJBException**

The **getJobQueueList** method obtains list of names of configured Job Queues. If **htmlFormat** is true, returned variable is populated with a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line.



**Note:** You can use split() or getToken() method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

**Return:** Returns the list of names of configured Job Queues.

**Parameters:**

htmlFormat	The output format in which you want to obtain the list of 24x7 Job Queue names.
------------	---

**Value Meaning:**

true - format output as HTML text

false - format output as plain text

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

getJobQueue

getJobQueueMonitor

addJobQueue

**Example:**

```
try
{
    String list = j24x7EJB.getJobQueueList(new Boolean(false));
    System.out.println(list);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobQueueMonitor

**public String getJobQueueMonitor(String queueName, Boolean htmlFormat) throws J24x7EJBException**

The **getJobQueueMonitor** method obtains the list of running and waiting jobs in the specified job queue. If **htmlFormat** is true, the returned variable is populated with a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line. Each line contains the following tab-separated columns: queue name, unique job run number for that queue, job submission date and time, job priority (High, Normal or Low), job status (Awaiting, Running or Held), job ID, job name, job start time (for running jobs only), size of uncompressed job definition and linked job deployment data, size of compressed job definition and linked job deployment data, compression ratio. The same columns are available in the graphical version of the job queue monitor.



**Note:** You can use split() or getToken() method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

**Return:** Returns 1 if it succeeds or a negative number if an error occurs. Use the getLastErrorMessage() method to obtain the error message.

**Parameters:**

queueName	Job Queue name.
htmlFormat	The output format in which you want to obtain the list of forecasted jobs.

**Value Meaning:**

true - format output as HTML text

false - format output as plain text

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

getForecast

getMonitor

**Example:**

```
try
{
    String value = j24x7EJB.getJobQueueMonitor("Job Queue Test",
                                                new Boolean(true));

    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobProperty

**public String getJobProperty(String jobId, String propertyName) throws J24x7EJBException**

The **getJobProperty** method obtains value of the specified job property. The **propertyName** must be a valid JDL job property name. For information on supported property names and their values see [Job Properties in JDL Format](#) topic.

**Return:** Returns 1 if it succeeds or a negative number if an error occurs. Use the getLastErrorMessage method to obtain the error message.

**Parameters:**

JobID	Job ID converted to string or job name. Specify ID or name of the job whose property you want to retrieve.
PropertyName	<p>The job property name. Specify name of the property whose value you want to retrieve.</p> <p>For supported job properties and their JDL names see <a href="#">Job Properties in JDL Format</a> topic.</p>

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- setJobProperty
- getJobPropertyEx
- getJobDefinition
- getJobTemplateData

**Example:**

```
try
{
    String value = j24x7EJB.getJobProperty("61", "DESCRIPTION");
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```


## getJobPropertyEx

**public String getJobPropertyEx(String jobID, String propertyNameList) throws J24x7EJBException**

The **getJobPropertyEx** method obtains values of one or more job properties. The **propertyNameList** must contain comma-separated list of valid JDL job property names. For information on supported property names and their values see [Job Properties in JDL Format](#) topic.



**Note:** **getJobPropertyEx** method is an extended version of getJobProperty method. **getJobPropertyEx** is capable of returning values of multiple properties at once while **getJobProperty** can return only one property at a time. **getJobPropertyEx** is a more efficient and faster method to get multiple properties as it makes just one pass to the 24x7 Scheduler server.

 **Note:** You can use `split()` or `getToken()` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **`getToken`** method.

**Return:** Returns value of the property.

**Parameters:**

JobID	Job ID converted to string or job name. . Specify ID or name of the job whose properties your want to retrieve.
PropertyNameList	Comma-separated list of job property names. Specify names of properties whose values your want to retrieve.  For supported job properties and their JDL names see <a href="#">Job Properties in JDL Format</a> topic.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the `getMessage()` method of Throwable class to obtain the error message.

**See also:**

`getJobProperty`  
`getJobDefinition`  
`setJobProperty`  
`setJobPropertyEx`  
`getJobTemplateData`

**Example:**

```
try
{
    String value = j24x7EJB.getJobPropertyEx("61", "DESCRIPTION");
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobStatus

**public Integer getJobStatus(String jobID) throws J24x7EJBException**

The **`getJobStatus`** method obtains the status of the specified job.

**Return:** Returns a number indicating job status, which could be one of the following:

- -1 - Error job. Job may have this status because of incomplete job definition or if an error occurred while 24x7 was executing this job.
- -2 - Job is performing notification action after or before job run, such as sending email message, executing database command, etc.
- -3 - Job is running.
- -5 - First job run is pending. This job has been never been started before.
- -6 - Unknown status. Job may have an unknown status when it is a "Program" type job and the operation system is unable to report exit code of the job process.
- 0 - Successfully finished.



**Note:** an asynchronous job of "Program" type also may have this status after it successfully started the specified program and the started program is still running. Other Successfully finished (valid for jobs of "Program" type only).

**Parameters:**

jobID	Job ID converted to string or job name.
-------	---

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

runJob  
getForecast  
getJobQueueMonitor  
getMonitor

**Example:**

```
try
{
    Integer value = j24x7EJB.getJobStatus("61");
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getJobTemplateData

**public JobTemplateContent getJobTemplateData(String jobID) throws J24x7EJBException**

The **getJobTemplateData** method obtains template properties and data used to create or modify the specified job. This data must be previously saved using **setJobTemplateData** method. If the **getJobTemplateData** method succeeds method returns the object of **JobTemplateContent** type.

**Return:** Object of **JobTemplateContent** type, that has properties and data used to create or modify the specified job. This type has following fields:

templateName - saved job template.

templateFile - saved job template file name.

data - saved job data.

**Parameters:**

jobID	Job ID converted to string or job name.
-------	---

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

setJobTemplateData

getJobDefinition

getJobProperty

getTemplate

**Example:**

```
try
{
    JobTemplateContent value = j24x7EJB.getJobTemplateData("1");
    System.out.println(" TemplateFile " + value.getTemplateFile());
    System.out.println(" TemplateName " + value.getTemplateName());
    System.out.println(" Data " + value.getData());
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```



## getMonitor

**public String getMonitor(Integer interval, Boolean htmlFormat) throws J24x7EJBException**

The **getMonitor** method obtains list of running and pending jobs for the specified time interval (hours). Jobs having non-time based schedules are not included in the pending jobs portion of the report as the 24x7 Scheduler has now way to know when such jobs start conditions will be satisfied.

If the method succeeds, returned variable is populated with job monitor report. If **htmlFormat** is true, the returned variable is populated with a text formatted as a HTML table; otherwise, it is populated with a plain text containing each entry on a new line. Each line contains the following tab-separated columns: job ID, job name, job status, and job last start time.



**Note:** You can use `split()` or `getToken()` method to parse the returned list and extract individual elements or convert it into an array of elements. For details see description and examples for **getToken** method.

