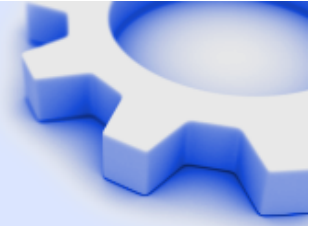


projectengine



Project Engine Web Services Application Interface

Table of Contents

- Web Services.....9
- Parameters to Web Services.....9
- Authentication.....9
- Return Values from Web Services.....9
- List of Web Services.....10
 - activateTemplates.....10
 - Parameters.....10
 - Return Value.....10
 - addAttachment.....10
 - Parameters.....10
 - Return Value.....10
 - changePassword.....10
 - Parameters.....10
 - Return Value.....10
 - checkPassword.....10
 - Parameters.....11
 - Return Value.....11
 - clearPassword.....11
 - Parameters.....11
 - Return Value.....11
 - completeTask.....11
 - Parameters.....11
 - Return Value.....11
 - copyTask.....11
 - Parameters.....11
 - Return Value.....12
 - copyTaskReference.....12
 - Parameters.....12
 - Return Value.....12
 - copyTaskToSibling.....12
 - Parameters.....12
 - Return Value.....12
 - createBaseline.....12
 - Parameters.....12
 - Return Value.....12
 - deleteMessage.....13
 - Parameters.....13
 - Return Value.....13
 - deleteReport.....13
 - Parameters.....13
 - Return Value.....13
 - deleteTask.....13
 - Parameters.....13
 - Return Value.....13

deleteUnit.....	13
Parameters.....	13
Return Value.....	14
executeAction.....	14
Parameters.....	14
Return Value.....	14
getActions.....	14
Parameters.....	14
Return Value.....	14
getAssignedUnits.....	14
Parameters.....	14
Return Value.....	14
getAttachment.....	14
Parameters.....	15
Return Value.....	15
getBurndownReport.....	15
Parameters.....	15
Return Value.....	15
getChangeFlagDate.....	15
Parameters.....	15
Return Value.....	15
getCurrentTaskId.....	15
Parameters.....	16
Return Value.....	16
getEstimationAccuracyReport.....	16
Parameters.....	16
Return Value.....	16
getEstimationHistoryReport.....	16
Parameters.....	16
Return Value.....	16
getEstimationSummaryReport.....	16
Parameters.....	16
Return Value.....	16
getHistoryList.....	17
Parameters.....	17
Return Value.....	17
getHistoryTask.....	17
Parameters.....	17
Return Value.....	17
getIconProperties.....	17
Parameters.....	17
Return Value.....	17
getLateTaskList.....	17
Parameters.....	17
Return Value.....	18
getLicenseExpirationDate.....	18

Parameters.....	18
Return Value.....	18
getMessage.....	18
Parameters.....	18
Return Value.....	18
getNameAssignedToAttachment.....	18
Parameters.....	18
Return Value.....	18
getNewMessages.....	18
Parameters.....	19
Return Value.....	19
getNoUsersInLicense.....	19
Parameters.....	19
Return Value.....	19
getOldMessages.....	19
Parameters.....	19
Return Value.....	19
getParentTask.....	19
Parameters.....	19
Return Value.....	19
getPlannedWorkloadReport.....	19
Parameters.....	20
Return Value.....	20
getPriorities.....	20
Parameters.....	20
Return Value.....	20
getProductVersion.....	20
Parameters.....	20
Return Value.....	20
getReports.....	20
Parameters.....	20
Return Value.....	20
getStatusReport.....	21
Parameters.....	21
Return Value.....	21
getSubTaskTypes.....	21
Parameters.....	21
Return Value.....	21
getTask.....	21
Parameters.....	21
Return Value.....	21
getTaskHistoryList.....	21
Parameters.....	21
Return Value.....	22
getTaskList.....	22
Parameters.....	22

