ORACLE
INSTANTIS
EnterpriseTrack

API Reference Guide
16 R1

June 2016

Contents

Getting Started

This document provides details useful when designing, programming, deploying, and troubleshooting Web-enabled applications for your Oracle Instantis EnterpriseTrack account.

EnterpriseTrack includes an Integration module that allows you to create customized applications that:

- Obtain activity assignment data
- Obtain the Project Finances Element Monthly Detail report
- Update activity data
- Update effort data
- Get finance data
- Enable automatic data uploads
- Perform CRUD (create, read, update, and delete) operations related to ideas, proposals, project, project finance, resource, resource rate, activity WBS, non-WBS activity, and assignments.
- Generate Timesheet Detail Report programmatically.

This document also includes details on preconfigured, web-enabled reports that do not require any software development (programming) effort.

> **Note:** You can use the APIs when the EnterpriseTrack system is in either Production or UAT mode.

In This Section

Recommendations

Before developing any Web service software, you should be familiar with:

- A programming language or environment for developing Web service applications
- The fundamentals of Web services (for an overview, go to ***http://www.w3schools.com/webservices/default.asp*** (see http://www.w3schools.com/webservices/default.asp - ***http://www.w3schools.com/webservices/default.asp***))
- The JSON data format (for an overview, go to ***http://www.w3schools.com/json/default.asp*** (see http://www.w3schools.com/json/default.asp - ***http://www.w3schools.com/json/default.asp***))

Requirements

Before developing any EnterpriseTrack-specific Web service software, you should:

- Be familiar with the EnterpriseTrack product, especially those areas you want to manipulate using the Integration functions.
- Confirm that you have a valid EnterpriseTrack integration user account (login ID and password).
- To use the financial report related integration function, verify that you have permission to execute the financial report from an interactive session.
- To use the Timesheet Detail report related integration function, verify that you have permission to execute the timesheet report from an interactive session.
- To use CRUD functions, ensure you also have permissions to generate the templates from the EnterpriseTrack Administration module.
- To update effort or activity using the integration functions, verify that you have permission to update activities for the project.
- Verify that you have the **Execute APIs** permission.
- If invoking the function for someone other than yourself, verify that you have the **Execute APIs as Proxy** permission.
- To update effort using the Integration functions, also verify the following:
  - If you will be updating efforts for yourself, verify that you have the necessary permissions required to perform this operation interactively.
  - If you will be updating efforts for someone other than yourself, verify that you have the necessary permissions required to perform this operation interactively.

> **Note:** The other Integration functions can be successfully invoked *only* after the Login function is successful. Once you are logged in, you can invoke any number of Integration functions. POST is the only recommended option. When you are finished with your Web service interactions you should invoke the Logout function. In the event you fail to log out, you will automatically be logged out after the same period of inactivity as an interactive session.

Security

Only valid EnterpriseTrack users can use the integration APIs. User authentication and application level security for the APIs are similar to what is used by the EnterpriseTrack web interface. You can set the authentication type to SSO, LDAP, or SSPLM, as per your configuration. Access to various entities is driven by permissions which are set at the title and the role levels through the Administration module. If users without the required permissions attempt to use the APIs, the system sends an error message in the response XML or JSON.

SSL is used for network security. EnterpriseTrack integration APIs require https.

Using the Oracle Instantis EnterpriseTrack API

Where to Begin

Step 1: Install and configure Oracle Instantis EnterpriseTrack for the API

As a prerequisite to using the API, you will need to install Oracle Instantis EnterpriseTrack and configure a user with the appropriate permissions in the application. Oracle Instantis EnterpriseTrack must be correctly installed, configured, and running before you can use the API to connect to it.

Step 2: Decide on a client technology

Decide on the client technology that you will use with Oracle Instantis EnterpriseTrack to invoke APIs. Java and JavaScript are examples of technologies that can invoke services to interact with the Oracle Instantis EnterpriseTrack API.

Step 3: Use the API to interact with Oracle Instantis EnterpriseTrack

This step involves interacting with the API using the following URL pattern to send requests to the API.

```
https://<server>/SiteWand/Submission/<account_name>/integration/
login
```

For more information, see ***Function Invocation*** (on page 9).

Generally, calls to the API will follow a sequence similar to the following sequence:

a) Get a session ID.
b) Use the session ID to invoke other operations as required by your program.
c) Delete the session ID when you are finished.

In This Section

Function Invocation

All *programmable* functions are invoked using a SiteWand symbolic submission. Invocation details for non-programmable capabilities are described in the section.

An Integration Login relies on the following path:

```
https://<server>/SiteWand/Submission/<account_name>/integration/
login
```

Once successfully logged in, the Integration functions rely on the following path:

```
<api_session>
```

where:

Placeholder	Description
<server>	Specifies the IP address or hostname of the server hosting your EnterpriseTrack instance.
<account_name>	Specifies the account name (or company name) of your EnterpriseTrack instance.
<api_session>	Specifies the session URL associated with your Integration login. This value is obtained when successfully completing a Login function and the value is similar to the following. `https://ABC.example.com/SiteWand/Submission/F_xer34afd2f`

The invocation parameters for each function are provided as detailed for each function.

Note: The `/SiteWand/Submission` portion of the URL *is* case sensitive.

Invocation Parameters

The parameters for the invocation of the Login function are described in the following table. Unless otherwise specified, all values are not case sensitive.

Name	Data Type	Placeholder or Constant	Description
api_name	String	*<api_name>*	Specifies the name of the API. For CRUD APIs, use **crud_api**.
output_type	String	*<output_type>*	Specifies the data format for the output. Supported formats include: ▸ JSON ▸ XML **Note:** Functions prior to Release 8.7 support only JSON format.
user_login_id	String	*<login_id>*	Specifies your EnterpriseTrack login ID. The case sensitivity for this value conforms to that used by your

			EnterpriseTrack system.
password	String	*<pwd>*	Specifies the password corresponding to your EnterpriseTrack login ID. The case sensitivity for this value conforms to that used by your EnterpriseTrack system.

Global Properties Object

Most of the functions rely on input parameters to specify the search criteria (filter data), or to provide the updates to the EnterpriseTrack data. Conversely, many of the functions rely on output parameters as the mechanism to deliver those results.

To ensure compatibility with the configuration of EnterpriseTrack, the `global_properties` object is included in this collection of parameters. The settings specified in this object perform the necessary "translations" of the data (specified by the other parameters) into the formats compatible with EnterpriseTrack.

Since the majority of the functions use JSON data format, the details are presented in the following table as name/value pairs. Unless otherwise specified, all values are not case sensitive.

Name	**Data Type**	**Value Required?**	**Placeholder or Constant**	**Description**
api_version	String	Yes	et-integration-api-1.0	Specifies the version number of the Integration API software.
char_set	String	Yes	*<char_set>*	Specifies the character set that EnterpriseTrack is deployed on. Typically, `utf-8` is specified.
date_format	String	Optionally required (see description)	*<date_format>*	Required only if date parameters are used by the Integration function. Specifies the date format that EnterpriseTrack uses. Typically, `yyyy/MM/dd` is specified.
effort_unit	String	Not applicable	*<effort_unit>*	Output parameter. Specifies the unit of measurement for effort.

language	String	No	*<lang>*	Specifies the language that EnterpriseTrack uses. If no value is specified, the language is set to that used for the Login session.

Login Function

The Login function provides the necessary authentication data to your EnterpriseTrack account and, if successful, starts your Web services session.

The other Integration functions can be successfully invoked *only* after the Login function is successful. Once you are logged in, you can invoke any number of Integration functions. POST is the only recommended option. When you are finished with your Web service interactions you should invoke the Logout function. In the event you fail to log out, you will automatically be logged out after the same period of inactivity as an interactive session.

Note: You may have any number and combination of interactive (browser) and Web services sessions.

In This Section

Invocation Syntax

The syntax for the invocation of the Login function is as follows:

```
https://<server>/SiteWand/Submission/<account_name>/integration/
login?api_name=login&output_type=
<output_type>&user_login_id=<login_id>
```

Invocation Parameters

The parameters for the invocation of the Login function are described in the following table. Unless otherwise specified, all values are not case sensitive.

Name	Data Type	Placeholder or Constant	Description
api_name	String	*<api_name>*	Specifies the name of the API. For CRUD APIs, use **crud_api**.
output_type	String	*<output_type>*	Specifies the data format for the output. Supported formats include: ▸ JSON ▸ XML **Note:** Functions prior to Release 8.7

			support only JSON format.
user_login_id	String	*<login_id>*	Specifies your EnterpriseTrack login ID. The case sensitivity for this value conforms to that used by your EnterpriseTrack system.
password	String	*<pwd>*	Specifies the password corresponding to your EnterpriseTrack login ID. The case sensitivity for this value conforms to that used by your EnterpriseTrack system.

Output Parameters

The results of the Login function are provided in JSON data format. The following table details the name/value pairs.

Name	Data Type	Description
result_code	String	Provides the result code for the completion status of the function.
result_reason	String	If the function is successful, NULL results. Otherwise, the reason for the error is returned.
api_url	String	If the function is successful, the *session* URL is returned. Otherwise, NULL is returned. The <*api_session*> value that is returned is used by each of the programmable Integration functions.

Output Examples

The results from a successful Login are similar to the following:

```
{
      "result_code":"SUCCESS",
      "result_reason":"",
      "api_url":"https://ABC.example.com/SiteWand/Submission/F_xer34afd
2f"
}
```

The results from a failed Login are similar to the following:

```
{
	"result_code":"ERR_AUTHENTICATION",
	"result_reason":"You specified invalid login information."
	"api_url":"",
}
```

Logout Function

The Logout function terminates your Web services session. This function should always be invoked when you have concluded your Web-service based interactions with your EnterpriseTrack account. In the event you fail to log out, you will automatically be logged out after the same period of inactivity as an interactive session.

Name	Data Type	Placeholder or Constant	Description
api_name	String	logout	Specifies the name of the Integration function.

In This Section

Invocation Syntax

The syntax for the invocation of the Logout function is as follows:

<*api_session*>?api_name=logout

Note: There are no input or output parameters for the Logout function.

Output Example

If the Logout function is successful, you are merely logged out of your current Web services session.

CRUD APIs

In This Section

Using CRUD APIs

Step 1: Log in and get session ID

For more information see:

Using the Oracle Instantis EnterpriseTrack API (on page 9)

Login Function (on page 13)

Step 2: Invoke Session URL for XML/JSON Posting

Before invoking a CRUD API, ensure that you have downloaded a CRUD template and prepared your XML/JSON for posting. For more information, see:

Downloading Templates (on page 20)

Preparing XML/JSON

For more information on invoking all supported CRUD APIs, see:

Support Objects

Step 3: Log out of the session

For more information see:

Logout Function (on page 17)

In This Section

Downloading Templates

In This Section

Downloading CRUD Templates from the User Interface

The **Data Import and Expor**t tab in the EnterpriseTrack Administration module enables you to download templates in real-time for a project, finance, resource, team member, WBS, non_WBS, and assignment entities, based on your EnterpriseTrack account configuration.

To download the CRUD templates:

1) Log in to EnterpriseTrack with valid credentials.
2) From the Top Navigation bar, select **Go To > Administration**.
3) Click the **Data Import & Export** tab.
4) Click the **Download Data Integration Templates** link.
5) Select values for the following fields from the corresponding drop-down list:
   - **Languages**: Select your language. English is displayed by default.
   - **Data Format**: Select the data format in which the function is to be rendered. Choices include: JSON, and XML.
   - **Type**: Select **Download Template** as the type of template to be downloaded.
   - **Initiative**: Select the initiative, if you are downloading a template for project, team member, activity WBS or activity non WBS entities.
   - **Finance Template**: Select the finance template, if you are downloading a template for Project Finance Data or Project Finance Snapshot Data entities.
   - **Activity Type Name**: Select the activity type, if you are downloading a template for Activity WBS or Activity Non WBS entities.
6) Select the **Download** button for the corresponding function. A create_request, update_request, search_request and delete_request file will be generated.