Below is a sample output (with **htmlFormat** set to false):

285	Backup job	AWAITING START	10/11/2002 04:20:00 PM
14	BCP	RUNNING	10/11/2002 03:00:00 PM
112	Cube building	RUNNING	10/11/2002 03:10:00 PM
56	Database export	AWAITING START	10/12/2002 02:00:00 AM

**Return:** Returns job monitor report.

### Parameters:

Interval	The time interval within which the monitor report is created. The interval is specified in hours.
htmlFormat	The output format in which you want to obtain the list of forecasted jobs.

### Value Meaning:

true - format output as HTML text

false - format output as plain text

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the `getMessage()` method of Throwable class to obtain the error message.

### See also:

`getForecast`

`getJobQueueMonitor`

**Example:**

```
try
{
    String value = j24x7EJB.getMonitor(new Integer(2), new Boolean(true));
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getTemplate

**public String getTemplate(String templateFile) throws J24x7EJBException**

The **getTemplate** method obtains contents of the specified template file. If the method succeeds, returned variable is populated with the template text.

**Return:** Returns template.

**Parameters:**

templateFile	Template file name.
--------------	---------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

setTemplate

getTemplateCatalog

**Example:**

```
try
{
    String value = j24x7EJB.getTemplate("%HOME%\\Template\\ftp.ini");
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getTemplateCatalog

**public String getTemplateCatalog() throws J24x7EJBException**

The **getTemplateCatalog** method obtains contents of the TEMPLATE.INI file. TEMPLATE.INI stores catalog of available job templates. The file must exist in the 24x7 Scheduler home directory. If the method succeeds, returned variable is populated with the template catalog.

**Return:** Returns template catalog.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- setTemplate
- getTemplate
- addTemplate

**Example:**

```
try
{
    String value = j24x7EJB.getTemplateCatalog();
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getToken

**public String getToken(String holder, String separator) throws J24x7EJBException**

The **getToken** method parses the source string (**holder**) and obtains first string token. If the token is found it removes it along with the following **Separator** string from the source string.

**Return:** Returns found token or an empty string if the specified **separator** value cannot be found or if it is found in the beginning of the **holder**.

**Parameters:**

holder	Source string from which you want to remove a token.
separator	A string whose value is searched within the source string. The <b>Separator</b> value must consist of one or more characters.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.



**Note:** getToken can be used with many methods that return value lists and table-like multi-value results. Standard split() method of the String class can be also used for this purpose. The main difference between these methods is that the split() method operates on arrays while getToken method operates on simple Strings.



**Warning:** It recommended that you use the split() method whenever possible as getToken method is going to be deprecated in future versions.

**See also:**

- getAgentList
- getJobList
- getFolderList
- getJobPropertyEx
- getMonitor
- getJobQueueList
- getJobQueueMonitor

**Example:**


```
try
{
    String value = j24x7EJB.getToken("eter ytryr", "r");
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getStatusReport

**public void getStatusReport(String destindir) throws J24x7EJBException**

The **getStatusReport** method obtains **HTML Status Reports** from the 24x7 Master Scheduler and copies them to the destination directory specified in the **DestinDir** parameter.

**Parameters:**

destinDir	<p>The name of the directory into which the <b>24x7 Status Report</b> files will be copied. The <b>DestinDir</b> can contain either an absolute path to the directory in the format <i>disk:\dir\subdir1\...\subdirX</i> or a relative path in the format <i>subdir1\...\subdirX</i> or a network path name like <i>\\SERVER\VOLUME\dir\subdir1\...\subdirX</i>.</p> <p> <b>Note:</b> The <b>DestinDir</b> must be an existing directory and the directory must be accessible from the computer running 24x7 Scheduler server. The process executing this method must have write permissions for the specified directory.</p>
-----------	--

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

[getJobLog](#)

**Example:**

```
try
{
    System.out.println(" getStatusReport");
    j24x7EJB.getStatusReport("c:\\reports");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## getUserRole

**public Integer getUserRole(String userName) throws J24x7EJBException**

The **getUserRole** method obtains ID of the security member group (e.g. user role) for the specified user.

**Return:** The following values can be returned:

- **SECURITY\_OFF** (value = -1) – the security system is turned off. All users have unlimited privileges.
- **ROLE\_ADMIN** (value = 0) – user is a member of Administrators group.

- **ROLE\_STANDARD** (value = 1) - user is a member of Standard Privileges group. In 24x7 Scheduler Multi-platform Edition the corresponding group name is Power Users.
- **ROLE\_RESTRICTED** (value = 2) - user is a member of Restricted Privileges group. In 24x7 Scheduler Multi-platform Edition the corresponding group name is Operators.
- **ROLE\_GUEST** (value = 3) - user is a member of Guests group

For more information about returned values see the [Constants](#) topic.

**Parameters:**

username	The name of the user as it is specified in the 24x7 Scheduler security settings. Names are case-insensitive.
----------	--

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

openSession

**Example:**

```
try
{
    Integer value = j24x7EJB.getUserRole("scott");
    System.out.println(value);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## logMessage

**public void logMessage(Integer sourceID, String sourceName, Integer eventSeverity, String message, Boolean forceReportUpdate) throws J24x7EJBException**

The **logMessage** method adds new record to the 24x7 Scheduler job log.



**Note:** 24x7 Scheduler does not verify sourceID and sourceName values. Normally you should use them to specify job ID and job name that the logged message belongs to.

**Parameters:**

sourceID	ID of the job for which you add the new message. To add a job independent
----------	---

	message specify 0 for the <b>SourceID</b> .
sourceName	Descriptive name of the message source.
eventSeverity	The event severity. It can be one of the following: <ul style="list-style-type: none"><li>• RC_ERROR</li><li>• RC_WARNING</li><li>• RC_INFO</li></ul> For more information about event severity values see <a href="#">Constants</a> topic.
message	The message that you want to add to the 24x7 event log.
forceReportUpdate	A Boolean whose value indicates whether 24x7 Scheduler must perform an immediate update of the <b>HTML Status Report</b> or perform a deferred update.

**Value Meaning:**

true - update immediately and force immediate rebuild and refresh of HTML Status Reports and the job log.

false – add the message to log without forcing the rebuild of HTML Status Reports.