Return Value.....	22
getTaskListWeb.....	22
Parameters.....	22
Return Value.....	22
getTaskSummary.....	22
Parameters.....	23
Return Value.....	23
getTaskTree.....	23
Parameters.....	23
Return Value.....	23
getTaskTreeAll.....	23
Parameters.....	23
Return Value.....	23
getTaskTypes.....	23
Parameters.....	23
Return Value.....	24
getUnavailableServices.....	24
Parameters.....	24
Return Value.....	24
getUserIdFromName.....	24
Parameters.....	24
Return Value.....	24
getUsers.....	24
Parameters.....	24
Return Value.....	24
getUsersOnline.....	24
Parameters.....	24
Return Value.....	25
getWorkloadReport.....	25
Parameters.....	25
Return Value.....	25
getYourTaskList.....	25
Parameters.....	25
Return Value.....	25
hello.....	25
Parameters.....	25
Return Value.....	25
importMSProjectXml.....	26
Parameters.....	26
Return Value.....	26
insertReport.....	26
Parameters.....	26
Return Value.....	26
insertTask.....	26
Parameters.....	26
Return Value.....	26

insertTaskWeb.....	26
Parameters.....	27
Return Value.....	27
insertUnit.....	27
Parameters.....	27
Return Value.....	27
insertUserWeb.....	27
Parameters.....	27
Return Value.....	27
levelResources.....	27
Parameters.....	27
Return Value.....	28
moveTask.....	28
Parameters.....	28
Return Value.....	28
moveTaskDown.....	28
Parameters.....	28
Return Value.....	28
moveTaskUp.....	28
Parameters.....	29
Return Value.....	29
moveTaskToSibling.....	29
Parameters.....	29
Return Value.....	29
moveUnit.....	29
Parameters.....	29
Return Value.....	29
moveUnitDown.....	29
Parameters.....	29
Return Value.....	30
moveUnitUp.....	30
Parameters.....	30
Return Value.....	30
reassignTask.....	30
Parameters.....	30
Return Value.....	30
repeatTask.....	30
Parameters.....	30
Return Value.....	31
sendEmail.....	31
Parameters.....	31
Return Value.....	31
sendMessage.....	31
Parameters.....	31
Return Value.....	31
setChangeFlagDate.....	31

Parameters.....	31
Return Value.....	32
setCurrentTaskId.....	32
Parameters.....	32
Return Value.....	32
sentToMessage.....	32
Parameters.....	32
Return Value.....	32
startTask.....	32
Parameters.....	32
Return Value.....	32
todo.....	32
Parameters.....	33
Return Value.....	33
updateReportSettings.....	33
Parameters.....	33
Return Value.....	33
updateTask.....	33
Parameters.....	33
Return Value.....	33
updateUnit.....	33
Parameters.....	33
Return Value.....	33
Web Interface Services.....	33
serviceMainForm.....	34
Parameters.....	34
Return Value.....	34
serviceEditTaskForm.....	34
Parameters.....	34
Return Value.....	34
serviceNewTaskForm.....	34
Parameters.....	34
Return Value.....	34
serviceCompleteTaskForm.....	34
Parameters.....	35
Return Value.....	35
serviceReportForm.....	35
Parameters.....	35
Return Value.....	35
serviceChangePasswordForm.....	35
Parameters.....	35
Return Value.....	35
serviceAddAttachmentForm.....	35
Parameters.....	36
Return Value.....	36
serviceGanttChartForm.....	36

Parameters.....	36
Return Value.....	36
serviceServerPropertiesForm.....	36
Parameters.....	36
Return Value.....	37
serviceConfirmDeleteForm.....	37
Parameters.....	37
Return Value.....	37
servicePlannedWorkloadForm.....	37
Parameters.....	37
Return Value.....	37
serviceWorkloadForm.....	37
Parameters.....	37
Return Value.....	37
serviceManageUserForm.....	38
Parameters.....	38
Return Value.....	38
serviceConfirmCompleteForm.....	38
Parameters.....	38
Return Value.....	38
serviceAddLinkForm.....	38
Parameters.....	38
Return Value.....	38
serviceConfirmStopServerForm.....	39
Parameters.....	39
Return Value.....	39
serviceEditMessageForm.....	39
Parameters.....	39
Return Value.....	39
serviceCustomReportForm.....	39
Parameters.....	39
Return Value.....	39
serviceConfirmDeleteReportForm.....	39
Parameters.....	40
Return Value.....	40
Example of a Task XML.....	41
Example of a Unit XML.....	41
Project Engine SDK.....	42

Web Services

All Web Services in the Project Engine Server container are accessed through HTTP (GET or POST). Depending on the type of service the response will be XML, JSON or HTML. A Web Service Tester is supplied with the Project Engine Server and can be used for testing all Web Services in the Project Engine Server. Use for example the call “hello” to determine if the server is available.