> **Note**: You must download a new template every time a configuration change is made to your account.

Downloading the Template Programmatically

Follow the steps below if you are downloading the template Programmatically:

Step 1: Download Request for Template

1) Log in to EnterpriseTrack with valid credentials.
2) From the Top Navigation bar, select **Go To > Administration**.
3) Click the **Data Import & Export** tab.
4) Click the **Download Data Integration Templates** link.
5) Select values for the following fields from the corresponding drop-down list:
   - **Languages**: Select your language. English is displayed by default.
   - **Data Format**: Select the data format in which the function is to be rendered. Choices include: JSON, and XML.
   - **Type**: Select **Download Request for Template**. Generates a request template in XML and JSON formats for each CRUD function. These request templates can be used to specify input data in the relevant CRUD function.
   - **Initiative**: Select the initiative, if you are downloading a template for project, team member, activity WBS or activity non WBS entities.
   - **Finance Template**: Select a finance template if you are downloading a template for the Project Finance Data or Project Finance Snapshot Data entities.
   - **Activity Type Name**: Select the activity type if you are downloading a template for the Activity WBS or the Activity Non WBS entities.
6) Select the **Download** button for the corresponding function. The following files will be generated: create_request_template, update_request_template, search_request_template and delete_request_template. You can use these files to specify input data for the relevant CRUD function.

Step 2: Post to Session URL

You must post the downloaded request templates to the session URL for the most up to date template.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<tags specified in create_template,
update_template, search_template, or
delete_template.xml>&request_format=xml
```

```
<api_session>?request_data=<tags specified in create_template,
update_template, search_template, or
delete_template.json>&request_format=json
```

Related Topics

Using the Oracle Instantis EnterpriseTrack API (on page 9)

Login Function (on page 13)

Logout Function (on page 17)

Functions to Request Templates Programmatically

Ideas

Function	Description
create_template	The create_template function allows you to retrieve a template for creating an idea. This can be used to define data for creating an idea in EnterpriseTrack.
update_template	The update_template function allows you to retrieve a template for updating an idea. This can be used to define data for updating an idea in EnterpriseTrack.
search_template	The search_template function allows you to retrieve a template for searching an idea. This can be used to define data for searching an idea in EnterpriseTrack.
delete_template	The delete_template function allows you to retrieve a template for deleting an idea. This can be used to define data for deleting an idea in EnterpriseTrack.

Proposals

Function	Description
create_template	The create_template function allows you to retrieve a template for creating a proposal. This can be used to define data for creating a proposal in EnterpriseTrack.
update_template	The update_template function allows you to retrieve a template for updating a proposal. This can be used to define data for updating a proposal in EnterpriseTrack.
search_template	The search_template function allows you to retrieve a template for searching a proposal. This can be used to define data for searching a proposal in EnterpriseTrack.

delete_template	The delete_template function allows you to retrieve a template for deleting a proposal. This can be used to define data for deleting a proposal in EnterpriseTrack.

Project

Function	Description
create_template	The create_template function allows you to retrieve a template for creating a project. This can be used to define data for creating a project in EnterpriseTrack.
update_template	The update_template function allows you to retrieve a template for updating a project. This can be used to define data for updating a project in EnterpriseTrack.
search_template	The search_template function allows you to retrieve a template for searching a project. This can be used to define data for searching a project in EnterpriseTrack.
delete_template	The delete_template function allows you to retrieve a template for deleting a project. This can be used to define data for deleting a project in EnterpriseTrack.

Project Finance

Function	Description
update_template	The update_template function allows you to retrieve a template for updating project finance.
search_template	The search_template function allows you to retrieve a template for searching project finance.

Project Finance Structure

Function	Description
search_template	The search_template function allows you to retrieve a template for searching a project finance structure.

Project Finance Snapshot

Function	Description
create_template	The create_template function allows you to retrieve a template for creating a project finance snapshot.
update_template	The update_template function allows you to retrieve a template for updating a project finance snapshot.
search_template	The search_template function allows you to retrieve a template for searching a project finance snapshot.
delete_template	The delete_template function allows you to retrieve a template for deleting a project finance snapshot.

Resource

Function	Description
create_template	The create_template function allows you to retrieve a template for creating a resource.
update_template	The update_template function allows you to retrieve a template for updating a resource.
search_template	The search_template function allows you to retrieve a template for searching a resource.
delete_template	The delete_template function allows you to retrieve a template for deleting a resource.

Resource Rate

Function	Description
create_template	The create_template function allows you to retrieve a template for creating a resource rate.
update_template	The update_template function allows you to retrieve a template for updating a resource rate.
search_template	The search_template function allows you to retrieve a template for searching a resource rate.

Team Member

Function	Description
create_template	The create_template function allows you to retrieve a template for creating a project team member.
update_template	The update_template function allows you to retrieve a template for updating a project team member.
search_template	The search_template function allows you to retrieve a template for searching a project team member.
delete_template	The delete_template function allows you to retrieve a template for deleting a project team member.

Activity WBS

Function	Description
create_template	The create_template function allows you to retrieve a template for creating a project WBS activity.
update_template	The update_template function allows you to retrieve a template for updating a project WBS activity.
search_template	The search_template function allows you to retrieve a template for searching a project WBS activity.
delete_template	The delete_template function allows you to retrieve a template for deleting a project WBS activity.

Activity Non-WBS

Function	Description
create_template	The create_template function allows you to retrieve a template for creating a non-WBS activity.
update_template	The update_template function allows you to retrieve a template for updating a non-WBS activity.
search_template	The search_template function allows you to retrieve a template for searching a non-WBS activity.
delete_template	The delete_template function allows you to retrieve a template for deleting a non-WBS activity.

Assignment

Function	Description
create_template	The create_template function allows you to retrieve a template for creating a project assignment.
update_template	The update_template function allows you to retrieve a template for updating a project assignment.
search_template	The search_template function allows you to retrieve a template for searching a project assignment.
delete_template	The delete_template function allows you to retrieve a template for deleting a project assignment.

Preparing XML/JSON

After downloading the CRUD templates, you must merge data and make other changes specific to your account before posting it to the session.

When updating finance data or finance snapshot, note the following:

After downloading the template for finance, you must copy the structure based on the project finance edit mode.

- If the project finance edit mode is Aggregate, copy the whole structure once under the <data_aggregate> tag.
- If the project finance edit mode is Monthly, copy and repeat the whole structure for each month in the <data_YYYYMM> tag. The value for MM (months) will depend on the project dates and the month for which data is being updated.
- If the project finance edit mode is Yearly, copy and repeat the whole structure for each year in the <data_YYYY> tag. The value for YYYY (years) will depend on the project dates and the year for which data is being updated.

Invocation Parameters

The parameters for the invocation of the create function are described in the following table. Unless otherwise specified, all values are not case-sensitive.

Name	Data Type	Placeholder or constant	Description
Request_data	String	*<input_data>*	Specifies the input data for creating a project. For more details, See the Input Parameters.

Name	Data Type	Placeholder or constant	Description
Request_format	String	*<request_format>*	The data format of the request. Supported formats include: - JSON - XML

Input Tags

The parameters described in the following table provide the data to be specified. This information should be provided in JSON or XML file format. Unless otherwise specified, all values are not case-sensitive.

Name	Data Type	Value Required?	Placeholder or Constant	Description
global_properties	Object	Yes	Not applicable	This *object* lists the global settings for your EnterpriseTrack instance.
request_data	Object	Yes	Not applicable	This object lists a fixed set of request attributes. See *Request_Data Table* below for more details.
application_data	Object	Yes	Not applicable	The application data that is to be created depends on the configuration of your EnterpriseTrack account, and therefore the data is dynamic. To work with application data that is most current and accurate in real time, it is recommended that you download the create template from your EnterpriseTrack Administration module. For more details, see ***Downloading CRUD Templates from the User Interface*** (on page 20).

Name	Data Type	Value Required?	Placeholder or Constant	Description
Request_Data Table				
Request_type	String	Yes	create, update, search, and delete	The name of the function.
Entity_type	String	Yes	Idea, proposal, project, project_finance, project_finance_structure, project_finance_snapshot, resource, resource_rate, activity, activity_nonwbs, teammenber, and assignment	The entity being created.
Output_format	String	Yes		The data format of the output. Supported formats include: - JSON - XML
Value_delimiter	String	Yes	|	The delimiter to be used to parse all strings in the input and output. For example, | or comma.

Supported Objects

Supported Objects	Supported Operations	Request Format
Ideas (on page 29)	Create, Update, Delete, and Search	JSON and XML
Proposals (on page 32)	Create, Update, Delete, and Search	JSON and XML
Projects (on page 35)	Create, Update, Delete, and Search	JSON and XML
Project Finance (on page 39)	Search, and Update	JSON and XML

Project Finance Structure (on page 41)	Search	JSON and XML
Project Finance Snapshot (on page 41)	Create, Update, Search, and Delete	JSON and XML
Resource (on page 45)	Create, Search, Update, and Delete	JSON and XML
Resource Rate (on page 49)	Create, Search, and Update	JSON and XML
Team Member (on page 51)	Create, Search, Update, and Delete	JSON and XML
Activity WBS (on page 55)	Create, Search, Update, and Delete	JSON and XML
Activity Non-WBS (on page 58)	Create, Search, Update, and Delete	JSON and XML
Assignments (on page 61)	Create, Search, Update, and Delete	JSON and XML

Ideas

In This Section

Create an Idea

Creates an idea in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/idea_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/idea_create.html

Update an Idea

The update function allows you to update an idea in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/idea_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/idea_update.html

Search an Idea

The search function allows you to search for an idea in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/idea_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/idea_search.html

Delete an Idea

The delete function allows you to delete an idea in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/idea_delete.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/idea_delete.html

Proposals

In This Section

Create a Proposal

Creates a proposal in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/charter_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/charter_create.html

Update a Proposal

The update function allows you to update a proposal in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/charter_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/charter_update.html

Search a Proposal

The search function allows you to search for a proposal in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/charter_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/charter_search.html

Delete a Proposal

The search function allows you to delete a proposal in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/charter_delete.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/charter_delete.html

Projects

In This Section

Create a Project

Creates a project in EnterpriseTrack.

Note: Updating team members is not supported.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/project_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/project_create.html

Update a Project

The update function allows you to update a project in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/project_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/project_update.html

Delete a Project

The delete function allows you to delete a project in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_delete.xml and project15_delete.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/project_delete.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/project_delete.html

Search a Project

The search function allows you to search for a project in EnterpriseTrack. <change XML and JSON sample>

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/project_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/project_search.html

Project Finance

In This Section

Search Finance Data

The search function allows you to search finance data for a project in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/finance_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/finance_search.html

Update Finance Data

The update function allows you to update finance data for a project in EnterpriseTrack. Update is based on the project finance edit mode.

- If the project finance edit mode is Aggregate, copy the whole structure once under the <data_aggregate> tag.
- If the project finance edit mode is Monthly, copy and repeat the whole structure for each month in the <data_YYYYMM> tag. The value for MM (months) will depend on the project dates and the month for which data is being updated.
- If the project finance edit mode is Yearly, copy and repeat the whole structure for each year in the <data_YYYY> tag. The value for YYYY (years) will depend on the project dates and the year for which data is being updated.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_update.xml and project15_update.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/finance_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/finance_update.html

Project Finance Structure

In This Section

Search a Finance Structure

The search function allows you to retrieve the finance structure for a project in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/finance_structure_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/financestructure_search.html

Project Finance Snapshot

This object contains finance data for a given snapshot. A project can have multiple finance snapshots, which are identified by unique name.

In This Section

Create a Finance Snapshot

The Create function allows you to create a project finance snapshot. You can create multiple project snapshots.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<tags specified in
project15_create.xml>&request_format=xml
```

```
<api_session>?request_data=<tags specified in
project15_create.json>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/finance_snapshot_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/finance_snapshot_create.html

Update a Finance Snapshot

The update function allows you to update a project finance snapshot in EnterpriseTrack. Project finance snapshot update consists of two parts:

- Snapshot metadata: Snapshot description or *is_default_snapshot* can be updated unconditionally.
- Snapshot finance data: This is driven by feature *is_snapshot_editable*. If feature is disabled, you cannot update finances for snapshot.

Note: After downloading the template for finance, you must copy the structure based on the project finance edit mode.

- If the project finance edit mode is Aggregate, copy the whole structure once under the <data_aggregate> tag.
- If the project finance edit mode is Monthly, copy and repeat the whole structure for each month in the <data_YYYYMM> tag. The value for MM (months) will depend on the project dates and the month for which data is being updated.
- If the project finance edit mode is Yearly, copy and repeat the whole structure for each year in the <data_YYYY> tag. The value for YYYY (years) will depend on the project dates and the year for which data is being updated.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_update.xml and project15_update.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/finance_snapshot_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/finance_snapshot_update.html

Search a Finance Snapshot

The search function allows you to search for a finance snapshot.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/finance_snapshot_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/finance_snapshot_search.html

Delete a Finance Snapshot

The delete function allows you to delete a project finance snapshot in EnterpriseTrack.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_delete.xml and project15_delete.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/finance_snapshot_delete.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/finance_snapshot_delete.html

Resource

In This Section

Create a Resource

The Create function allows you to create a resource in EnterpriseTrack. This resource object contains resource information related to organization, type, location, preferences, authentication, and custom fields.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<tags specified in
project15_create.xml>&request_format=xml
```

```
<api_session>?request_data=<tags specified in
project15_create.json>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/resource_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/resource_create.html

Search a Resource

The search function allows you to get existing resource rate records.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/resource_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/resource_search.html

Update a Resource

The Update function allows you to edit existing resource records.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_update.xml and project15_update.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/resource_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/resource_update.html

Delete a Resource

The Delete function allows you to delete existing resource records.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_delete.xml and project15_delete.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/resource_delete.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/resource_delete.html

Resource Rate

In This Section

Create Resource Rate

The Create function allows add new resource rates for a given resource.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<tags specified in
project15_create.xml>&request_format=xml
```

```
<api_session>?request_data=<tags specified in
project15_create.json>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/resourcerate_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/resourcerate_create.html

Search Resource Rate

The search function allows you to get existing resource rate records.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/resourcerate_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/resourcerate_search.html

Update Resource Rate

The Update function allows you to edit existing resource rates for a given resource.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_update.xml and project15_update.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/resourcerate_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/resourcerate_update.html

Team Member

In This Section

Create Team Member

The Create function allows you to add team members for a given project. If your initiative supports allocations, then use this function to create allocations for a team member on a given project.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<tags specified in
project15_create.xml>&request_format=xml
```

```
<api_session>?request_data=<tags specified in
project15_create.json>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/teammember_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/teammember_create.html

Search a Team Member

The Search function allows you to get information on the team composition of a given project. If your initiative supports allocations, then this function retrieves team member allocation for a given project.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/teammember_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/teammember_search.html

Update a Team Member

The Update function allows you to edit the team composition of a given project.

> **Note**: Updating TBD team member is not supported if there is more than one TBD in a given project.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_update.xml and project15_update.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/teammember_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/teammember_update.html

Delete a Team Member

The Delete function allows you to delete team members from a given project. If your initiative supports allocations, then this function deletes team member allocation for a given project.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_delete.xml and project15_delete.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/teammember_delete.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/teammember_delete.html

Activity WBS

In This Section

Create a WBS activity

The Create function allows add a new activity to a project roadmap.

Note: Activity status indicators and activity documents are not supported.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<tags specified in
project15_create.xml>&request_format=xml
```

```
<api_session>?request_data=<tags specified in
project15_create.json>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/phase_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/phase_create.html

Search an Activity

The search function allows you to get existing activity information.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/phase_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/phase_search.html

Update a WBS Activity

The Update function allows you to edit an existing activity.

Note: Activity status indicators and activity documents are not supported.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_update.xml and project15_update.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/phase_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/phase_update.html

Delete a WBS Activity

The Delete function allows you to delete an existing activity from a project roadmap.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_delete.xml and project15_delete.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/phase_delete.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/phase_delete.html

Activity Non-WBS

In This Section

Create a Non-WBS Activity

The Create function allows add a new activity non-WBS.

> **Note**: Activity status indicators and activity documents are not supported.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<tags specified in
project15_create.xml>&request_format=xml
```

```
<api_session>?request_data=<tags specified in
project15_create.json>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/issue_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/issue_create.html

Search a Non-WBS Activity

The search function allows you to get existing activity non-WBS records.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/issue_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/issue_search.html

Update a Non-WBS Activity

The Update function allows you to edit existing non-WBS activities.

> **Note**: Activity status indicators and activity documents are not supported.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_update.xml and project15_update.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/issue_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/issue_update.html

Delete a Non-WBS Activity

The Delete function allows you to delete non-WBS activities.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_delete.xml and project15_delete.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/issue_delete.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/issue_delete.html

Assignments

In This Section

Create an Assignment

The Create function allows you to assign resources to activities on existing projects.

> **Note**: Assignments for activity with the following effort types: Effort at Activity Level-Unequal Distribution and Effort at Resource Level- Details are not supported.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