**Important Notes:**

- If the **HTML Status Report** option is not enabled, **forceReportUpdate** parameter is ignored.
- "forceReportUpdate = true" ensures the reports are updated immediately so people who monitor that report can see this change in a real-time. However you should remember that immediate updates impacts the performance of the 24x7 Scheduler.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

getJobLog

getStatusReport

**Example:**

```
try
{
    j24x7EJB.logMessage(new Integer(15), "Test",
                        new Integer(RC_INFO), "test message",
                        new Boolean(false));
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## holdJob

**Public void holdJob ( Long JobQueueID ) throws RemoteException**

The **holdJob** method places already queued job on hold. The job must be in awaiting start state. Do not confuse holdJob with [disableJob](#). The latest method can be used to disable a job and prevent it from starting again, while the **holdJob** method can be used to lock an already queued job instance and prevent it from running until it is released. Note that this operation affects only one job instance. Other jobs can continue running in the queue as well as other instances of the same job can be also added to the queue and be run.

### Parameters:

JobQueueID	Run-time job number in queue.
------------	-------------------------------

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

deleteJob  
disableJob  
killJob  
RELEASEJOB

### Example:

```
try
{
    j24x7EJB. holdJob( 22465 );
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## killJob

**public void killJob ( Long JobQueueID ) throws RemoteException**

The **killJob** method deletes job from the queue. If the job is already running it forcedly terminates the running process. If the job type is JavaScript the script and the job is run as a non-detached process, **killJob**



will attempt to interrupt the script. If the job is SQL Script and the job is run as a non-detached process, **killJob** will attempt to execute database-specific "Cancel Query" request.

**Important Notes:**

The **killJob** method can be used with all types of jobs both jobs launched using runJob command and jobs started automatically by the scheduler

**Parameters:**

JobQueueID	Run-time job number in queue.
------------	-------------------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

deleteJob  
disableJob  
holdJob

**Example:**

```
try
{
    j24x7EJB.killJob( 22465 );
}
catch ( J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## killShellCommand

**Public void killShellCommand ( Long ProcessID ) throws RemoteException**

The **killShellCommand** method forcibly terminates operation system processes. Although this method can be used with any system processes it is recommended that this method is only used for processes started using [runShellCommand](#).

**Parameters:**

ProcessID	System process ID.
-----------	--------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

runShellCommand  
getProcessList  
killJob

**Example:**

```
try
{
    j24x7EJB.killShellCommand( 254 );
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## openSession

**public void openSession(Integer portNo, String hostName, String userID, String userPass, String serial) throws J24x7EJBException**

The **openSession** method establishes new connection between **24x7 Remote Control Java** control and the specified target 24x7 Scheduler running in either Master or Agent mode. The target 24x7 Scheduler can run on the same computer or run on another networked computer.

**Notes:**

- You must open a session using the **openSession** method before you call other **24x7 Remote Control Java** methods.
- Use the **closeSession** method to close the session after you don't need it anymore.
- If you destroy j24x7EJB class and a session is still open, the j24x7EJB class automatically calls **closeSession**. In web based applications object clean up and destruction is often left to the web server. In such applications you usually do not need to call **closeSession** explicitly.

**Parameters:**

portNo	The port number for the 24x7 Scheduler server (for example, 1096).
hostName	The location of the 24x7 Scheduler server. Specify either of the following

	values: <ul style="list-style-type: none"><li>• The IP address (for example, 199.99.99.91)</li><li>• The host name of the remote computer (network computer name in workgroup)</li></ul>
userID	The user ID that you want to use for the connection.
userPass	The password that you want to use for the connection.
serial	The Serial Number given for the <b>24x7 Remote Control Java interface</b>

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

closeSession

**Example:**

```
System.out.println("connect");
Integer portNo = new Integer(1097);
String hostName = new String("localhost");
String userID = new String("");
String userPass = new String("");
String serial = new String("00000-99999999-55555");

try
{
    System.out.println("openSession");
    j24x7EJB.openSession(portNo, hostName, userID, userPass, serial);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## protectJob

**public void protectJob(String jobId, String protectionType, String jobPassword) throws J24x7EJBException**

The **protectJob** method can be used to change protection level for an already protected job, define protection level for an unprotected job. If the job is already protected you must specify valid **jobPassword** that matches the current job password.

**Parameters:**

jobID	Job ID converted to string or job name
protectionType	Job protection code. The following values are supported:  <b>F</b> – Full protection – job definition cannot be seen, changed or deleted and the job cannot be run manually.  <b>R</b> – Read only protection – job definition can be seen and the job can be run manually, but the job cannot be changed or deleted.  <b>E</b> – Execute only – job definition cannot be seen, changed or deleted, but the job can be run manually.
jobPassword	Job password

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

unprotectJobob  
disableJob  
createJob

**Example:**

```
try
{
    j24x7EJB.protectJob("67", "R", "1");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## releaseJob

**Public void releaseJob ( Long JobQueueID ) throws RemoteException**

The **releaseJob** method releases held jobs job and puts it back to queue according to job priority. The job state changes to "awaiting start". Do not confuse **releaseJob** with [enableJob](#). The latest method can be used to enable previously disabled job and allow it to be scheduled again, while the **releaseJob** method can be used to unlock a queued job instance and allow that specific instance to run. Note that this affects only single job instance.

**Parameters:**

JobQueueID	Run-time job number in queue.
------------	-------------------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

holdJob  
enableJob

**Example:**

```
try
{
    j24x7EJB. releaseJob( 22465 );
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## queueJob

**public Long queueJob(String jobId) throws J24x7EJBException**

The **queueJob** method submits the specified job to the associated job queue. If the queue is free, the specified job starts running immediately; otherwise it waits for the queue to become free. As compared to **runJob** method with synchronous parameter set, the submitter job does NOT wait for the submitted child job to complete.

**Return:** Returns unique run-time job id for the submitted job. This run-time id can be referenced in **killJob**, **holdJob** and other methods dealing with run-time job instances.

**Parameters:**

jobID	Job ID converted to string or job name.
-------	---

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

createJob  
runJob

**Example:**

```
try
{
    j24x7EJB.queueJob( "10" );
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## runJob

**public void runJob(String jobID, Boolean asynchronous) throws J24x7EJBException**

The **runJob** method starts the specified job. The job is executed on the computer where the target 24x7 Scheduler is running.

**Parameters:**

jobID	Job ID converted to string or job name.
asynchronous	Controls how the job is processed.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**Value Meaning:**

true - Start the job using a separate instance of 24x7 Scheduler and then immediately return control back to the caller

false - Start the job using the main instance of 24x7 Scheduler and wait for the job to complete before returning control back to the caller.



**Note:** Each method has some advantages and disadvantages. If you want to wait for the job to complete before starting another job set **asynchronous** parameter to **false**. This will ensure that jobs run sequentially. If you start the job **asynchronous** but don't wait for it to complete set run **asynchronous**

parameter to **true**. Keep in mind that if you run a job **synchronous** (asynchronous=false) and that job takes a long time to run your session may expire before the job completes and this may cause the job to abort prematurely. Always use **true** for the **asynchronous** property for jobs taking long time to run.

**See also:**

createJob  
queueJob  
runScript  
runShellCommand

**Example:**

```
try
{
    j24x7EJB.runJob("10", new Boolean(true));
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## runScript

**public void runScript(String script) throws J24x7EJBException**

The **runScript** method executes the specified JavaScript script. The effect of this method is similar to running a job with the same script. The script is executed on the computer where the target 24x7 Scheduler is running.



**Important Notes:** This method is not currently supported.

**Parameters:**

script	The script that you want to execute.
--------	--------------------------------------

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

runJob  
runShellCommand  
utilRunScript

**Example:**


```
try
{
    j24x7EJB.runScript("Scheduler.pause( 10 )\n");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## runShellCommand


**public void runShellCommand(String commandLine, String dir, Boolean async, Integer timeout)**  
**throws J24x7EJBException**

The **runShellCommand** method executes the specified Operation System command or program. The command is executed on the computer where the target 24x7 Scheduler is running.