All services that return XML also have two optional stylesheet parameters to be able to modify the XML response into HTML.

Parameters to Web Services

Most Web Services in Project Engine Server takes `user_id` and `password` as the first two parameters. The syntax for calling a service (using HTTP GET) is:

```
http://server_address:port/command?user_id=x&password=x&param1=x&param2=x&...
```

The parameters to supply are listed for each service in the section below. There are two optional parameters; `stylesheet` and `error_stylesheet` that will translate any XML response back into HTML when viewed from the browser. The `error_stylesheet` will be used when returning an error from the server.

Parameters within [] are optional. Note that they do not change the parameter name of subsequent parameters. Omitting, for example, the parameters `sortTaskId` and `sortType` in the `getTaskListWeb` service still requires an `param4` parameter for filter expression.

Authentication

A client may supply the `user_id` and `password` parameters with any call to the server. Alternatively a client may provide the `session` parameter that contains both the `user_id` and `password` (in hexadecimal format separated with a semicolon). If neither `user_id/password` or `session` is provided with a service call the server will prompt for a `user_id` and `password` using HTTP basic authentication. The user may enter the full user name, user id or login id with the corresponding password in the authentication dialog.

Return Values from Web Services

All Web Services return either XML, JSON, HTML or XHTML back to the client. The optional parameters `stylesheet` and `error_stylesheet` are filepaths to stylesheets (.xsl file) stored on the server (relative the `ProjectEngineServer.jar` file). Supplying the `stylesheet` parameter will trigger the XML to HTML conversion on the server for successful returns. An XML response is always returned within a response tag (`<response>...</response>`).

List of Web Services

activateTemplates

Activates a task. The task and all subtasks are converted into template tasks.

Parameters

user_id	User id
password	Password
param1	Task id - Id of task to activate.

Return Value

0 if succeeded or negative value if error.

addAttachment

Adds an attachment to the attachments directory. The file name may contain a path to the id of the task.

Parameters

user_id	User id
password	Password
param1	Filename - The path and file name of the attachment.
param2	The attachment in hex (all bytes are converted into two character hexadecimal values).

Return Value

0 if succeeded or negative value if error.

changePassword

Change the password of a user.

Parameters

user_id	User id
password	Password
param1	Old password
param2	New password

Return Value

0 if succeeded or negative value if error.

checkPassword

Check the password of a user.

Parameters

user_id	User id
password	Password

Return Value

0 if correct password or -5 if incorrect.

clearPassword

Clear the password of a user.

Parameters

user_id	User id
password	Password
param1	User id - User to clear the password for. The password will be blank (empty).

Return Value

0 if succeeded or negative value if error.

completeTask

Complete a task. A result description will be set if provided.

Parameters

user_id	User id
password	Password
param1	Task id - The task to complete.
[param2]	Result description - A result description. This parameter is optional.

Return Value

0 if succeeded or negative value if error.

copyTask

Copy a task and place the new task below a another task.

Parameters

user_id	User id
password	Password
param1	From task id - Task to copy.
param2	To parent task id - Task to place the new task under.

Return Value

Task id of new task or negative value if error.

copyTaskReference

Copy a task and place a reference to that task below a another task.

Parameters

user_id	User id
password	Password
param1	From task id - Task to copy.
param2	To parent task id - Task to place the new task reference under.

Return Value

Task id of new task or negative value if error.

copyTaskToSibling

Copy a task and that task above a another task.

Parameters

user_id	User id
password	Password
param1	From task id - Task to copy.
param2	To sibling task id - Place the new task on top of this task.

Return Value

Task id of new task or negative value if error.

createBaseline

Creates a baseline below the provided task.

Parameters

user_id	User id
password	Password
param1	From task id – Task to create a baseline for.

Return Value

0 if succeeded or negative value if error.

deleteMessage

Deletes a message.

Parameters

user_id	User id
password	Password
param1	Message id - The message to delete.

Return Value

0 if succeeded or negative value if error.

deleteReport

Delete a custom report.

Parameters

user_id	User id
password	Password
param1	Report id - The report to delete.

Return Value

0 if succeeded or negative value if error.

deleteTask

Delete a task.

Parameters

user_id	User id
password	Password
param1	Task id - The task to delete.