```
<api_session>?request_data=<tags specified in
project15_create.xml>&request_format=xml
```

```
<api_session>?request_data=<tags specified in
project15_create.json>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/assignment_create.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/assignment_create.html

Update an Assignment

The Update function allows you to edit existing assignments for projects.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_update.xml and project15_update.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/assignment_update.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/assignment_update.html

Search an Assignment

The search function allows you to get assignment information for existing projects.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_search.xml and project15_search.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/assignment_search.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/assignment_search.html

Delete an Assignment

The Delete function allows you to delete existing assignments on projects.

Request Format

JSON and XML

Syntax

```
<api_session>?request_data=<input_data>&request_format
=<request_format>
```

Invocation Example

This example assumes the input data has been specified in files, project15_delete.xml and project15_delete.json.

```
<api_session>?request_data=<content of input XML
example>&request_format=xml
```

```
<api_session>?request_data=<content of input JSON
example>&request_format=json
```

Related Topics

Invocation Parameters (on page 26)

Global Properties Object (on page 11)

Input Tags (on page 27)

Input Examples

XML Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/XML/assignment_delete.html

JSON Example
http://docs.oracle.com/cd/E71620_01/English/Integration_Documentation/JSON/assignment_delete.html

GetActivityAssignments Function

The GetActivityAssignments function fetches the activity information that corresponds to the search criteria (filter data) you specify in the input parameters.

In This Section

Invocation Parameters

The parameters for the invocation of the GetActivityAssignments function are described in the following table. Unless otherwise specified, all values are not case sensitive.

Name	Data Type	Placeholder or Constant	Description
api_name	String	getactivityassignments	Specifies the name of the Integration function.
input_type	String	JSON	Specifies the data format for the input.
output_type	String	JSON	Specifies the data format for the output.
input_data	String	*<input_params>*	Specifies the location of the input parameters. This value is case sensitive.

Invocation Example

The syntax for the invocation of the GetActivityAssignments function is as follows:

```
<api_session>?api_name=getactivityassignments&input_type=JSON
&output_type=JSON&input_data=<input_params>
```

Input Parameters

The input parameters described in the following table provide the search criteria (filter data) used to identify the data you want. This information should be provided in the JSON formatted data specified by <*input_params*>. Unless otherwise specified, all values are not case sensitive.

Name	Data Type	Value Required?	Placeholder or Constant	Description
global_properties	Object	Yes	Not applicable	This *object* specifies the global settings for your EnterpriseTrack instance. See "global_properties Object" for details.
application_data	Object	Yes	Not applicable	This *object* specifies the search criteria. See "application_data" for details.
application_data				
resource_descriptor	Object	Yes	Not applicable	This *object* specifies the resource. An error results in the event a matching resource cannot be found. See "resource_descriptor" for details.
start_date_from	Date	No	*<start_from>*	Specifies the beginning date for the range of start dates. This filters on actual (if present) or planned activity dates.
start_date_to	Date	No	*<start_to>*	Specifies the ending date for the range of start dates. This filters on actual (if present) or planned activity dates.
end_date_from	Date	No	*<end_from>*	Specifies the beginning date for the range of end dates. This filters on actual (if present) or planned activity dates.
end_date_to	Date	No	*<end_to>*	Specifies the ending date for the range of end dates. This filters on actual (if present) or planned activity dates.

include_external_wa	Boolean	No	<*incl_ external*>	Indicates whether or not to consider external activities. Valid values are: TRUE FALSE
include_closed_wa	Boolean	No	<*incl_closed*>	Indicates whether or not to include closed activities. Valid values are: TRUE FALSE (default)
max_rows	Integer	No	<*max_rows*>	Specifies the maximum number of rows of data to be fetched. The default value is 20.
resource_descriptor A value for at least one of the following parameters must be provided.				
resource_id	String	No	<*resource_ ID*>	Specifies the resource ID. If: A `resource_id` value *is* specified Then: All other parameters are ignored. Otherwise: The other `resource_descriptor` parameters will be used to help identify the resource.

resource_login_id	String	No	*<resource_login_ID>*	Specifies the login ID. If: A `resource_id` value *is not* specified -and if- A `resource_login_id` value *is* specified Then: All other parameters are ignored. Otherwise: The other `resource_descriptor` parameters will be used to help identify the resource.
resource_email	String	No	*<resource_email>*	Specifies the e-mail address. If: A `resource_id` value *is not* specified -and if- A `resource_login_id` value *is not* specified -and if- A `resource_email` value *is* specified Then: All other parameters are ignored *unless* multiple resources use the same e-mail address. Otherwise: The other `resource_descriptor` parameters will be used to help identify the resource.

resource_last_name	String	No	*<resource_last_name>*	Specifies the last name. If: A `resource_id` value *is not* specified -and if- A `resource_login_id` value *is not* specified -and if- A `resource_email` value *is not* specified, or multiple resources have the same e-mail address Then: A combination of the `resource_last_name` and `resource_first_name` values is used to identify the resource. Otherwise: The resource cannot be found and an error results.
resource_first_name	String	No	*<resource_first_name>*	Specifies the first name.

Input Examples

The syntax for the GetActivityAssignments data input parameters is as follows:

```
{
  "global_properties":
  {
          "char_set":"<char_set>",
          "date_format":"<date_format>",
          "language":"<lang>"
          "api_version":"et-integration-api-1.0",
  },

  "application_data":
  {
          "resource_descriptor":
          {
```

```
                "resource_id":"<resource_ID>",
                "resource_login_id":"<resource_login_ID>",
                "resource_email":"<resource_email>",
                "resource_first_name":"<resource_first_name>",
                "resource_last_name":"<resource_last_name>"
        },
        "start_date_from":"<start_from>",
        "start_date_to":"<start_to>",
        "end_date_from":"<end_from>",
        "end_date_to":"<end_to>",
        "include_external_wa":"<incl_external>",
        "include_closed_wa":"<incl_closed>",
        "max_rows":"<max_rows>"
  }
}
```

This is an example with values for the placeholders:

```
{
  "global_properties":
  {
        "char_set":"utf-8",
        "date_format":"yyyy/mm/dd",
        "language": "en"
        "api_version": "et-integration-api-1.0",
  },

  "application_data":
  {
        "resource_descriptor":
        {
                "resource_id":"GHGHG545TRT",
                "resource_login_id":"john_doe",
                "resource_email":"john.smith@example.com",
                "resource_first_name":"john",
                "resource_last_name":"smith"
        },
        "start_date_from":"2011/12/01",
        "start_date_to":"2011/12/31",
        "end_date_from":"2011/12/01",
        "end_date_to":"2011/12/31",
        "include_external_wa":"TRUE",
        "include_closed_wa":"FALSE",
        "max_rows":"20"
  }
}
```

Output Parameters

The results of the GetActivityAssignments function are provided in JSON data format. The following table details the name/value pairs.