**Parameters:**

commandLine	<p>The full or partial path and filename of the module to execute.</p> <p> <b>Notes:</b></p> <ul style="list-style-type: none"><li>You should always include the full path - don't rely on the PATH environment variable, because this may be different at the time the program runs, depending on what account the program is being run under. Also, keep in minds that other programs can modify the PATH environment variable as well.</li><li>Program name can be followed by command line parameters. You can use 24x7 supported macro-parameters inside program name and command line parameters to pass dynamic information (such as the current month) to the scheduled program.</li></ul>
dir	<p>The directory where the program executable finds associated files that are required to run the program. Most programs do not require an entry in this field so that you can specify an empty string (""). Occasionally a program will refuse to run properly unless it is specifically told where to find other program files. The 24x7 Scheduler will change to this directory when running the program or command</p>
async	<p>This controls how the 24x7 Scheduler executes the process specified in the <b>commandLine</b>.</p> <p><b>Value Meaning:</b></p> <p>true - Start the specified command and return control back to the 24x7 Scheduler. The <b>timeout</b> argument is ignored in this case.</p> <p>false - Start the specified command and wait for that command to complete before returning control back to the 24x7 Scheduler.</p>



	 <b>Note:</b> When running the command synchronously ( <b>async=false</b> ) 24x7 Scheduler enters an efficient wait state until this command finishes or the <b>timeout</b> interval elapses. In the latter case, the 24x7 Scheduler forcibly terminates the process created by the specified <b>commandLine</b> .
timeout	The maximum time interval (in seconds) within which you allow the process (as specified in the <b>commandLine</b> ) to run. Use 0 <b>timeout</b> to allow infinite waiting. The <b>timeout</b> parameter is ignored when <b>async</b> parameter is set to <b>true</b> .

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

runJob  
runScript  
utilRunScript

**Example:**

```
try
{
    j24x7EJB.runShellCommand("h:\\sales\\reports\\month_end.exe",
                             "", new Boolean(false), new Integer(30));
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## setGlobalVariable

**public void setGlobalVariable(String variableName, String newValue) throws J24x7EJBException**

The **setGlobalVariable** method changes the value of the global variable on the target 24x7 Remote Agent or 24x7 Master Scheduler.



**Important Note:** This method is only valid for 24x7 Scheduler Windows Edition.

**Return:** Returns value of the specified global variable converted to String format.

**Parameters:**

variableName	The name of the global variable that must exist on the target 24x7 Agent or Master Scheduler. Variable names are case-insensitive.
newValue	The new value converted to string format.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

getGlobalVariable

**Example:**

```
try
{
    String value = j24x7EJB.getGlobalVariable("test_var", "55");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## setFolderProperty

**public void setFolderProperty(String folderID, String propertyName, String newValue) throws J24x7EJBException**

The **setFolderProperty** method changes value of the specified folder **propertyName** for the specified **folderID**. The **propertyName** must be a valid JDL job property name. The following folder properties are currently supported: "FOLDER\_NAME", "DESCRIPTION".

**Parameters:**

folderID	Folder ID converted to string or folder name.
propertyName	The folder property name.
newValue	Then new property value.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

createFolder  
getFolderProperty

**Example:**

```
try
{
    j24x7EJB.setFolderProperty("56", "DESCRIPTION",
                               "New Folder description test");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## setJobProperty

**public void setJobProperty(String jobId, String propertyName, String newValue) throws J24x7EJBException**

The **setJobProperty** method changes value of the specified job **propertyName** for the specified job. The **propertyName** must be a valid JDL job property name. For more details see [Job Properties in JDL Format](#) topic.

**Parameters:**

jobID	Job ID converted to string or job name.
propertyName	The job property name. For supported job properties and their JDL names see <a href="#">Job Properties in JDL Format</a> topic.
newValue	Then new value converted to string format.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

getJobProperty  
setJobPropertyEx  
updateJob  
setFolderProperty  
setJobTemplateData

**Example:**

```
try
{
    j24x7EJB.setJobProperty("69", "DESCRIPTION",
                           "new test job description test");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## setJobPropertyEx

**public void setJobPropertyEx(String jobId, String propertyName, String newValue) throws J24x7EJBException**

The **setJobPropertyEx** method changes values of job properties specified in the **propertyNameList** parameter for the job specified by **jobID** parameter. The **propertyNameList** must contain comma-separated list of valid JDL job property names. For more details see [Job Properties in JDL Format](#) topic.



**Note:** **setJobPropertyEx** method is an extended version of **setJobProperty** method. **setJobPropertyEx** is capable of updating multiple properties at once while **setJobProperty** can update only one property at a time. **setJobPropertyEx** provides more efficient and faster method for updating multiple properties as it makes just one round-trip to the 24x7 Scheduler server. On the other hand, because new values are passed as a comma-separated list, **setJobPropertyEx** cannot be used to update values that contain commas

**Parameters:**

jobID	Job ID converted to string or job name.
propertyNameList	Comma-separated list of job property names. For supported job properties and their JDL names see <a href="#">Job Properties in JDL Format</a> topic.
newValueList	Tab-separated list of new property values converted to string format.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

setJobProperty  
getJobPropertyEx

updateJob  
setFolderProperty  
setJobTemplateData

**Example:**

```
try
{
    j24x7EJB.setJobPropertyEx("69",
        "SCHEDULE_TYPE,SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY",
        "D,N,Y,N,Y,N,N,N");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## setJobTemplateData

**public void setJobTemplateData(String jobID, String templateName, String templateFile, String data)**

The **setJobTemplateData** method saves template properties and data used to create or modify the specified job. This data can be later retrieved using the **getJobTemplateData** method. If the method succeeds the values of **templateName**, **templateFile**, and **data** parameters are saved in a file. The **Data** value is a free text that could be of virtually any size. It is up to developers to decide which internal format to use for the **data**.

**Parameters:**

jobID	Job ID converted to string or job name.
templateName	Name of the template used for the specified job.
templateFile	Name of the template file used for the specified job.
data	Data that you want to save for future references.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

getJobTemplateData  
setJobProperty  
setTemplate

**Example:**

```
try
{
    j24x7EJB.setJobTemplateData("69", "template_test", "template_file", "teamppte_data");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## setTemplate

**public void setTemplate(String templateFile, String buffer) throws J24x7EJBException**

The **setTemplate** method updates contents of the specified template file.