Return Value

0 if succeeded or negative value if error.

deleteUnit

Delete a unit (user, role or group).

Parameters

user_id	User id
password	Password
param1	Unit id - The unit to delete.

Return Value

0 if succeeded or negative value if error.

executeAction

Perform an action on a task.

Parameters

user_id	User id
password	Password
param1	Task id – Task to get actions for.
param2	Action – Action to perform on the task.

Return Value

0 if succeeded or negative value if error.

getActions

Get all available actions for a task.

Parameters

user_id	User id
password	Password
param1	Task id – Task to get actions for.

Return Value

A comma separated list of actions.

getAssignedUnits

Returns a list of units that are assigned to one or more tasks below the supplied task id.

Parameters

user_id	User id
password	Password
param1	Task id – Task to find assigned to units below.

Return Value

A JSON string containing the name and id of all units that are assigned to any of the tasks below the param1 task.

getAttachment

Get an attachment from the attachments directory.

Parameters

user_id	User id
password	Password
param1	Filename - The path and file name of the attachment relative the attachment directory.

Return Value

The attachment as a hexadecimal string or negative value if error.

getBurndownReport

Shows the total work remaining for all tasks below the selected task from the first creation date to the current date. This report is used by the Scrum framework to be able to estimate when all work will be completed.

Parameters

user_id	User id
password	Password
param1	Task id - The task to base the report on.
[param2]	Start date - The first date in the time interval. The first creation date will be used if omitted.
[param3]	End Date - The last date in the time interval. The current date will be used if omitted.

Return Value

An XML string or negative value if error.

getChangeFlagDate

Returns the changeFlagDate. The changeFlagDate is used by the change tracking to display changes made to the tasks since this date.

Parameters

user_id	User id
password	Password

Return Value

The changeFlagDate or blank if not set.

getCurrentTaskId

Returns the id of the current task for this user.

Parameters

user_id	User id
password	Password

Return Value

The current task id or blank if not set.

getEstimationAccuracyReport

Returns the Estimation Accuracy Report.

Parameters

user_id	User id
password	Password
param1	Task id - The task to base the report on.
param2	Units - The units to include in the report.

Return Value

An XML string or negative value if error.

getEstimationHistoryReport

Returns the Estimation History Report.

Parameters

user_id	User id
password	Password
param1	Task id - The task to base the report on.

Return Value

An XML string or negative value if error.

getEstimationSummaryReport

Returns the Estimation Summary Report.

Parameters

user_id	User id
password	Password
param1	Task id - The task to base the report on.

Return Value

An XML string or negative value if error.

getHistoryList

Returns the History List Report.

Parameters

user_id	User id
password	Password
param1	No tasks - The maximum number of tasks to display.

Return Value

An XML string or negative value if error.

getHistoryTask

Returns a task from the history.

Parameters

user_id	User id
password	Password
param1	Task id - The id of the task to return.
param2	Updated date - The updated date of the task to return. Note that there may be several tasks with the same id in the history.

Return Value

An XML string or negative value if error.

getIconProperties

Returns a comma separated list of icon properties from the "icon.properties" file stored on the server.

Parameters

user_id	User id
password	Password

Return Value

A comma separated list of icon properties.

getLateTaskList

Returns the Late Task List Report.

Parameters

user_id	User id
password	Password

user_id	User id
param1	Task id - The task to base the report on.

Return Value

An XML string or negative value if error.

getLicenseExpirationDate

Returns a string of the format YYMM. This is the last month the license key is valid.

Parameters

No parameters.

Return Value

A string of the format YYMM.

getMessage

Returns a message.

Parameters

user_id	User id
password	Password
param1	Message id - The message to return.

Return Value

An XML string or negative value if error.

getNameAssignedToAttachment

Returns the name of the unit assigned to a task that contains an attachment.

Parameters

user_id	User id
password	Password
param1	Filepath of the attachment.

Return Value

A user name or negative value if error.

getNewMessages

Returns a list of new messages for the current user.

Parameters

user_id	User id
password	Password

Return Value

An XML string or negative value if error.

getNoUsersInLicense

Returns the number of available users. This information is stored in the license key.

Parameters

No parameters.

Return Value

No of users.

getOldMessages

Returns a list of old messages for the current user.