Name	Data Type	Description
global_properties	Object	This *object* lists the global settings for your EnterpriseTrack instance. See "global_properties Object" for details.
application_data	Object	This *object* lists your search criteria and provides the results. See "application_data" for details.
application_data		
et_transaction_id	String	Provides the unique EnterpriseTrack transaction ID that is stored in the audit tables.
result_code	String	Provides the result code for the completion status of the function.
result_reason	String	If the function is successful, NULL is returned. Otherwise, the reason for the error is returned.
activity_ descriptor_list	Object	This *object* contains the lists of activities corresponding to the search criteria you specified. See "activity_descriptor_list" for details.
activity_descriptor_list		
resource_descriptor	Object	This *object* specifies the resource. See "resource_descriptor" for details.
total_assignments	Integer	Provides the total number of assignments for the specified resource.
rows_returned	Integer	Specifies the number of activities actually returned. This could be different from the number of total assignments due to the restrictions imposed by the `max_rows` value you specified in the input parameters.
activity_descriptor	Array of Objects	These *objects* contain the details of an activity. See "activity_descriptor" for details.
project_descriptor	Object	This *object* provides the details of the project. See "project_descriptor" for details.
resource_descriptor		

resource_id	String	Specifies the resource ID.
resource_login_id	String	Specifies the login ID.
resource_email	String	Specifies the e-mail address.
resource_last_ name	String	Specifies the last name.
resource_first_ name	String	Specifies the first name.
activity_descriptor		
activity_id	String	Provides the ID for the activity.
activity_name	String	Provides the name of the activity.
activity_desc	String	Provides the comments associated with the activity.
activity_type	String	Provides the type of the activity.
activity_ planned_start_ date	Date	Provides the planned start date of the activity. In some cases, this value may be NULL.
activity_ planned_end_date	Date	Provides the planned end date of the activity. In some cases, this value may be NULL.
activity_ actual_start_date	Date	Provides the actual start date of the activity.
activity_ actual_end_date	Date	Provides the actual end date of the activity.
activity_actual_ efforts	Number	Provides the actual effort for the activity.
activity_ remaining_efforts	Number	Provides the computed remaining effort for the activity.
activity_planned_ efforts	Number	Provides the planned effort for the activity.
activity_ percent_completion	Number	Provides the percentage completion of the activity.
activity_owner_ info	String	Specifies the name(s) of the activity owner. The format is last name, comma, a space, first name, a space, and then the role enclosed in parentheses. Multiple values should be separated by semicolons. For example: John, Smith (Project Manager); John, Jones (Network Admin).

activity_ baseline_start_date	Date	Provides the baseline start date for the activity.
activity_ baseline_end_date	Date	Provides the baseline end date for the activity.
activity_planned_ effort_type	String	Provides the planned effort type for the activity.
activity_actual_ effort_type	String	Provides the actual effort type for the activity.
status_descriptor	Object	This *object* specifies the status of the activity. See "status_descriptor" for details.
role_descriptor	Object	This *object* provides details about the role. See "role_descriptor" for details.
activity_external	String	Indicates whether or not the activity is tracked outside of the EnterpriseTrack. Expected values are: ▸ YES ▸ NO
activity_ external_id	String	Provides the external ID if the activity is tracked outside of the EnterpriseTrack. This value is typically NULL when the value for `activity_assignment_external` is `NO`.
project_descriptor	Object	This *object* provides the project details. See "project_descriptor" for details.
status_descriptor		
status_id	String	Provides the ID of the status.
status_desc	String	Provides the description of the status.
role_descriptor		
role_id	String	Provides the ID of the role.
role_desc	String	Provides the description of the role.
project_descriptor		
project_id	Integer	Provides the ID for the project.
project_name	String	Provides the name for the project.
project_manager	String	Provides the name of the manager of the project.
project_status	String	Provides the status of the project.

project_program	String	Provides the names of the programs associated with the project.

Output Example

The syntax for the JSON formatted parameters from a successful GetActivityAssignments function is similar to the following.


```
{
  "global_properties":
  {
          "char_set":"<some_character_set>",
          "date_format":"<some_date_format>",
          "effort_unit":"<some_units_for_effort>",
          "language":"<some_language>"
          "api_version":"et-integration-api-1.0",
  },

  "application_data":
  {
          "et_transaction_id":"<unique_transaction_ID>",
          "result_code":"<result_code>",
          "result_reason":"<result_reason>",
          "activity_descriptor_list":
          {
                  "resource_descriptor":
                  {
                          "resource_id":"<some_value>",
                          "resource_login_id":"<some_value>",
                          "resource_email":"<some_value>",
                          "resource_last_name":"<some_value>",
                          "resource_first_name":"<some_value>"
                  },
                  "total_assignments":"<number_of_activities>",
                  "rows_returned":"<number_of_rows_returned>",
                  "activity_descriptor":
                  [
                          {
                                  "activity_id":"<ID_1>",
                                  "activity_name":"<activity_name>",
                                  "activity_desc":"<activity_description>",
                                  "activity_type":"<activity_type>",
                                  "activity_planned_start_date":"<some_date>",
                                  "activity_planned_end_date":"<some_date>",
```

```
            "activity_actual_start_date":"<some_date>",
            "activity_actual_end_date":"<some_date>",
            "activity_actual_efforts":"<actual_efforts_value>",
            "activity_remaining_efforts":"<remaining_efforts_value>",
            "activity_planned_efforts":"<planned_efforts_value>",
            "activity_percent_completion":"<some_value>",
            "activity_owner_info":"<list_of_owners>",
            "activity_baseline_start_date":"<some_date>",
            "activity_baseline_end_date":"<some_date>",
            "activity_planned_effort_type":"<PET_value>",
            "activity_actual_effort_type":"<AET_value>",
            "status_descriptor":
            {
                    "status_id":"<status_ID>",
                    "status_desc":"<status_description>"
            },
            "role_descriptor":
            {
                    "role_id":"<role_ID>",
                    "role_desc":"<role_description>"
            },
            "activity_external":"<yes|no>",
            "activity_external_id":"<some_ID>",
            "project_descriptor":
            {
                    "project_id":"<project_ID>",
                    "project_name":"<project_name>",
                    "project_manager":"<project_manager_name>",
                    "project_status":"<project_status>",
                    "project_program":"<list_of_program_names>"
            }
    },
    {
            "activity_id":"<ID_2>",
            "activity_name":"<activity_name>",
            "activity_desc":"<activity_description>",
            "activity_type":"<activity_type>",
            "activity_planned_start_date":"<some_date>",
            "activity_planned_end_date":"<some_date>",
            "activity_actual_start_date":"<some_date>",
            "activity_actual_end_date":"<some_date>",
            "activity_actual_efforts":"<actual_efforts_value>",
            "activity_remaining_efforts":"<remaining_efforts_value>",
            "activity_planned_efforts":"<planned_efforts_value>",
            "activity_percent_completion":"<some_value>",
```

```
                                        "activity_owner_info":"<list_of_owners>",
                                        "activity_baseline_start_date":"<some_date>",
                                        "activity_baseline_end_date":"<some_date>",
                                        "activity_planned_effort_type":"<PET_value>",
                                        "activity_actual_effort_type":"<AET_value>",
                                        "status_descriptor":
                                        {
                                                "status_id":"<status_ID>",
                                                "status_desc":"<status_description>"
                                        },
                                        "role_descriptor":
                                        {
                                                "role_id":"<role_ID>",
                                                "role_desc":"<role_description>"
                                        },
                                        "activity_external":"<yes|no>",
                                        "activity_external_id":"<some_ID>",
                                        "project_descriptor":
                                        {
                                                "project_id":"<project_ID>",
                                                "project_name":"<project_name>",
                                                "project_manager":"<project_manager_name>",
                                                "project_status":"<project_status>",
                                                "project_program":"<list_of_program_names>"
                                        }
                                }
                        ]
                }
        }
  }
```

UpdateResourceEffort Function

The UpdateResourceEffort function updates the effort for an activity based on the details you specify in the input parameters.

In This Section

Invocation Parameters

The parameters for the invocation of the UpdateResourceEffort function are described in the following table. Unless otherwise specified, all values are not case sensitive.

Name	**Data Type**	**Placeholder or Constant**	**Description**
api_name	String	UpdateResourceEffort	Specifies the name of the Integration function.
input_type	String	JSON	Specifies the data format for the input parameters.
output_type	String	JSON	Specifies the data format for the output parameters.
input_data	String	<*input_params*>	Specifies the location of the input parameters. This value is case sensitive.

Invocation Example

The syntax for the invocation of the UpdateResourceEffort function is as follows:

```
<api_session>?api_name=updateresourceeffort&input_type=JSON
&output_type=JSON&input_data=<input_params>
```

Input Parameters

The input parameters described in the following table provide the search criteria (filter data) to identify the activity, as well as to specify the updated effort data you want to commit. This information should be provided in the JSON formatted data specified by <*input_params*>. Unless otherwise specified, all values are not case sensitive.

Note: This function includes a "test" feature (see **test_mode**) that allows you to verify that the information you include in the input parameters can be successfully committed. Since there is no mechanism to "roll back" invalid data, you are encouraged to "test" the data before actually committing any updates.

Name	Data Type	Value Required?	Placeholder or Constant	Description
global_properties	Object	Yes	Not applicable	This *object* specifies the global settings for your EnterpriseTrack instance. See the "global_properties Object" for details.
application_data	Object	Yes	Not applicable	This *object* specifies the search criteria as well as the revised effort data. See "application_data" for details.
application_data				
source_application_descriptor	Object	Yes	Not applicable	This object specifies the information you want stored in the audit tables. See "source_application_descriptor" for details.
security_descriptor	Object	Yes	Not applicable	This object specifies the authentication information to be verified. See "security_descriptor" for details.
resource_ descriptor	Object	Yes	Not applicable	This *object* specifies the resource. An error results in the event a matching resource cannot be found. See "resource_descriptor" for details.

project_descriptor	Object	Optionally required (see description)	Not applicable	Required only if operation_type has one of the following values: ▸ INTERNAL_ACTIVITY ▸ EXTERNAL_ACTIVITY ▸ PROJECT_TIME This object specifies the project details. See "project_descriptor" for details.
time_category_descriptor	Object	Optionally required (see description)	Not applicable	Required only if operation_type has one of the following values: ▸ NON_PROJECT_TIME ▸ NON_WORKING_TIME This object specifies the category information for the effort. See "time_category_descriptor" for details.
operation_type	String	Yes	<op_type>	Specifies the type of operation. Valid values are: ▸ INTERNAL_ACTIVITY ▸ EXTERNAL_ACTIVITY ▸ PROJECT_TIME ▸ NON_PROJECT ▸ NON_WORKING_TIME
test_mode	Boolean	No	<test_mode>	Indicates whether or not this invocation of the function is merely a test. Valid values are: ▸ TRUE ▸ FALSE (default) If test_mode is FALSE, then the updates will be committed in the EnterpriseTrack database.
source_application_descriptor				
source_app	String	Yes	*<source_App>*	Specifies the name of the source application.
source_ref_unique_id	String	Yes	*<source_ID>*	Specifies the ID of the caller of the Integration function.

source_ref_description	String	Yes	*<source_desc>*	Specifies the description of the caller of the Integration function.
source_ref_type	String	Yes	*<source_type>*	Specifies the reference type of the caller of the Integration function.
security_descriptor				
authorization_policy	String	Yes	<auth_policy>	Specifies the authorization policy to be used. Valid values are: • AUTHORIZE_WITH_LOGIN_RESOURCE - Execute using the permissions of the logged in Integration user. • AUTHORIZE_WITH_RECORD_LOCATOR_RESOURCE - Execute using the permissions of the resource specified in `resource_descriptor`. • AUTHORIZE_WITH_AUTHORIZATION_POLICY_GIVEN_RESOURCE - Execute using the permissions of the resource specified in `authorization_policy_given_resource_descriptor`.