**Parameters:**

templateFile	Template file name.
buffer	A String variable whose value replaces contents of the specified template file.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

- addTemplate
- getTemplate
- getJobTemplateData
- getTemplateCatalog
- setJobTemplateData

**Example:**

```
try
{
    j24x7EJB.setTemplate("Template_filename", "Template_test");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## test

**public Integer test(Integer x) throws J24x7EJBException**

The **test** method is provided exclusively for your convenience so you can test whether you can load and call **24x7 Java API** methods. The **test** method does not communicate with the 24x7 servers and performs simple computations on the client side only.

**Return:** The returned value must be the same as the **x** value specified for the method argument.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**Example:**

```
try
{
    System.out.println(j24x7EJB.test(new Integer(67)));
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## unprotectJob

**public void unprotectJob(String jobID, String jobPassword) throws J24x7EJBException**

The **unprotectJob** method can be used to remove protection from a protected job. You must specify valid JobPassword that matches the current job password.

**Parameters:**

jobID	Job ID converted to string or job name
jobPassword	Job password

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

protectJob  
enableJob  
createJob

**Example:**

```
try
{
    j24x7EJB.unprotectJob("69", "pass");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## updateAgentProfile

**public void updateAgentProfile(String profileName, String comMethod, String location, String port, String options)**

The **updateAgentProfile** method updates properties of an existing 24x7 Remote Agent or 24x7 Master Scheduler profile.

**Parameters:**

For description of **updateAgentProfile** parameters see [addAgentProfile](#) method.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addAgentProfile  
deleteAgentProfile  
getAgentProfile

**Example:**

```
try
{
    j24x7EJB.updateAgentProfile("profile_name", "Winsock",
                                "192.168.100.1", "1096", "");
}
}
```



```
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## updateCalendar

**public void updateCalendar(Integer calendarId, String calendarName, Boolean exclusive) throws J24x7EJBException**

The **updateCalendar** method updates properties of an existing Business Calendar.



**Important Note:** This method is only valid for 24x7 Scheduler Multi-platform Edition.

### Parameters:

For description of **updateCalendar** parameters see [addCalendar](#) method.

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

- addCalendar
- deleteCalendar
- getCalendar

### Example:

```
try
{
    j24x7EJB.updateCalendar(new Integer(7), "Payroll Calendar",
                           new Boolean(false));
}
catch (J24x7EJBException e)
{
    System.out.println("InteractionException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## updateDatabaseProfile

**public void updateDatabaseProfile(String profileName, String databaseDriver, String server, String databaseName, Boolean autoCommit, String user, String password)**

The **updateDatabaseProfile** method updates properties of an existing database profile.

### Parameters:

For description of **updateDatabaseProfile** parameters see [addDatabaseProfile](#) method.

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

- addDatabaseProfile
- getDatabaseProfile
- deleteDatabaseProfile

### Example:

```
try
{
    j24x7EJB.updateDatabaseProfile("profile_name", "My database", "Neptune",
        "warehouse", new Boolean(true), "sa", "*****");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## updateJob

**public void updateJob(String jobID, String jobDefinition) throws J24x7EJBException**

The **updatesJob** method updates properties of an existing job.



**Note:** **jobDefinition** parameter may contain any combination of job properties and scripts. Only values of referenced properties are updated. Values of all other properties are preserved as is.

**Parameters:**

jobID	Job ID converted to string or job name
jobDefinition	<p>The Job definition in JDL format. For a wide variety of examples see job templates available in the [24x7 install directory]\Template subdirectory.</p> <p>The default path is <i>C:\Program Files\24x7 Automation 3\Template</i>.</p> <p>For supported job properties see <a href="#">Job Properties in JDL Format</a> topic.</p>

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

createJob  
setJobProperty  
setJobTemplateData  
changeFolder  
disableJob  
protectJob  
runJob

**Example:**

```
try
{
    String jobDefinition = "NAME=updated 4 job\r\n" +
        "COMMAND=c:\\winnt\\notepad.exe\r\n" +
        "SCHEDULE_TYPE=D\r\n" +
        "FRIDAY=Y\r\n" +
        "SUNDAY=Y\r\n" +
        "MONDAY=Y\r\n" +
        "TUESDAY=Y\r\n" +
        "WEDNESDAY=Y\r\n" +
        "THURSDAY=Y\r\n" +
        "SATURDAY=Y\r\n" +
        "START_TIME=10:00\r\n" +
        "ASYNC=N\r\n" +
        "LOG=Y\r\n" +
        "DESCRIPTION=job description\r\n" +
        "JOB_TYPE=P\r\n" +
        "FOLDER=401\r\n" +
        "QUEUE=[default]";

    j24x7EJB.updateJob("4", jobDefinition);
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## updateJobQueue

**public void updateJobQueue(String queueName, Integer maxSize) throws J24x7EJBException**

The **updateJobQueue** method updates properties of an existing job queue.



**Note:** This method has been deprecated. Use [updateJobQueueEx](#) method.



**Note:** In 24x7 Scheduler Windows Edition, updating job queue properties does not have an immediate effect. The changes are effective only after the 24x7 Scheduler is restarted. In 24x7 Scheduler Multi-platform Edition, the changes are effective immediately.

### Parameters:

queueName	Name of the new Job Queue. This name should be unique.
maxSize	Max queue size in Mbytes. 1 Mbytes should be sufficient in most cases.

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

addJobQueue  
deleteJobQueue

### Example:

```
try
{
    j24x7EJB.updateJobQueue("My queue", new Integer(20));
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
    System.out.println(e.getCode() + " " + e.getMessage());
}
```

## updateJobQueueEx

**public void updateJobQueue Ex(String queueName, Integer maxSize, Integer maxJobs, Boolean nearCapacityAlerts, String emailSender, String emailPassword, String emailRecipients) throws J24x7EJBException**

The **updateJobQueue** method updates properties of an existing job queue.



**Note:** In 24x7 Scheduler Windows Edition, updating job queue properties does not have an immediate effect. The changes are effective only after the 24x7 Scheduler is restarted. In 24x7 Scheduler Multi-platform Edition, the changes are effective immediately.

**Parameters:**

queueName	Name of the Job Queue.
maxSize	Max queue size in Mbytes. 1 Mbytes should be sufficient in most cases.
maxJobs	Maximum number of jobs allowed in a queue at any moment in time. The count includes both running and queued jobs, including jobs placed on hold. Specify zero value for unlimited number of jobs.
nearCapacityAlerts	Enables sending email alerts in case a queue is at or near its maximum capacity. The capacity is controlled by <b>maxSize</b> and <b>maxJobs</b> parameters
emailSender	Email account (for MAPI email protocol) or email address (for SMTP email protocol) to use for sending "near capacity" and "over capacity" email alerts.
emailPassword	Email password to use for authenticating email sender to the email server. Specify an empty string or null value if password is not required.
emailRecipients	Comma-separated list of email recipient addresses for "near capacity" and "over capacity" email alerts.

**Throws:**

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

**See also:**

addJobQueue  
deleteJobQueue

**Example:**