Parameters

user_id	User id
password	Password

Return Value

An XML string or negative value if error.

getParentTask

Returns the parent task to a task.

Parameters

user_id	User id
password	Password
param1	Task id - The task to find the parent to.

Return Value

An XML string or negative value if error.

getPlannedWorkloadReport

Returns the Planned Workload report.

Parameters

user_id	User id
password	Password
param1	Task id - The task to base the report on.
param2	Units - The units to include in the report.
param3	No days or weeks.
param4	Days or weeks. 0=display days, 1=display weeks.
param5	Opening time - Start time of working day.
param6	Hours in working day.

Return Value

0 if succeeded or negative value if error.

getPriorities

Returns a list of priorities from the "priorities.XML" file.

Parameters

user_id	User id
password	Password

Return Value

An XML string or negative value if error.

getProductVersion

Returns the product version of the current license key: per, pro or ent.

Parameters

No parameters.

Return Value

A string: per, pro or ent.

getReports

Returns a list of reports available to the current user.

Parameters

user_id	User id
password	Password

Return Value

An XML string or negative value if error.

getStatusReport

Returns the Status report.

Parameters

user_id	User id
password	Password
param1	Task id - Task to base the report on.

Return Value

An XML string or negative value if error.

getSubTaskTypes

Returns a list of subtasks that may be placed below the supplied task type.

Parameters

user_id	User id
password	Password
param1	Task id - Task id that defines a task type (template).

Return Value

0 if succeeded or negative value if error.

getTask

Returns a task.

Parameters

user_id	User id
password	Password
param1	Task id - The task to return.

Return Value

An XML string or negative value if error.

getTaskHistoryList

Returns the history of a task.

Parameters

user_id	User id
password	Password
param1	Task id - The task to return history for.

Return Value

An XML string or negative value if error.

getTaskList

Returns a filtered list of tasks. The list will always contain all fields, param7 and param8 are only used when converting the XML to HTML.

Parameters

user_id	User id
password	Password
param1	Task id - The task to base the report on.
[param2]	Filter - A filter expression.
[param3]	Sort field - The field to sort the list on.
[param4]	Sort direction - 0=high to low, 1=low to high.
[param5]	Second sort field.
[param6]	Second sort direction.
[param7]	Visible fields - Semicolon separated list of fields to display in the list.
[param8]	Report title - The title of the report.

Return Value

An XML string or negative value if error.

getTaskListWeb

Returns a filtered list of tasks. The list will always contain all fields, param4 and param5 are only used when converting the XML to HTML. This service works like the getTaskList service but takes the filter expression directly from the HTTP GET/POST command instead of providing the filter as a parameter. That feature makes this the ideal service to use with HTML forms.

Parameters

user_id	User id
password	Password
param1	Task id - The task to base the report on.
param2	Sort field - The field to sort the list on.
param3	Sort direction - 0=high to low, 1=low to high.
param4	Visible fields - Semicolon separated list of fields to display in the list.
param5	Report title - The title of the report.
param6	Second sort field.
param7	Second sort direction.

Return Value

An XML string or negative value if error.

getTaskSummary

Returns a summary of a task as HTML.

Parameters

user_id	User id
password	Password
param1	Task id - The task to return.

Return Value

An XML string or negative value if error.

getTaskTree

Returns a tree of tasks visible to a user. Only returns the fields used by the task tree view in the Project Engine client.

Parameters

user_id	User id
password	Password
[param1]	Task id - The task to return the task tree below. The entire task tree visible to the current user will be returned if this parameter is omitted.

Return Value

An XML string or negative value if error.

getTaskTreeAll

Returns a tree of tasks visible to a user. Same as the getTaskTree service but returns all fields for all tasks.

Parameters

user_id	User id
password	Password
[param1]	Task id - The task to return the task tree below. The entire task tree visible to the current user will be returned if this parameter is omitted.

Return Value

An XML string or negative value if error.

getTaskTypes

Returns a list of task types available to the current user.

Parameters

user_id	User id
password	Password

Return Value

An XML string or negative value if error.

getUnavailableServices

Returns a list of unavailable services.

Parameters

user_id	User id
password	Password

Return Value

A comma separated list of unavailable services.

getUserIdFromName

Returns the user id of user name or -17 if unit was not found or not a user.

Parameters

user_name	User name
-----------	-----------

Return Value

userId or -17 if unit was not found or not a user

getUsers

Returns a tree structure containing all users, roles and groups.