authorization_ policy_given_ resource_ descriptor	Object	Optionally required (see description)	Not applicable	Required only if `authorization_policy` has the following value: • AUTHORIZE_WITH_ AUTHORIZATION_ POLICY_GIVEN_ RESOURCE - This *object* specifies the resource whose permissions should be used to execute the function. See "authorization_policy_given_resource_descriptor" for details.
authorization_policy_given_resource_descriptor				
resource_id	String	No	<auth_ resource_ ID>	Specifies the resource ID of the authorized resource. If a `resource_id` value *is* specified then all other parameters are ignored. Otherwise, the other `resource_descriptor` parameters will be used to help identify the resource.
resource_login _id	String	No	<auth_ resource_ login_ID>	Specifies the login ID of the authorized resource. If a resource_id value is not specified and if a resource_login_id value is specified, then all other parameters are ignored. Otherwise, the other resource_descriptor parameters will be used to help identify the resource.

resource_email	String	No	<auth_ resource_ email >	Specifies the e-mail address of the authorized resource. If a resource_id value is not specified and if a resource_login_id value is not specified and if a resource_email value is specified, then all other parameters are ignored unless multiple resources use the same e-mail address. Otherwise, the other resource_descriptor parameters will be used to help identify the resource.
resource_last_ name	String	No	<auth_ resource_ last_name>	Specifies the last name of the authorized resource. If, a `resource_id` value *is not* specified and if a `resource_login_id` value *is not* specified and if a `resource_email` value *is not* specified, or multiple resources have the same e-mail address, then the combination of the `resource_last_name` and `resource_first_name` values are used to identify the resource. Otherwise, the resource cannot be found and an error results.
resource_first_ name	String	No	<auth_resour ce_first_name >	Specifies the first name of the authorized resource.

resource_descriptor				
A value for at least one of the parameters must be provided.				
resource_id	String	No	<resource_ID >	Specifies the resource ID of the resource. If a resource_id value is specified then all other parameters are ignored. Otherwise, the other resource_descriptor parameters will be used to help identify the resource.
resource_login _id	String	No	<resource_log in_ID>	Specifies the login ID of the resource. If a `resource_id` value *is not* specified and if a `resource_login_id` value *is* specified then all other parameters are ignored. Otherwise, the other `resource_descriptor` parameters will be used to help identify the resource.
resource_email	String	No	<resource_e mail>	Specifies the e-mail address of the resource. If a `resource_id` value *is not* specified and if a `resource_login_id` value *is not* specified and if a `resource_email` value *is* specified, then all other parameters are ignored *unless* multiple resources use the same e-mail address. Otherwise the other `resource_descriptor` parameters will be used to help identify the resource.

resource_last_name	String	No	<resource_last_name>	Specifies the last name of the resource. If a `resource_id` value *is not* specified and if a `resource_login_id` value *is not* specified and if a `resource_email` value *is not* specified, or multiple resources have the same e-mail address, then the combination of the `resource_last_name` and `resource_first_name` values are used to identify the resource. Otherwise, the resource cannot be found and an error results.
resource_first_name	String	No	<resource_first_name>	Specifies the first name of the resource.
project_descriptor All of the values can be NULL if you do not want to filter on the project. If you want to filter on a project, either the project_id or the project_name should be specified. If the project_id and the project_name are both NULL, the project will default to "Operations Project." An error results if there is no project with the name "Operations Project.				
project_id	String	No	<project_ID>	Specifies the ID for the project. If specified and there are no matches, an error results.
project_name	String	No	<project_name>	Specifies the name for the project. If a `project_id` value *is not* specified and if a `project_name` value *is* specified, then this data used to help identify the project. An error results if a match is not found.
project_manager	String	No	<project_manager>	Specifies the name of the manager of the project.

project_status	String	No	<project_status>	Specifies the status of the project. Valid values match those configured for your EnterpriseTrack application and there is no default value. Some examples of the status for are project are: ▸ Active ▸ On Hold ▸ Canceled ▸ Completed-Post Realization ▸ Closed-In Realization
project_program	String	No	<project_program>	Specifies the name of the program associated with the project.
activity_descriptor	Object	Yes	Not applicable	This object specifies the details of the activity. At least one value must be specified. See "activity_descriptor" for details.
time_category_descriptor	Object	Yes	Not applicable	This object specifies the category for the effort. See "time_category_descriptor" for details.

activity_descriptor				
activity_id	String	Yes	<act_id>	Specifies the activity ID to match. The value is not case sensitive. For internal activities, this corresponds to the EnterpriseTrack activity ID. For external activities, this corresponds to the unique ID assigned for the activities tracked outside of the EnterpriseTrack. For miscellaneous activities, this corresponds to the Enterprise category name. An error results if no matching activity ID for the specified resource is found.
activity_desc	String	No	<act_desc>	Specifies the external activity description to match. For internal or miscellaneous activities, this can be NULL. For external activities, this should match the name of the activity assigned in the EnterpriseTrack.
role_descriptor	Object	Yes	Not applicable	This object specifies the role. See "role_descriptor" for details.
effort_descriptor	Object	Yes	Not applicable	This object specifies the effort details. See "effort_descriptor" for details.
role_descriptor All of the values can be NULL if you do not want to filter on the role. If the role_id and the role_desc are both NULL and the resource has multiple roles in the specified project, an error results.				
role_id	String	No	<role_ID>	Specifies the role ID to match. An error results if no matching role ID for the specified resource is found.

role_desc	String	No	<role_ID>	Specifies the role description to match. An error results if no matching role description for the specified resource is found.
effort_descriptor				
update_action_code	String	Yes	<action_code>	Specifies how the values (for `total_hours` and `overtime_hours`) should be used. Valid values are: ▸ REPLACE - Replace disregards the existing value and updates using the new value. ▸ INCREMENT - Increment adds the new value to the existing value, then updates using the new sum.
date	Date	Yes	<date>	Specifies the date to be assigned to the effort. If the effort is tracked using EnterpriseTrack timesheets, then the effort will be revised for the specified date. Otherwise if the effort is tracked as activities, then either the effort will be revised for the week in which the date occurs, or the date will be ignored, and the effort will be revised for that activity.
total_hours	Integer	Yes	<total_hrs>	Specifies the number of non-overtime hours to include. See `update_action_code` for additional detail.
overtime_hours	Integer	No	<ot_hrs>	Specifies the number of overtime hours to include. See update_action_code for additional detail.

notes	String	No	<notes>	Specifies the remarks to be included with the effort. If activities are tracked using EnterpriseTrack timesheets, the note will be appended to the timesheet notes. Otherwise, the note will be appended to the activity comments.
time_category_descriptor				
time_category_desc	String	Optionally required (see description)	<time_cat>	Required only if operation_type has one of the following values: ▸ NON_PROJECT ▸ NON_WORKING_TIME Specifies the description of the category.
effort_descriptor	Object	Yes	Not applicable	This object specifies the effort details. See "effort_descriptor" for details.

Input Example

The syntax for the UpdateResourceEffort data input parameters is as follows:

```
{
  "global_properties":
  {
          "char_set":"<char_set>",
          "date_format":"<date_format>",
          "language":"<lang>"
          "api_version":"et-integration-api-1.0",
  },

  "application_data":
  {
          "source_application_descriptor":
          {
                  "source_app":"<source_App>",
                  "source_ref_unique_id":"<source_ID>",
                  "source_ref_description":"<source_desc>",
                  "source_ref_type":"<source_type>"
```

```
},
"security_descriptor":
{
        "authorization_policy":"<auth_policy>",
        "authorization_policy_given_resource_descriptor":
        {
                "resource_id":"<auth_resource_ID>",
                "resource_login_id":"<auth_resource_login_ID>",
                "resource_email":"<auth_resource_email>",
                "resource_first_name":"<auth_resource_last_name>",
                "resource_last_name":"<auth_resource_first_name>"
        }
},
"resource_descriptor":
{
        "resource_id":"<resource_ID>",
        "resource_login_id":"<resource_login_ID>",
        "resource_email":"<resource_email>",
        "resource_first_name":"<resource_last_name>",
        "resource_last_name":"<resource_first_name>"
},
"project_descriptor":
{
        "project_id":"<project_ID>",
        "project_name":"<project_name>",
        "project_manager":"<project_manager>",
        "project_status":"<project_status>",
        "project_program":"<project_program>",
        "activity_descriptor":
        {
                "activity_id":"<act_id>",
                "activity_desc":"<act_desc>",
                "role_descriptor":
                {
                        "role_id":"<role_ID>",
                        "role_desc":"<role_desc>"
                },
                "effort_descriptor":
                {
                        "update_action_code":"<action_code>",
                        "date":"<date>",
                        "total_hours":"<total_hrs>",
                        "overtime_hours":"<ot_hrs>",
                        "notes":"<notes>"
                }
```

```
                },
                "time_category_descriptor":
                {
                        "time_category_desc":"<time_desc>",
                        "effort_descriptor":
                        {
                                "update_action_code":"<action_code>",
                                "date":"<date>",
                                "total_hours":"<total_hrs>",
                                "overtime_hours":"<ot_hrs>",
                                "notes":"<notes>"
                        }
                }
        },
        "time_category_descriptor":
        {
                "time_category_desc":"<time_desc>",
                "effort_descriptor":
                {
                                "update_action_code":"<action_code>",
                                "date":"<date>",
                                "total_hours":"<total_hrs>",
                                "overtime_hours":"<ot_hrs>",
                                "notes":"<notes>"
                }
        },
        "operation_type":"<op_type>",
        "test_mode":"<test_mode>"
  }
}
```


This is an example with values for the placeholders.


```
{
  "global_properties":
  {
        "char_set":"ISO-8859-1",
        "date_format":"yyyy/MM/dd",
        "language":"en"
        "api_version":"et-integration-api-1.0",
  },

  "application_data":
  {
        "source_application_descriptor":
        {
```

```
        "source_app":"hp quality center",
        "source_ref_unique_id":"WEWEWWW1222",
        "source_ref_description":"this is related to new calls",
        "source_ref_type":"support call"
},
"security_descriptor":
{
        "authorization_policy":"authorize_with_login_resource",
        "authorization_policy_given_resource_descriptor":
        {
                "resource_id":"",
                "resource_login_id":"",
                "resource_email":"",
                "resource_first_name":"don",
                "resource_last_name":"adams"
        }
},
"resource_descriptor":
{
        "resource_id":"",
        "resource_login_id":"",
        "resource_email":"",
        "resource_first_name":"don",
        "resource_last_name":"adams"
},
"project_descriptor":
{
        "project_id":"4",
        "project_name":"",
        "project_manager":"",
        "project_status":"",
        "project_program":"",
        "time_category_descriptor":
        {
                "time_category_desc":" ",
                "effort_descriptor":
                {
                        "date":" ",
                        "total_hours":" ",
                        "overtime_hours":" ",
                        "update_action_code":" ",
                        "notes":" "
                }
        },
        "activity_descriptor":
```

```
                    {
                            "activity_id":"JXHQDCCGSVHPC",
                            "activity_desc":"new act",
                            "role_descriptor":
                            {
                                    "role_id":"",
                                    "role_desc":"Network Admin"
                            }
                    },
                    "effort_descriptor":
                    {
                            "update_action_code":"INCREMENT",
                            "date":"2012/10/11",
                            "total_hours":"10.5",
                            "overtime_hours":"5",
                            "notes":"some notes"
                    }
            },
            "operation_type":"EXTERNAL_ACTIVITY",
            "test_mode":"false"
    }
  }
```

Output Parameters

The results of the UpdateResourceEffort function are provided in JSON data format. The following table details the name/value pairs.

Name	Data Type	Description
global_properties	Object	This *object* lists the global settings for your EnterpriseTrack instance. See "***Global Properties Object*** (on page 11)" for details.
application_data	Object	This *object* provides the results. See "application_data" for details.
application_data		
et_transaction_id	String	This is the unique EnterpriseTrack transaction ID that is stored in the audit tables.
result_code	String	Provides the result code for the completion status of the function.
result_reason	String	If the function is successful, NULL is returned. Otherwise, the reason for the error is returned.