```
try
{
    j24x7EJB.updateJobQueueEx("Payroll jobs",
        new Integer(1), new Integer(200), new Boolean(true)
        "alerter@domain.com", null, "helpdesk@domain.com");
}
catch (J24x7EJBException e)
{
    System.out.println("J24x7EJBException " + e.toString());
}
```

```
    System.out.println(e.getCode() + " " + e.getMessage());  
}
```

## utilRunScript

**public String utilRunScript(String script) throws J24x7EJBException**

The **utilRunScript** method executes the specified JAL script and returns the script output. The script is executed on the computer running 24x7 Scheduler to which the API client session is connected to.

This method internally calls the [runScript](#) method. Before calling **runScript** method to execute the **Script**, **utilRunScript** creates a unique temporary file on the remote system running 24x7 Scheduler, and alters text of the **Script**, adding an additional variable named **output**. This variable value is set to the name the temporary file. This is how the name of the temporary file is passed to the **Script**. In the **Script** you can then use this file to save any script output. After completion of the **runScript** method, **utilRunScript** reads contents of the remote temporary file into the **OutputBuffer** parameter and deletes the file. That's how the output saved on the remote system is returned to the caller.



**Important Notes:** This method is not currently supported.

**Return:** Returns contents of the temporary file.

### Parameters:

script	The script that you want to execute.
--------	--------------------------------------

### Throws:

Throws [J24x7EJBException](#) exception. In case if an error has occurred on the server (RemoteException) the error code is REMOTE\_OPERATION\_ERROR. In case if an error has occurred on the client (the operation can't be executed successfully because of an invalid parameter or data) the error code is INVALID\_DATA. Use the getMessage() method of Throwable class to obtain the error message.

### See also:

runJob  
runShellCommand  
runScript

### Example:


```
try  
{  
    String script = "var files = Directory.dir(\"/home/logs/*\");\n" +  
                    "file.save( output, files )"  
    String result = j24x7EJB.utilRunScript(script);  
    System.out.println("Log directory contents on the server: " + result);  
}  
catch (J24x7EJBException e)  
{  
    System.out.println("J24x7EJBException " + e.toString());  
    System.out.println(e.getCode() + " " + e.getMessage());  
}
```

}



## Job Properties in JDL Format





All job properties are documented in the 24x7 Scheduler User's Guide. This topic can be used as a quick reference for supported job properties and their JDL names.




Job Definition Language (JDL) supports the following property names:




Property Name	Meaning
<b>ACCOUNT</b>	E-mail Account such as user ID, profile, or e-mail address (e-mail watch job).  The actual value may differ for different e-mail interfaces. For a MAPI interface you should use the name of the MAPI profile you use when logging on to the e-mail system. For Lotus Notes you should use the name of the user (or ID) you use when logging on to the Lotus Notes. For SMTP you should use your e-mail address.
<b>AGENT</b>	Same as Host (see Host description)
<b>ALL_DAY_TYPE</b>	All Day Schedule Type, one of the following: <b>R</b> , <b>L</b> ( <b>R</b> - recursive, repeat at specified intervals; <b>L</b> - fixed time list)
<b>ARCHIVE_OUTPUT</b>	Capture and archive job output, one of the following: <b>Y</b> , <b>N</b> (yes, no)   <b>Note:</b> This property is not used in 24x7 Scheduler Windows-only Edition.
<b>AS_GROUP</b>	Name of Auto-scaling group assigned to the job
<b>ASYNC</b>	Asynchronous Process, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>BACKUP_AGENT</b>	Same as Backup Host (see Backup Host description)
<b>BACKUP_HOST</b>	Backup Remote Host (e.g. Backup Remote Agent name)
<b>CALENDAR</b>	Name of the Calendar object assigned to the job
<b>COMMAND</b>	Program Command Line
<b>DAY_END_TIME</b>	Daily End Time for "all day" jobs with limited run-time interval
<b>DAY_LIST</b>	Monthly Schedule List of fixed Day Numbers, numbers must be in 1..31 range. Example: 1,3,5,7,14. This property is shared with TIME_LIST property for All Day Schedule.
<b>DAY_NAME</b>	Monthly Schedule Day Name, one of the following: <b>Monday</b> , <b>Tuesday</b> , <b>Wednesday</b> , <b>Thursday</b> , <b>Friday</b> , <b>Saturday</b> , <b>Sunday</b> , <b>Weekend</b> , <b>Weekday</b>
<b>DAY_NUMBER</b>	Monthly Schedule Day Number, a number from 1 - 31 range
<b>DAY_START_TIME</b>	Daily Start Time for "all day" jobs with limited run-time interval
<b>DELAY</b>	Allowed Job Delay Interval (minutes)
<b>DELETE_RULE</b>	Delete, Move, and Rename Semaphore File Rules, one of the following: <b>D</b> , <b>A</b> , <b>B</b> , <b>M</b> , <b>E</b> , <b>R</b> , <b>C</b> , <b>F</b> , <b>G</b> ( <b>D</b> - do not delete, move, rename; <b>A</b> - delete after job run; <b>B</b> - delete before job run; <b>M</b> - move before job run; <b>E</b> - move after job run; <b>R</b> - rename before job run; <b>C</b> - rename after job run; <b>F</b> -move and rename before job








	run; <b>G</b> - move and rename after job run)
<b>DESCRIPTION</b>	Job Description
<b>DISABLE_ON_ERROR</b>	Disable Job on Error, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>DISABLED</b>	Job Disabled Status, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>DETACHED</b>	Detached Job, one of the following: <b>Y</b> , <b>N</b> (yes, no)  <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.
<b>END_DATE</b>	Last Job Start Date
<b>END_TIME</b>	Last Job Start Date
<b>EXIT_CODE</b>	Exit Code Condition (as a string expression)
<b>FILE</b>	Semaphore File Names(s) for file-watch jobs; Module Name for process-watch job
<b>FOLDER</b>	Job Folder ID. This is read-only property. It may not be changed using <b>SET</b> command. It can be retrieved using <b>GET</b> command
<b>FOLDER_NAME</b>	Job Folder Name. This is read-only property. It may not be changed using <b>SET</b> command. It can be retrieved using <b>GET</b> command
<b>FRIDAY</b>	Execute Job On Fridays, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>HOST</b>	Remote Host (Remote Agent Name)
<b>ID</b>	Job ID, This is read-only property. It may not be changed using <b>SET</b> command. It can be retrieved using <b>GET</b> command with Job Name parameter.
<b>IGNORE_ERRORS</b>	Ignore Errors, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>INIT_TIMEOUT</b>	Initial Timeout before sending keystroke (seconds)
<b>INTERVAL</b>	Repeat Interval for Job having Schedule Type <b>T</b>
<b>JOB_PASSWORD</b>	<p>Job Protection State and Password. Sets or removes job protection state and password. This is a write-only property. It can be changed using <b>SET</b> command, but it cannot be retrieved using <b>GET</b> command. The value in this property must be specified in the following format : [old password][tab character][new password][tab character][protection state] If the job is not protected, the [old password] is ignored, otherwise a valid password must be specified in order to remove or change job password or protection state.</p> <p>If the protection exists and the new protection state is specified as an empty string the protection will be removed. The protection code must one of the following: <b>F</b>, <b>E</b>, <b>R</b>, an empty string (<b>F</b> - full protection; <b>E</b> - execute only; <b>R</b> - read only; an empty string indicates that a job is not protected).</p>
<b>JOB_TYPE</b>	Job Type, one of the following: <b>P</b> , <b>D</b> , <b>S</b> (program, database, script)
<b>KEYSTROKE</b>	<p>Keystroke to send to the launched program.</p> <p> <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.</p>
<b>LOG</b>	Log Job Execution, one of the following: <b>Y</b> , <b>N</b> (yes, no)

<b>MESSAGE</b>	E-mail Message Text (e-mail watch job).   <b>Note:</b> This is used in email-watch jobs only. Do not confuse this with Message triggers. The legacy property named Message is preserved for backward compatibility reasons.
<b>MESSAGE_ACTION_TYPE</b>	Type of Action that the job should perform after being triggered by a Message, one of the following <b>D</b> , <b>B</b> , <b>A</b> (do nothing, delete message before starting job execution, delete message after job executions completes).
<b>MESSAGE_ID</b>	Message ID of the Message to monitor. This is used in Message-watch job triggers. Do not confuse this with email messages.
<b>MODIFY_TERMINAL</b>	Network name of the computer from which the job was last modified. This is a read-only property. It cannot be changed using <b>SET</b> command. It can be retrieved using <b>GET</b> command.   <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.
<b>MODIFY_TIME</b>	Date and time when the job was modified. This is a read-only property. It cannot be changed using <b>SET</b> command. It can be retrieved using <b>GET</b> command.   <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.
<b>MODIFY_USER</b>	Name of the user who last modified the job. This is a read-only property. It cannot be changed using <b>SET</b> command. It can be retrieved using <b>GET</b> command.   <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition
<b>MONDAY</b>	Execute Job On Mondays, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>MONTHLY_TYPE</b>	Monthly Schedule Type, one of the following: <b>D</b> , <b>T</b> , <b>L</b> ( <b>D</b> - by day number; <b>T</b> - by day name; <b>L</b> - fixed day list)
<b>MOVE_DIR</b>	Name of the destination directory for semaphore file move and rename operations.
<b>MSG_ACCOUNT</b>	E-mail Account for Notification Action of E-mail Type E-mail (user ID, profile, or e-mail address).  The actual value may differ for different e-mail interfaces. For the MAPI interface you should use the name of the MAPI profile you use when logging on to the e-mail system. For Lotus Notes you should use the name of the user (or ID) you use when logging on to Lotus Notes. For SMTP you should use your e-mail address.
<b>MSG_ACTIONS</b>	Map of Notification Actions and Events in text format. The map is represented as a comma-separated list of 2-character values where in every list item the first character represents Notification Event Type and the second character represents Notification Action Type. The following characters can be used for the event type: <b>S</b> - job start, <b>F</b> - job finish, <b>E</b> - job error, <b>N</b> - job file not found, <b>L</b> - job is late. The following characters can be used for the action type: <b>E</b> - send email, <b>P</b> - send page, <b>N</b> - send network popup message, <b>D</b> - execute database commands, <b>F</b> - create semaphore files, <b>M</b> - send Message; <b>T</b> - send SNMP trap, <b>J</b> - run job, <b>R</b> - run program, <b>S</b> - run script.  Example map:

	<p>SE,FE,EE,FD</p> <p>This example map represents the following Notification Events and Events:</p> <ol style="list-style-type: none"> <li>1. Send notification email on job start.</li> <li>2. Send notification email on job finish.</li> <li>3. Send notification email on job error.</li> <li>4. Execute database commands on job finish.</li> </ol>
<b>MSG_DATABASE</b>	Execute Notification Action of Database Type, one of the following: <b>Y, N</b> (yes, no)
<b>MSG_E-MAIL</b>	Execute Notification Action of E-mail Type, one of the following: <b>Y, N</b> (yes, no)
<b>MSG_ERROR</b>	Execute Notification Action on Job Execution Error, one of the following: <b>Y, N</b> (yes, no)