Parameters

[user_id]	User id - Mandatory if server configured to login using user name.
[password]	Password - Mandatory if server configured to login using user name.

Return Value

An XML string or negative value if error.

getUsersOnline

Returns statistics for all currently connected users. A user is connected if it is holding one license. A user must be inactive for X minutes before being removed from the online list (X is by default set to 5 minutes).

Parameters

No parameters.

Return Value

An XML string or negative value if error.

getWorkloadReport

Returns the Workload report.

Parameters

user_id	User id
password	Password
param1	Task id - The task to base the report on.
param2	Units - The units to include in the report.
Param3	From date - Start date of report.
param4	No days - No of days in report.

Return Value

0 if succeeded or negative value if error.

getYourTaskList

Returns the Your Task List for the current user. Parameter 1 to 4 are optional.

Parameters

user_id	User id
password	Password
[param1]	Sort field - The field to sort the list on.
[param2]	Sort direction - 0=down, 1=up.
[param3]	Visible fields - Fields to display in the list (columns).
[param4]	Report title - The title of the report.

Return Value

An XML string or negative value if error.

hello

Returns 0. Use this service to determine if the server is responding.

Parameters

No parameters.

Return Value

Always returns 0.

importMSProjectXml

Import an XML file from MS Project.

Parameters

user_id	User id
password	Password
param1	Task id - The task to place the imported tasks under.
param2	Xml - MS Project XML file. This XML should be encrypted using the built-in encryption.

Return Value

0 if succeeded or negative value if error.

insertReport

Adds a new report.

Parameters

user_id	User id
password	Password
param1	Report XML - The report to insert as an XML string.

Return Value

0 if succeeded or negative value if error.

insertTask

Adds a new task.

Parameters

user_id	User id
password	Password
param1	Task id - Task to add a new task below.
param2	Task XML - The task to insert as an XML string.

Return Value

0 if succeeded or negative value if error.

insertTaskWeb

Adds a new task. Same as insertTask but takes the task fields directly from the HTTP GET/POST command instead of providing the task XML as a parameter. That feature makes this the ideal service to use with HTML forms.

Parameters

user_id	User id
password	Password
param1	Task id - Task to add a new task below.

Return Value

0 if succeeded or negative value if error.

insertUnit

Adds a new unit.

Parameters

user_id	User id
password	Password
param1	Unit id - Unit to add a new unit below.
param2	Unit XML - The unit to insert as an XML string.

Return Value

0 if succeeded or negative value if error.

insertUserWeb

Adds a new user. Same as insertUnit but takes the user fields directly from the HTTP GET/POST command instead of providing the unit XML as a parameter. That feature makes this the ideal service to use with HTML forms.

Parameters

user_id	User id
password	Password
param1	Unit id - Unit to add a new unit below (will be added as a user).

Return Value

0 if succeeded or negative value if error.

levelResources

Level resources for a task and children.

Parameters

user_id	User id
password	Password
param1	Task id - The task to base the report on.
param2	Time period in days.
param3	Opening time - Start time of working day.
param4	Hours in working day.
param5	First priority field.
param6	First priority order (0/1).
param7	Second priority field.
param8	Second priority order (0/1).
param9	Complete option. 0=Complete as soon as possible 1=Complete before due date

Return Value

An XML string or negative value if error.

moveTask

Moves a task in the task tree.

Parameters

user_id	User id
password	Password
param1	Task id - Task to move.
param2	Task id - Task to move the task under.

Return Value

0 if succeeded or negative value if error.

moveTaskDown

Moves a task down one step in the task tree.

Parameters

user_id	User id
password	Password
param1	Task id - Task to move.

Return Value

0 if succeeded or negative value if error.

moveTaskUp

Moves a task up one step in the task tree.

Parameters

user_id	User id
password	Password
param1	Task id - Task to move.

Return Value

0 if succeeded or negative value if error.

moveTaskToSibling

Moves a task in the task tree.

Parameters

user_id	User id
password	Password
param1	Task id - Task to move.
param2	Task id - The task to move the task on top of.

Return Value

0 if succeeded or negative value if error.

moveUnit

Moves a unit in the unit tree.

Parameters

user_id	User id
password	Password
param1	Unit id - Unit to move.
param2	Unit id - Unit to move the unit under.