Name	Data Type	Description
project_descriptor	Object	This *object* contains the details of the project. See "project_descriptor" for details.
timesheet_descriptor	Object	This *object* contains the details of the timesheet. This is provided only if the effort is tracked using EnterpriseTrack timesheets. See "timesheet_descriptor" for details.
project_descriptor		
project_id	Integer	Provides the ID for the project.
project_name	String	Provides the name for the project.
project_manager	String	Provides the name of the manager of the project.
project_status	String	Provides the status of the project. Valid values match those configured for your EnterpriseTrack application and there is no default value. Some *examples* of the status for are project are: - Active - On Hold - Cancelled - Completed-Post Realization - Closed-In Realization
project_program	String	Provides the name of the program associated with the project.
activity_descriptor	Object	This *object* contains the details of an activity. See "activity_descriptor" for details.
time_category_descriptor	Object	This *object* contains the details of the time category of an activity. See "time_category_descriptor" for details.
activity_descriptor		
activity_id	String	Provides the ID of the activity.
activity_desc	String	Provides the description of the activity.
activity_total_effort	Integer	Provides the total number of hours (to date) for the activity.
activity_name	String	Provides the name of the activity.

Name	Data Type	Description
time_category_descriptor		
time_category_desc	String	Provides the description of the time category.
effort_descriptor	Object	This *object* specifies the effort details. See "effort_descriptor" for details.
effort_descriptor		
update_action_code	String	Specifies how the values for `total_hours` and `overtime_hours` should be used. Valid values are: ▸ REPLACE Replace disregards the existing value and updates using the new value. ▸ INCREMENT Increment adds the new value to the existing value and then updates using the new sum.
date	Date	Specifies the date to be assigned to the effort. If: The effort is tracked using EnterpriseTrack timesheets and then the effort will be revised for the specified date. Else if: The effort is tracked as activities, then either: ▸ The effort will be revised for the week in which the date occurs. -or- ▸ The date will be ignored, and the effort will be revised for that activity.
total_hours	Integer	Specifies the number of non-overtime hours to include. See `update_action_code` for additional detail.
overtime_hours	Integer	Specifies the number of overtime hours to include. See `update_action_code` for additional detail.
notes	String	Specifies the remarks to be included with the effort. If: Activities are tracked using EnterpriseTrack timesheets, the note will be appended to the timesheet notes. Otherwise: The note will be appended to the activity comments.

Name	Data Type	Description
timesheet_descriptor		
timesheet_id	String	Provides the ID of the activity.
timesheet_start_ date	Date	Provides the start date of the activity.
timesheet_end_ date	Date	Provides the end date of the activity.
timesheet_total_ hours	Integer	Provides the total number of hours (to date) for the activity.
timesheet_ overtime_hours	Integer	Provides the total number of overtime hours (to date) for the activity
timesheet_ approver	String	Provides the name of the timesheet approver.

Output Examples

The syntax for the JSON formatted parameters from a successful UpdateResourceEffort function is similar to the following.

```
{
  "global_properties":
  {
          "char_set":"<some_character_set>",
          "date_format":"<some_date_format>",
          "language":"<some_language>",
          "effort_unit":"<some_units_for_effort>"
          "api_version":"et-integration-api-1.0",
  },

  "application_data":
  {
          "et_transaction_id":"<some_unique_ID>",
          "result_code":"<result_code>",
          "result_reason":"<result_reason>",
          "project_descriptor":
          {
                  "project_id":"<project_ID>",
                  "project_name":"<project_name>",
                  "project_manager":"<manager_name>",
```

```
                "project_status":"<project_status>",
                "project_program":"<list_of_program_names>",
                "activity_descriptor":
                {
                        "activity_name":"<activity_name>",
                        "activity_id":"<activity_ID>",
                        "activity_total_effort":"<total_effort>"
                }
        },
        "timesheet_descriptor":
        {
                "timesheet_id":"<timesheet_ID>",
                "timesheet_start_date":"<timesheet_start_date>",
                "timesheet_end_date":"<timesheet_end_date>",
                "timesheet_approver":"<timesheet_approver_name>",
                "timesheet_total_hours":"<total_hours>",
                "timesheet_overtime_hours":"<overtime_hours>"
        }
  }
}
```

UpdateActivity Function

The UpdateActivity function updates the activity data based on the details you specify in the input parameters.

In This Section

Invocation Parameters

The parameters for the invocation of the UpdateActivity function are described in the following table. Unless otherwise specified, all values are not case sensitive.

Name	Data Type	Placeholder or Constant	Description
api_name	String	updateactivity	Specifies the name of the Integration function.
input_type	String	JSON	Specifies the data format for the input parameters.
output_type	String	JSON	Specifies the data format for the output parameters.
input_data	String	*<input_params>*	Specifies the location of the input parameters. This value is case sensitive.

Invocation Example

The syntax for the invocation of the UpdateActivity function is as follows:

```
<api_session>?api_name=updateactivity&input_type=JSON&output_type=JSON&
input_data=<input_params>
```

Input Parameters

The input parameters described in the following table provide the search criteria (filter data) to identify the activity, as well as to specify the updated effort data you want to commit.

This information should be provided in the JSON formatted data specified by <*input_params*>. Unless otherwise specified, all values are not case sensitive.

Note: This function includes a "test" feature (see `test_mode`) that allows you to verify that the information you include in the input parameters can be successfully committed. Since there is no mechanism to "roll back" invalid data, you are encouraged to "test" the data before actually committing any updates.

Name	Data Type	Value Required?	Placeholder or Constant	Description
global_properties	object	yes	Not applicable	This object specifies the global settings for your EnterpriseTrack instance. See "global_properties Object" for details.
application_data	Object	Yes	Not applicable	This object specifies the search criteria. See "application_data" for details.
application_data				
source_application_descriptor	Object	Yes	Not applicable	This *object* specifies the information you want stored in the audit table. See "source_application_descriptor" for details.
security_descriptor	Object	Yes	Not applicable	This *object* specifies the authentication information to be verified. See "security_descriptor" for details.
resource_descriptor	Object	Yes	Not applicable	This *object* specifies the resource. An error results in the event a matching resource cannot be found. See "resource_descriptor" for details.
project_descriptor	Object	Yes	Not applicable	This *object* specifies the project details. See "project_descriptor" for details.
operation_type	String	Yes	<*op_type*>	Specifies the type of operation. Valid values are: ▸ INTERNAL_ACTIVITY ▸ EXTERNAL_ACTIVITY

test_mode	Boolean	No	*<test_mode>*	Indicates whether or not this invocation of this function is merely a test. Valid values are: • TRUE • FALSE (default) If `test_mode` is `FALSE`, then the updates *will be committed* in the EnterpriseTrack database.
source_application_descriptor				
source_app	String	Yes	*<source_App>*	Specifies the name of the source application.
source_ref_unique_id	String	Yes	*<source_ID>*	Specifies the ID of the caller of the Integration function.
source_ref_description	String	Yes	*<source_desc>*	Specifies the description of the caller of the Integration function.
source_ref_type	String	Yes	*<source_type>*	Specifies the reference type of the caller of the Integration function.
security_descriptor				
authorization_policy	String	Yes	*<auth_policy>*	Specifies the authorization policy to be used. Valid values are: • `AUTHORIZE_WITH_LOGIN_RESOURCE` - Execute using the permissions of the logged in Integration user. • `AUTHORIZE_WITH_RECORD_LOCATOR_RESOURCE` - Execute using the permissions of the resource specified in `resource_descriptor`. • `AUTHORIZE_WITH_AUTHORIZATION_POLICY_GIVEN_RESOURCE` - Execute using the permissions of the resource specified in `authorization_policy_given_resource_descriptor`.

authorization_policy_given_resource_descriptor	Object	Optionally required (see description)	Not applicable	Required only if `authorization_policy` has the `AUTHORIZE_WITH_AUTHORIZATION_POLICY_GIVEN_RESOURCE` value. This *object* specifies the resource whose permissions should be used to execute the function. See "authorization_policy_given_resource_descriptor" for details.
authorization_policy_given_resource_descriptor				
resource_id	String	No	*<auth_resource_ID>*	Specifies the resource ID of the authorized resource. If a `resource_id` value *is* specified, then all other parameters are ignored. Otherwise, the other `resource_descriptor` parameters will be used to help identify the resource.
resource_login_id	String	No	*<auth_resource_login_ID>*	Specifies the login ID of the authorized resource. If a `resource_id` value *is not* specified and if a `resource_login_id` value *is* specified then all other parameters are ignored. Otherwise, the other `resource_descriptor` parameters will be used to help identify the resource.
resource_email	String	No	*<auth_resource_email >*	Specifies the e-mail address of the authorized resource. If a `resource_id` and `resource_login_id` values *are not* specified and a `resource_email` value *is* specified, then all other parameters are ignored *unless* multiple resources use the same e-mail address. Otherwise, the other `resource_descriptor` parameters will be used to help identify the resource.

resource_last_name	String	No	*<auth_ resource_ last_name>*	Specifies the last name of the authorized resource. If a `resource_id` and `resource_login_id` values are *not* specified, and a `resource_email` value *is not* specified, or multiple resources have the same e-mail address, then the combination of the `resource_last_name` and `resource_first_name` values are used to identify the resource. Otherwise, the resource cannot be found and an error results.
resource_first_name	String	No	*<auth_ resource_ first_name>*	Specifies the first name of the authorized resource.
resource_descriptor: A value for at least one of the parameters must be provided.				
resource_id	String	No	*<resource_ ID>*	Specifies the resource ID of the resource. If a `resource_id` value *is* specified then all other parameters are ignored. Otherwise, the other `resource_descriptor` parameters will be used to help identify the resource.
resource_login_id	String	No	*<resource_ login_ID>*	Specifies the login ID of the resource. If a `resource_id` value *is not* specified and a `resource_login_id` value *is* specified, then all other parameters are ignored. Otherwise, the other `resource_descriptor` parameters will be used to help identify the resource.

resource_e mail	String	No	*<resource_ email>*	Specifies the e-mail address of the resource. If `resource_id` and `resource_login_id` values are *not* specified, and a `resource_email` value *is* specified, then all other parameters are ignored *unless* multiple resources use the same e-mail address. Otherwise, the other `resource_descriptor` parameters will be used to help identify the resource.
resource_las t_ name	String	No	*<resource_ last_name>*	Specifies the last name. If a `resource_id` value, and a `resource_login_id` value *are not* specified, and if a `resource_email` value *is not* specified, or multiple resources have the same e-mail address, then a combination of the `resource_last_name` and `resource_first_name` values are used to identify the resource. Otherwise, the resource cannot be found and an error results.
resource_fir st_ name	String	No	*<resource_ first_name>*	Specifies the first name.

project_descriptor

All of the values can be NULL if you do not want to filter on the project.

If you want to filter on a project, either the `project_id` or the `project_name` should be specified. If the `project_id` and the `project_name` are both NULL, the project will default to "Operations Project." An error results if there is no project with name `Operations Project`.

project_id	String	No	*<project_ID>*	Specifies the ID for the project. If specified and there are no matches, an error results.

project_name	String	No	*<project_ name>*	Specifies the name for the project. If a `project_id` value *is not* specified and a `project_name` value *is* specified, then this data used to help identify the project. An error results if a match is not found.
project_manager	String	No	*<project_ manager>*	Specifies the name of the manager of the project.
project_status	String	No	*<project_ status>*	Specifies the status of the project. Valid values match those configured for your EnterpriseTrack application and there is no default value. Some *examples* of the status for are project are: ▸ Active ▸ On Hold ▸ Cancelled ▸ Completed-Post Realization ▸ Closed-In Realization
project_program	String	No	*<project_ program>*	Specifies the name of the program associated with the project.
activity_ descriptor	Object	Yes	Not applicable	This *object* specifies the details of the activity. At least one value must be specified. See "activity_descriptor" for details.
activity_descriptor				
activity_id	String	Yes	*<act_ID>*	Specifies the activity ID to match. The value is *not* case sensitive. For internal activities, this corresponds to the EnterpriseTrack activity ID. For external activities, this corresponds to the unique ID assigned for the activities tracked outside of the EnterpriseTrack. For miscellaneous activities, this corresponds to the Enterprise category name. An error results if no matching activity ID for the specified resource is found.

activity_perc ent_ completion	Numbe r	No	*<act_percen t>*	Specifies the percentage completion of the activity.
status_descr iptor	Object	No	Not applicable	This *object* specifies the status of the activity. See "status_descriptor" for details.
status_descriptor				
status_id	String	No	*<act_ID>*	Provides the ID of the status.
status_desc	String	No	*<act_desc>*	Provides the description of the status.