<b>MSG_FILE</b>	Execute Notification Action of Semaphore File Type, one of the following: <b>Y, N</b> (yes, no)
<b>MSG_FILE_NAME</b>	File name(s) for Notification Action of Semaphore File Type
<b>MSG_FINISH</b>	Execute Notification Action on Job Finish, one of the following: <b>Y, N</b> (yes, no)
<b>MSG_JOB</b>	Execute Notification Action of Run Job Type, one of the following: <b>Y, N</b> (yes, no)
<b>MSG_JOB_ID</b>	Job name or job id for Notification Action of Run Job Type
<b>MSG_MESSAGE</b>	Execute Notification Action of Message Type, one of the following: <b>Y, N</b> (yes, no)
<b>MSG_MESSAGE_DATA</b>	The data to send in Notification Action of Message Type. The data format is user defined. The size of the data shouldn't exceed 1 MByte
<b>MSG_MESSAGE_ID</b>	Message ID of the Message sent in Notification Action of Message Type
<b>MSG_LATE</b>	Execute Notification Action on Job Late Start, one of the following: <b>Y, N</b> (yes, no)
<b>MSG_NET</b>	<p>Execute Notification Action of Network Message Type, one of the following: <b>Y, N</b> (yes, no)</p> <p> <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.</p>
<b>MSG_NET_RECIPIENT</b>	<p>Message Recipient for Notification Action of Network Message Type</p> <p> <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.</p>
<b>MSG_NOTFOUND</b>	Execute Notification Action on Job Executable Not Found Error, one of the following: <b>Y, N</b> (yes, no)
<b>MSG_PAGE</b>	<p>Execute Notification Action of Page Type, one of the following: <b>Y, N</b> (yes, no)</p> <p> <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.</p>

<b>MSG_PAGER</b>	Page Recipient's Pager Number  <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.
<b>MSG_PASSWORD</b>	E-mail Password for Notification Action of E-mail Type
<b>MSG_PROFILE</b>	Database Profile for Notification Action of Database Type
<b>MSG_PROGRAM</b>	Execute Notification Action of Run Program Type, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>MSG_PROGRAM_NAME</b>	Program name for Notification Action of Run Program Type
<b>MSG_PROGRAM_TIMEOUT</b>	Process Timeout (seconds) for Notification Action of Run Program Type
<b>MSG_RECIPIENT</b>	E-mail Recipient for Notification Action of E-mail Type
<b>MSG_SCRIPT</b>	Script for Notification Action of Script Type  <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.
<b>MSG_SCRIPT_TYPE</b>	Type of Script for Notification Action of Script Type, one of the following: <b>JAL</b> , <b>VBS</b> (Job Automation Language, Visual Basic Script)  <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.
<b>MSG_START</b>	Execute Notification Action on Job Start, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>MSG_TRAP</b>	Execute Notification Action of Send SNMP Trap Type, one of the following: <b>Y</b> , <b>N</b> (yes, no) NAME Job Name
<b>MQ_PROFILE</b>	MQ broker profile
<b>MQ_SAVE_DIR</b>	The output directory in which to save messages downloaded from MQ broker
<b>MULTI_INSTANCE_CONTROL</b>	Job queuing rule for handling multiple job instances, one of the following: <b>R</b> – always queue and run, <b>T</b> – terminate already running and queued job instances if any, and add new instance, <b>S</b> – if there are already running or queued job instances, skip new instance and do nothing, <b>E</b> – if there are already running or queued job instances, skip new instance and raise an error.
<b>NAME</b>	Job Name
<b>OUTPUT_PATTERN</b>	Job Output evaluation pattern This property is not used in 24x7 Scheduler Windows-only Edition.
<b>PASSWORD</b>	E-mail Password (e-mail watch job)
<b>POLLING_INTERVAL</b>	Polling Interval (minutes)
<b>PRIORITY</b>	Job Priority, one of the following: <b>-1</b> – low, <b>0</b> – normal, <b>1</b> – high

<b>PROFILE</b>	Database Profile
<b>PROTECTION</b>	Job Protection State, one of the following: <b>F</b> , <b>E</b> , <b>R</b> , an empty string ( <b>F</b> – full protection; <b>E</b> – execute only; <b>R</b> – read only; an empty string indicates that a job is not protected). This is a read-only property. It cannot be changed using <b>SET</b> command. It can be retrieved using <b>GET</b> command.
<b>QUEUE</b>	Job Queue
<b>REBOOT</b>	Reboot Computer After Job Finished, one of the following: <b>Y</b> , <b>N</b> (yes, no)  <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.
<b>RETRY_INTERVAL</b>	Retry Interval (seconds)
<b>RENAME_SUFFIX</b>	Retry Interval (seconds)
<b>RETRY_ON_ERROR</b>	The name suffix used in semaphore file names for rename operations.
<b>RUNAS_DOMAIN</b>	Domain Name for authentication of jobs to be run using another user account.  <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition. In that version the RUNAS_USER must contain both the domain and user names in <b>domain\user</b> format.
<b>RUNAS_PASSWORD</b>	Password for authentication of jobs to be run using another user account.
<b>RUNAS_USER</b>	User Name for authentication of jobs to be run using another user account.
<b>SATURDAY</b>	Execute Job On Saturdays, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>SAVE_ATTACHMENT</b>	Save E-mail Attachments (e-mail watch job), one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>SCHEDULE_TYPE</b>	Schedule Type, one of the following: <b>O</b> , <b>D</b> , <b>T</b> , <b>M</b> , <b>F</b> , <b>P</b> , <b>A</b> , <b>E</b> , <b>I</b> , <b>L</b> , <b>S</b> (Time trigger: <b>O</b> – run once, <b>D</b> – repeat daily, <b>T</b> – repeat at specified time interval, <b>M</b> – repeat monthly; File trigger: <b>F</b> – check semaphore files; Process trigger: <b>P</b> – check process presence, <b>A</b> – check process absence; E-mail trigger: <b>E</b> – check e-mail message; User trigger: <b>I</b> – wake up on "user idle" event, <b>L</b> – wake up on log-off event, <b>S</b> – wake up on shutdown event)
<b>SCRIPT</b>	Job Script
<b>SCRIPT_TYPE</b>	Job Script Type, one of the following: <b>JAL</b> , <b>VBS</b> , <b>JS</b> (Job Automation Language, Visual Basic Script, JavaScript)  <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.
<b>SEND_KEYSTROKE</b>	Send Keystroke, one of the following: <b>Y</b> , <b>N</b> (yes, no)  <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.
<b>SIZE_CHECK_INTERVAL</b>	File Size Stability Check Interval (used in File-watch jobs)
<b>SKIP</b>	Skip Late Job, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>SKIP_HOLIDAY</b>	Skip Job on Holiday, one of the following: <b>Y</b> , <b>N</b> (yes, no)

<b>SLIDE_HOLIDAY</b>	Slide Job Execution Time on the next non-holiday if it falls on holiday, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>SQL</b>	SQL Command(s)
<b>START_DATE</b>	First Start Date
<b>START_IN</b>	Program Start-up Directory
<b>START_TIME</b>	First Start Time
<b>SUBJECT</b>	E-mail Message Subject for (e-mail watch job)
<b>SUNDAY</b>	Execute Job On Sundays, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>TIME_LIST</b>	All Day Schedule List of fixed Times, values must be in valid 24-hour time format. Example: 11:10,12:10,17:10,18:10. This property is shared with DAY_LIST property for Monthly Schedule.
<b>THURSDAY</b>	Execute Job On Thursdays, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>TIMEOUT</b>	Timeout (seconds)
<b>TUESDAY</b>	Execute Job On Tuesdays, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>WEDNESDAY</b>	Execute Job On Tuesdays, one of the following: <b>Y</b> , <b>N</b> (yes, no)
<b>WINDOW</b>	Window Style, one of the following: <b>N</b> , <b>M</b> , <b>I</b> , <b>H</b> (normal, maximized, iconic, hidden)  <b>Note:</b> This property is not used in 24x7 Scheduler Multi-platform Edition.

## Licensing

1. **Single installation license:** A separate single installation license is required for every 24x7 Scheduler client. That's it, you need at least 2 single licenses (or a site license) for using 24x7 EJB interface to control and manipulate 24x7 Scheduler or 24x7 Remote Agent. In case of 2 single licenses, one license is applied to the 24x7 Scheduler server or 24x7 Remote Agent and another license is applied to the 24x7 EJB client program.
2. **Site license:** 24x7 Scheduler site license covers unlimited usage of 24x7 servers and clients. Site license users can use 24x7 EJB components just as they use other components of the 24x7 Automation Suite. The usage of 24x7 Scheduler, 24x7 Remote Agents, 24x7 Web Console and 24x7 EJB interface, is governed by their site license agreement. The site license also allows installing and using 24x7 Remote Control Java on **one** Web server. You may not install or run it on multiple servers using the same license.
3. **Web server usage:** You must obtain 24x7 Scheduler site license before you can use 24x7 EJB interface on your server. A separate site license is required for every web server utilizing 24x7 Remote Control Java.
4. **Redistribution:** You must obtain 24x7 EJB interface redistribution license before you can redistribute it with your program.



**Important note about third party packages provided with the 24x7 EJB interface:**

24x7 EJB interface license includes installation and usage for *com.sybase.dpb* and *com.objectspace.jdl* packages. You may not use or redistribute these packages separately from 24x7 EJB interface.

The LICENSE.TXT file containing text of the single installation license can be found in the 24x7 Scheduler home directory. If you would like to obtain the redistribution license, please email your request to [sales@softtreotech.com](mailto:sales@softtreotech.com).