Return Value

0 if succeeded or negative value if error.

moveUnitDown

Moves a unit down one step in the unit tree.

Parameters

user_id	User id
password	Password

user_id	User id
param1	Unit id - Unit to move.

Return Value

0 if succeeded or negative value if error.

moveUnitUp

Moves a unit up one step in the unit tree.

Parameters

user_id	User id
password	Password
param1	Unit id - Unit to move.

Return Value

0 if succeeded or negative value if error.

reassignTask

Reassign a number of tasks.

Parameters

user_id	User id
password	Password
param1	Task id - The task and subtasks to reassign.
param2	Unit id - Value to set the assigned to field.
param3	Tasks to assign - 0=This task, 1=Direct subtasks, 2=This and direct subtasks, 3=All subtasks, 4=This and all subtasks.
[param4]	Unit id - Current value of the assigned to field or blank if task should be unassigned. The current value of the assigned to field will be ignored if this parameter is not provided.

Return Value

0 if succeeded or negative value if error.

repeatTask

Repeats a task.

Parameters

user_id	User id
password	Password

user_id	User id
param1	Task id - The task to repeat.

Return Value

0 if succeeded or negative value if error.

sendEmail

Sends an email.

Parameters

user_id	User id
password	Password
param1	Email to - Email address to send to.
param2	Title - Title of the email.
param3	Message - The message of the email. Start the message with "<html>" if you need to send a HTML formatted email. Use single quotes (') instead of double quotes (") in the HTML.

Return Value

0 if succeeded or negative value if error.

sendMessage

Adds a comment to the end of a message.

Parameters

user_id	User id
password	Password
param1	Message id - The message to add a comment to. A new message will be created with this id if it does not exist.
param2	Message - The comment to add to the existing or new message.

Return Value

0 if succeeded or negative value if error.

setChangeFlagDate

Sets the changeFlagDate used by the Change Tracking.

Parameters

user_id	User id
password	Password

user_id	User id
param1	Date - Date as a string of the form: YYYYMMDD

Return Value

0 if succeeded or negative value if error.

setCurrentTaskId

Set the current task for this user. Use a blank value to reset. The current task is used by the Task Timer.

Parameters

user_id	User id
password	Password
param1	Task id

Return Value

0 if succeeded or negative value if error.

sentToMessage

Sets the to field of a message.

Parameters

user_id	User id
password	Password
param1	Message id - The message to set the to units on. A new message will be created with this id if it does not exist.
param2	Unit id - A semicolon separated list of units that will be able to participate in the discussion.

Return Value

0 if succeeded or negative value if error.

startTask

Starts a task.

Parameters

user_id	User id
password	Password
param1	Task id - The task to start.

Return Value

0 if succeeded or negative value if error.

todo

Returns the todo list for the current user as XHTML.

Parameters

user_id	User id
password	Password

Return Value

0 if succeeded or negative value if error.

updateReportSettings

Updates the report settings of a user.

Parameters

user_id	User id
password	Password
param1	Report Settings - A string.

Return Value

0 if succeeded or negative value if error.

updateTask

Updates an existing task. The task id should be inside the XML string.

Parameters

user_id	User id
password	Password
param1	Task XML - The task to update as an XML string.

Return Value

0 if succeeded or negative value if error.

updateUnit

Updates an existing unit. The unit id should be inside the XML string.

Parameters

user_id	User id
password	Password
param1	Unit XML - The unit to insert as an XML string.

Return Value

0 if succeeded or negative value if error.

Web Interface Services

The services in this section are used by the Project Engine web interface.

serviceMainForm

Displays the main web interface with your task tree to the left and your task list to the right.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceEditTaskForm

Displays the edit task form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceNewTaskForm

Displays the create new task form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceCompleteTaskForm

Displays the complete task form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceReportForm

Displays a list of all reports.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceChangePasswordForm

Displays the change password form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceAddAttachmentForm

Displays the add attachment form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any).
param4	Time interval (0=days, 1=weeks).
param5	The visible levels
param6	Opening time.
param7	hours in workday.

Return Value

0 if succeeded or negative value if error.

serviceGanttChartForm

Displays the Gantt Chart in HTML.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	No units.
param4	Time interval (0=days, 1=weeks).
param5	The visible levels
param6	Opening time.
param7	hours in workday.