Input Examples

The syntax for the UpdateActivity data input parameters is as follows:

```
{
  "global_properties":
  {
          "char_set":"<char_set>",
          "date_format":"<date_format>",
          "language":"<lang>"
          "api_version":"et-integration-api-1.0",
  },
  "application_data":
  {
          "source_application_descriptor":
          {
                  "source_app":"<source_App>",
                  "source_ref_unique_id":"<source_ID>",
                  "source_ref_description":"<source_desc>",
                  "source_ref_type":"<source_type>"
          },
          "security_descriptor":
          {
                  "authorization_policy":"<auth_policy>",
                  "authorization_policy_given_resource_descriptor":
                  {
                          "resource_id":"<auth_resource_ID>",
                          "resource_login_id":"<auth_resource_login_ID>",
                          "resource_email":"<auth_resource_email>",
                          "resource_last_name":"<auth_resource_last_name>",
                          "resource_first_name":"<auth_resource_first_name>"
```

```
                        }
                },
                "resource_descriptor":
                {
                        "resource_id":"<resource_ID>",
                        "resource_login_id":"<resource_login_ID>",
                        "resource_email":"<resource_email>",
                        "resource_last_name":"<resource_last_name>",
                        "resource_first_name":"<resource_first_name>"
                },
                "project_descriptor":
                {
                        "project_id":"<project_ID>",
                        "project_name":"<project_name>",
                        "project_manager":"<project_manager>",
                        "project_status":"<project_status>",
                        "project_program":"<project_program>",
                        "activity_descriptor":
                        {
                                "activity_id":"<act_ID>",
                                "activity_percent_completion":"<act_percent>",
                                "status_descriptor":
                                {
                                        "status_id":"<act_ID>",
                                        "status_desc":"<act_desc>"
                                }
                        }
                },
                "operation_type":"<op_type>",
                "test_mode":"<test_mode>"
        }
    }
```

This is an example with values for the placeholders.

```
{
     "global_properties":
     {
          "char_set":"ISO-8859-1",
          "date_format":"",
          "language":"en"
          "api_version":"et-integration-api-1.0",
     },

     "application_data":
     {
          "source_application_descriptor":
          {
               "source_app":"hp quality center",
               "source_ref_unique_id":"WEWEWWW1222",
               "source_ref_description":"this is related to calls",
               "source_ref_type":"support call"
          },
          "security_descriptor":
          {

     "authorization_policy":"authorize_with_login_resource",
               "authorization_policy_given_resource_descriptor":
               {
                    "resource_id":"JBCDQVW5QMV9F",
                    "resource_login_id":"",
                    "resource_email":"",
                    "resource_first_name":"John",
                    "resource_last_name":"Smith"
               }
          },
          "resource_descriptor":
          {
               "resource_id":"JBCDQVW5QMV9F",
               "resource_login_id":"",
               "resource_email":"",
               "resource_first_name":"",
               "resource_last_name":""
          },
          "project_descriptor":
          {
               "project_id":"1",
               "project_name":"ExampleA",
               "activity_descriptor":
               {
                    "activity_id":"JABC5V9JSF4SP",
                    "activity_percent_completion":"38",
                    "status_descriptor":
                    {
```

```
                              "status_id":"Closed",
                              "status_desc":""
                        }
                  }
            },
            "operation_type":"INTERNAL_ACTIVITY",
            "test_mode":"FALSE"
      }
}
```


Output Parameters

The results of the UpdateActivity function are provided in JSON data format. The following table details the name/value pairs.

Name	Data Type	Description
global_properties	Object	This *object* lists the global settings for your EnterpriseTrack instance. See ***Global Properties Object*** (on page 11) for more details.
application_data	Object	This *object* provides the results. See "application_data" for more details.
application_data		
et_transaction_id	String	Provides the unique EnterpriseTrack transaction ID that is stored in the audit tables.
result_code	String	Provides the result code for the completion status of the function.
result_reason	String	If the function is successful, NULL is returned. Otherwise, the reason for the error is returned.
project_descriptor	Object	This *object* provides the details of the project. See "project_descriptor" for details.
project_descriptor		
project_id	Integer	Provides the ID for the project.
project_name	String	Provides the name for the project.

Name	Data Type	Description
project_manager	String	Provides the name of the manager of the project.
project_status	String	Provides the status of the project.
project_program	String	Provides the names of the programs associated with the project.
activity_descriptor	Object	This *object* contains the details of an activity. See "activity_descriptor" for details.
activity_descriptor		
activity_id	String	Provides the ID for the activity.
activity_name	String	Provides the name of the activity.
activity_status	String	Provides the status of the activity.
activity_percent_completion	Number	Provides the percentage completion of the activity.
activity_actual_start_date	Date	Provides the actual start date of the activity.
activity_actual_end_date	Date	Provides the actual end date of the activity.

Output Example

This is an example of the JSON formatted parameters from a successful UpdateActivity function.


```
{
  "global_properties":
  {
          "char_set":"ISO-8859-1",
          "date_format":"MMM/dd/yyyy",
          "language":"en",
          "effort_unit":"hours"
          "api_version":"et-integration-api-1.0",
```

```
  },

  "application_data":
  {
          "et_transaction_id":"JCDEJ58N2QMKW",
          "result_code":"SUCCESS",
          "result_reason":"",
          "project_descriptor":
          {
                  "project_id":"1",
                  "project_name":"it_test",
                  "project_manager":"john, smith",
                  "project_status":"Active",
                  "project_program":"",
                  "activity_descriptor":
                  {
                          "activity_id":"JEFGRCSKL3DTH",
                          "activity_name":"Rollout Project Preparation",
                          "activity_status":"Open",
                          "activity_percent_completion":"63",
                          "activity_actual_start_date":"",
                          "activity_actual_end_date":""
                  }
          }
  }
}
```

GetFinanceData Function

The GetFinanceData function fetches the data that is equivalent to the "Project Finances Element Monthly Detail Report" and corresponds to the search criteria (filter data) you specify in the input parameters.

In This Section

Invocation Parameters

The parameters for the invocation of the GetFinanceData function are described in the following table. Unless otherwise specified, all values are not case sensitive.

Name	**Data Type**	**Placeholder or Constant**	**Description**
api_name	String	getfinancedata	Specifies the name of the Integration function.
output_type	String	*<output_type>*	CSV XLS
input_data	String	*<input_params>*	Specifies the location of the input parameters. This value is case sensitive.

Invocation Example

The syntax for the invocation of the GetFinanceData function is as follows:

```
<api_session>?api_name=getfinancedata&output_type=<output_type>
&input_data=<input_params>
```

Input Parameters

The input parameters described in the following table provide the search criteria (filter data) needed to identify the data you want. This information should be provided in the JSON formatted data specified by <*input_params*>. Unless otherwise specified, all values are not case sensitive.

Name	Data Type	Value Required?	Placeholder or Constant	Description
global_properties	Object	Yes	Not applicable	This *object* lists the global settings for your EnterpriseTrack instance. See "global_properties Object" for details.
application_data	Object	Yes	Not applicable	This *object* lists the search criteria and provides the results. See "application_data" for details.
application_data				
pcs	String	No	*<pcs>*	Specifies the initiative attribute for the project.
project_id	Integer	No	*<project_ID>*	Specifies the project ID.
project_name	String	No	*<project_ name>*	Specifies the project name.
project_keyword	String	No	*<project_keyword >*	Specifies a keyword associated for the project.
project_status	String	No	*<project_status>*	Specifies one (or more) status values for the project. Multiple values should be separated by commas.
project_on_time_ status	String	No	*<project_on_ time_status>*	Specifies one (or more) status values for the project. Multiple values should be separated by commas.
project_org_ descriptor	Object	No	Not applicable	This *object* specifies the organization information. See "project_org_descriptor" for details.

Name	**Data Type**	**Value Required?**	**Placeholder or Constant**	**Description**
project_start_ date_from	Date	No	*<start_from>*	Specifies the beginning date for the range of start dates. This filters on actual (if present) or planned activity date.
project_start_ date_to	Date	No	*<start_to>*	Specifies the beginning date for the range of start dates. This filters on actual (if present) or planned activity dates.
planned_ realization_date_ from	Date	No	*<end_from>*	Specifies the beginning date for the range of end dates. This filters on actual (if present) or planned activity dates.
planned_ realization_date_ to	Date	No	*<end_to>*	Specifies the ending date for the range of end dates. This filters on actual (if present) or planned activity dates.
project_ classification_ descriptor	Object	No	Not applicable	This *object* specifies the project classification. See "project_classification_descriptor" for details.
project_ methodology_ descriptor	Object	No	Not applicable	This *object* specifies the project methodology. See "project_methodology_descriptor" for details.
program	String	No	*<program>*	Restricts the search to include only those projects in this program.

Name	Data Type	Value Required?	Placeholder or Constant	Description
finance_detail_level	String	No	*<detail_level>*	Specifies the level of finance elements to report. Valid values are: ▸ Total (default) ▸ Group ▸ Category ▸ Element
show_upper_levels	Boolean	No	*<show_levels>*	If `finance_detail_level` has a value of `Category`, this indicates whether or not to include the group in the report. Value values are: ▸ TRUE (default) ▸ FALSE
rpt_currency	String	No	*<currency>*	Specifies the type of currency to use. The default is USD.
fin_templates	String	No	*<template>*	Specifies one (or more) finance templates to use. Multiple values should be separated by commas.
finance_date_range_from	Date	No	*<range_from>*	Specifies the beginning date for the finance data that is to be reported.
finance_date_range_to	Date	No	*<range_to>*	Specifies the ending date for the finance data that is to be reported.
finance_dataset	String	No	*<dataset>*	Specifies which data stream should be considered. Valid values are: ▸ CURRENT (default) ▸ PLAN

Name	Data Type	Value Required?	Placeholder or Constant	Description
finance_snapshot_name	String	No	*<snapshot>*	If `finance_dataset` has a value of `PLAN`, this specifies the name of the finance snapshot that should be used for the report.
starting_month	Date	No	*<start_mo>*	Specifies the beginning month to be shown in the month-by-month breakdown. The default is the beginning of the *previous* fiscal year.
no_of_months	Integer	No	*<num_mo>*	Specifies the number of months to be included in the month-by-month breakdown. The default is 36.
project_org_descriptor				
division	String	No	*<division>*	Specifies one (or more) level 1 fields configured for the project hierarchy. Multiple values should be separated by commas.
business_unit	String	No	*<bus_unit>*	Specifies one (or more) level 2 fields configured for the project hierarchy. Multiple values should be separated by commas.
sub_business_unit	String	No	*<sub_unit>*	Specifies one (or more) level 3 fields configured for the project hierarchy. Multiple values should be separated by commas.
location	String	No	*<location>*	Specifies one (or more) level 4 fields configured for the project hierarchy. Multiple values should be separated by commas.

Name	Data Type	Value Required?	Placeholder or Constant	Description
region	String	No	*<region>*	Specifies one (or more) level 5 fields configured for the project hierarchy. Multiple values should be separated by commas.
project_classification_descriptor				
project_source	String	No	*<proj_source>*	Specifies one or more project sources for the associated *initiative*. Multiple values should be separated by commas.
functional_area	String	No	*<proj_area>*	Specifies one or more functional areas for the associated *initiative*. Multiple values should be separated by commas.
products	String	No	*<products>*	Specifies one or more products for the associated *initiative*. Multiple values should be separated by commas.
process	String	No	*<process>*	Specifies one or more processes for the associated *initiative*. Multiple values should be separated by commas.
project_methodology_descriptor				
phase_type	String	No	*<phase_type>*	Specifies one (or more) top level activities configured for the associated *initiative*. This field is dependent on the initiative and will be ignored is the initiative is NULL. Multiple values should be separated by commas.