Return Value

0 if succeeded or negative value if error.

serviceServerPropertiesForm

Displays the server properties form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceConfirmDeleteForm

Displays the confirm delete form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

servicePlannedWorkloadForm

Displays the Planned Workload report as HTML.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceWorkloadForm

Displays the Workload report as HTML.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	No units.

Return Value

0 if succeeded or negative value if error.

serviceManageUserForm

Displays the manage user form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceConfirmCompleteForm

Displays the confirm complete form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceAddLinkForm

Displays the add link form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceConfirmStopServerForm

Displays the confirm stop server form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceEditMessageForm

Displays the edit message form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceCustomReportForm

Displays the custom report form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

serviceConfirmDeleteReportForm

Displays the confirm delete report form.

Parameters

user_id	User id
password	Password
param1	Task id - The selected task in the task tree
param2	The form event name.
param3	Task id - The currently copied task (if any)

Return Value

0 if succeeded or negative value if error.

Example of a Task XML

Below is an example of a task XML. All of the attributes are optional except the id attribute that is mandatory in some cases. An updateTask service call will for example update all provided attributes of a task with the id specified in the task XML.

```
<task id="f18cb83f50bd" title="Projects" goal_descr="Add projects below this task."
assigned_by="1" assigned_to="1" serial="0" status="0" priority="1" started_date=""
completed_date="" delivery_date="" delivery_time="" expiration_date="" result_descr=""
estimated_time="0" work_done="0" work_done_details="" task_type="108a4343b3130"
consult="" visible_to="" est_started_date="" est_completed_date="" created_date="2007-02-
11 19:29:30" updated_date="2006-11-02 10:24:40" created_by="" updated_by=""
delivered_to="1" delivered_to_date="" repeat_mode="0" repeat="0" repeat_every="0"
repeat_start_date="" repeat_time="" object_type="0" attachment="" auto_start="1"
is_visible_template="0" custom0="" custom1="" custom2="" default_subtask=""
task_type_name="" reference="" auto_start_if="" auto_complete_if="" custom3=""
custom4="" custom5="" custom6="" custom7="" custom8="" custom9="" custom10=""
custom11="" custom12="" custom13="" custom14="" custom_meta="" timer_action="0"
timer_no="1" timer_interval="0" timer_after="0"
visible_fields="assigned_by;title;goal_descr;assigned_to;result_descr;consult;task_type;priori
ty;status;started_date;completed_date;est_started_date;est_completed_date;expiration_date;se
rial;estimated_time;work_done" valid_expression="" invalid_message=""
repeat_expression="" custom15="" custom16="" custom17="" custom18="" custom19=""
custom20="" custom21="" custom22="" custom23="" custom24="" custom25=""
custom26="" custom27="" custom28="" custom29=""/>
```

Example of a Unit XML

Unit XML:s can be of four types; user, worker, group or user_ref. All units except user_ref may contain other units. The user_id attribute of a user_ref refers to the id of the user to add to a group or a worker.

```
<unit id="0" name="Root" created_by="" created_date="" updated_by="" updated_date="">
  <user id="1" name="Administrator" password="" job_title="Administrator" description=""
type="2" work_mon="8" work_tue="8" work_wed="8" work_thu="8" work_fri="8"
work_sat="0" work_sun="0" created_by="" created_date="" updated_by="1"
updated_date="2006-11-06 10:36:38" non_working_days="" email="" cost_per_hour="0"
online="0" notify_new_task="0" notify_by_changed_task="0" notify_by_started_task="0"
notify_by_completed_task="0" notify_with_attachments="0" completed_visible_days="-1"
change_flag_date=""/>
  <worker id="100" name="All Roles" description="" created_by="" created_date=""
updated_by="1" updated_date="2002-10-30 23:00:46" cost_per_hour="0"/>
  <group id="300" name="All Groups" description="" created_by="" created_date=""
updated_by="1" updated_date="2002-10-30 23:00:35"/>
</unit>
```

Project Engine SDK

There is a small SDK available for Java developers to be able to integrate the Project Engine Server into another system. The SDK contains a `ServerProxy` class (with source code) that can be used for calling any Project Engine service.

There is also a `Task` class that will make it easier to create a valid task XML String. Task XML strings are used by many services, like `updateTask` or `insertTask`.