Name	Data Type	Value Required?	Placeholder or Constant	Description
project_type	String	No	*<proj_type>*	Specifies one (or more) project types configured for the associated *initiative*. This field is dependent on the initiative and will be ignored is the initiative is NULL. Multiple values should be separated by commas.
roadmap	String	No	*<roadmap>*	Specifies one (or more) roadmaps configured for the associated *initiative*. This field is dependent on the initiative and will be ignored is the initiative is NULL. Multiple values should be separated by commas.

Input Examples

The syntax for the GetFinanceData data input parameters is as follows:

```
{
  "global_properties":
          {
                  "char_set":"<char_set>",
                  "date_format":"<date_format>",
                  "language":"<lang>"
                  "api_version":"et-integration-api-1.0",
          },

  "application_data":
          {
                  "pcs":"<pcs>",
                  "project_id":"<project_ID>",
                  "project_name":"<project_name>",
                  "project_keyword":"<project_keyword>",
                  "project_status":"<project_status>",
                  "project_on_time_status":"<project_one_time_status>",
```

```
                "project_org_descriptor":
                        {
                                "division":"<division>",
                                "business_unit":"<bus_unit>",
                                "sub_business_unit":"<sub_unit>",
                                "location":"<location>",
                                "region":"<region>"
                        },
                "project_start_date_from":"<start_from>",
                "project_start_date_to":"<start_to>",
                "planned_realization_date_from":"<end_from>",
                "planned_realization_date_to":",<end_to>",
                "project_classification_descriptor":
                        {
                                "project_source":"<proj_source>",
                                "functional_area":"<proj_area>",
                                "products":"<products>",
                                "process":"<process>"
                        },
                "project_methodology_descriptor":
                        {
                                "phase_type":"<phase_type>",
                                "project_type":"<proj_type>",
                                "roadmap":"<roadmap>"
                        },
                "program":"<program>",
                "finance_detail_level":"<detail_level>",
                "show_upper_levels":"<show_levels>",
                "rpt_currency":"<currency>",
                "fin_templates":",<template>",
                "finance_date_range_from":"<range_from>",
                "finance_date_range_to":",<range_to>",
                "finance_dataset":"<dataset>",
                "finance_snapshot_name":"<snapshot>",
                "starting_month":"<start_mo>",
                "no_of_months":"<num_mo>"
        }
}
```

This is an example with values for the placeholders.

```
{
  "global_properties":
        {
                "char_set":"utf-8",
```

```
                "date_format":"yyyy/MM/dd",
                "language":"en"
                "api_version":"et-integration-api-1.0",
        },

"application_data":
        {
                "pcs":"it",
                "project_id":"1",
                "project_name":"",
                "project_keyword":"",
                "project_status":"",
                "project_on_time_status":"",
                "project_org_descriptor":
                        {
                                "division":"",
                                "business_unit":"",
                                "sub_business_unit":"",
                                "location":"",
                                "region":""
                        },
                "project_start_date_from":"",
                "project_start_date_to":"",
                "planned_realization_date_from":"",
                "planned_realization_date_to":"",
                "project_classification_descriptor":
                        {
                                "project_source":"",
                                "functional_area":"",
                                "products":"",
                                "process":""
                        },
                "project_methodology_descriptor":
                        {
                                "phase_type":"",
                                "project_type":"",
                                "roadmap":""
                        },
                "program":"",
                "finance_detail_level":"TOTAL",
                "show_upper_levels":"TRUE",
                "rpt_currency":"",
                "fin_templates":"",
                "finance_date_range_from":"",
                "finance_date_range_to":"",
```

```
                    "finance_dataset":"CURRENT",
                    "finance_snapshot_name":"PLAN",
                    "starting_month":"",
                    "no_of_months":"12"
             }
      }
```

Output Parameters

The output of the GetFinanceData function is provided in a file that uses either CSV or XLS data format.

Output Example

The CSV and XLS files from a successful GetFinanceData function provide the data as two rows of data. The first row provides the names of the fields in the report, and the second row provides the values for the corresponding fields.

An exceptionally simplified excerpt from a CSV file is as follows:

```
Project Id,Project Name,Initiative,Project Status,...,Mar/2013,Apr/2013
4,COST_Basic_External,IT,Active,... 0.00,0.00
```

Automated Data Upload

Automated data upload enables you to set up programs to automatically upload data files and receive the response in a standard format. You can use this to parse or interpret data with other third-party applications.

> **Note:** Only data uploads that are supported via the UI are also supported using the API.

The following functions are used to perform automate data uploads:

- receivedata
- getStatus

In This Section

receivedata Function

Invoke the receivedata function to begin the automated data upload process by specifying the data upload files and generating a unique ID for the data upload process.

In This Section

Invocation Syntax

The syntax for the invocation of automated data upload is:

```
<form method=POST ENCTYPE="multipart/form-data"
action="http://<server>/SiteWand/Submission/<account_name>/dataupload/a
utomatedupload/receivedata">User Login <input type=text
name='user_login_id' value=''/>Password <input type=password
name='password' value='' /> Delimiter <input type=text name='delimiter'
value=',' /> Encoding <input name = "encoding_type" value="UTF-8">
Entity_Name1 <input type=text name='entity_name1' value='user' />
File_Name1 <input type=file name='file_name1' />Entity_Name2 <input
type=text name='entity_name2' value='user' /> File_Name2 <input type=file
name='file_name2' />
....
Entity_Name15 <input type=text name='entity_name15' value='user' />
File_Name15 <input type=file name='file_name15' /> <input type = 'submit'
value='Submit' /></form>
```

Invocation Example

https://abc123.com/SiteWand/Submission/jdoe/dataupload/automatedupload/receivedata?

```
<form method=POST ENCTYPE="multipart/form-data"
action="http://abc123.com/SiteWand/Submission/jdoe/dataupload/automated
upload/receivedata">User Login <input type=text name='user_login_id'
value=jdoe/>Password<input type=password name='password' value=<>/>
Delimiter <input type=text name='delimiter' value=','/> Encoding <input
name ="encoding_type" value="UTF-8">Entity_Name1 <input type=text
name='entity_name1' value='project'/>File_Name1 <input type=file
name='file_name1'/>Entity_Name2 <input type=text name='entity_name2'
value='user'/>File_Name2 <input type=file name='file_name2'/><input type
= 'submit' value='Submit'/></form>
```

Invocation Parameters

The following invocation parameters can be specified for receivedata:

Name	Description
server	Specifies the IP address or hostname of the server hosting your EnterpriseTrack instance.
account_name	Specifies the account name (or company name) of your Specifies your EnterpriseTrack login ID. The case sensitivity for this value conforms to that used by your EnterpriseTrack system.
user_login_id	Specifies your EnterpriseTrack login ID. The case sensitivity for this value conforms to that used by your EnterpriseTrack system.

Name	Description
password	Specifies the password corresponding to your EnterpriseTrack login ID. The case sensitivity for this value conforms to that used by your EnterpriseTrack system.
encoding_type	Specifies the character encoding type that is specific to your account. Possible values: UTF-8, UTF-16, or ISO-8859-1.
delimiter	Specifies the csv delimiter. The possible values are: "," and ".".
decimal_symbol	Specifies the decimal symbol. The possible values are: "," and ".".
trim_trailing_spaces	Choose if you want to trim trailing spaces. You can select true or false.
trim_leading_spaces	Choose if you want to trim leading spaces. You can select true or false.
entity_name <1> to entity_name <15>	The name of the entity being submitted for an upload. A maximum of 15 entities can be uploaded in a single instance. Each entity name must have a file_name associated with it. Refer to the table below for a list of entities that you can upload.
file_name<1> to file_name <15>	The name of the file being uploaded. Data upload files must be submitted as .csv or .zip files. A maximum of 15 data files can be uploaded in a single instance.
is_update_allowed	Allows updates to data or only adding new projects/users to the system. Valid values are: ▸ True = (default) updates an existing record with new values from import data. Otherwise, adds a new record. ▸ False = Fails import for existing records. Otherwise adds new records.
Id	Unique id (Transaction id). This is required, when user wants to track transaction which was initiated earlier.

Name	Description
do_upload_on_error_records	Allows data upload on error records also. Valid values are: ▸ True = (default) The data will import only the error-free records. ▸ False = The data upload process will abort if error records are found.

Entity Name (entity_name <n>)	Possible Values
Ideas	Idea.
Charters	Charter
Charter Team	charter_team.
Charter Documents	charter_documents.
Projects	project
Project Team	project_team
Team Allocation	project_team_allocation
Project Dates	phase_date
Aggregate/Yearly Finance	project_annualized_finance
Monthly Finance	project_finance

Entity Name (entity_name <n>)	**Possible Values**
Aggregate/Yearly Finance Snapshot	project_annualized_finance_snapshot
Monthly Finance Snapshot	project_monthly_finance_snapshot
Documents	project_doc
Notes	project_note
Multiple Org Hierarchy	project_multiorg
Incremental Documents	project_incremental_docs
Incremental Monthly Finance	project_incremental_monthly_finance
Incremental Aggregate/Yearly Finance	project_incremental_annual_finance
Incremental Monthly Finance Snapshot	project_incremental_finance_snapshot
Incremental Aggregate/Yearly Finance Snapshot	project_annual_incremental_finance_snapshot
Incremental Notes	project_incremental_notes
Resources	User
Roles	user_role
Certifications	user_certification
Resource Update	UpdatedUsers
Role Update	UpdatedUserRoles
Resource Certification Update	updated_user_certifications

Entity Name (entity_name <n>)	Possible Values
Incremental Resource Certifications	user_incremental_certifications
Alignment 1	strategy_1 Add for all alignments configured in the account.
Measure	Measure
Measure Incremental Data	measure_data
Incremental Alignment	strategy_alignment

Note: The possible values for entity names (ex: entity_name 1/entity_name2 attributes) "entities_alignment_tree" value is always "" for all entities except for "alignment" entities.

Output

On successful login the receivedata function returns a unique ID value which can be used to check the status of the data upload.

Output Examples

If the data upload is received successfully, a response is received in the following format:

```
<response>
   <message>Received data successfully</message>
   <uniqueid>ZHR98374GT</uniqueid>
</response>
```

If authentication or data upload is not received successfully, a response is received in the following format:

```
<response>
   <error>invalid login ID or password.</error>
</response>
```

getstatus Function

The getstatus function displays the current status of the data upload process. The unique ID generated by the receivedata function is required to determine the status of the data upload.

In This Section

Invocation Syntax

The syntax for the invocation of the status of the automated data upload is:

> **Note**: Use the unique ID that was returned as part of the receivedata function as a parameter to get status.

```
https://<server>/SiteWand/Submission/<account_name>/dataupload/automate
dupload/getstatus?id=<receivedata_generated_unique id>
```

Invocation Example

Using the unique ID generated from the previous example for receivedata function, a successful invocation of getstatus function displays as follows:

```
https://abc123.com/SiteWand/Submission/jdoe/dataupload/automatedupload/
getstatus?id= ZHR98374GT
```

Output

If the data upload is successful, the unique ID and a successful message is displayed in XML format. If there are authentication errors or the data upload is not successful, and an error message is displayed in XML format.

Output Examples

On completing a data upload successfully, the following response displays:

```
<response>
   <status>Completed</status>
</response>
```

If the data upload process in ongoing, the following response displays for the unique ID:

```
<response>
   <status>In process</status>
</response>
```

The result from a successful project data upload in XML format is similar to the following.

```
<response>
   <status>Completed</status>
   <projects>
      <uploadstats>
         <errorrecords>0</errorrecords>
      </uploadstats>
   </projects>
</response>
```

For a file upload error, the output response in XML format displays as shown below:

```
<response>
   <status>Completed</status>
   <error type='upload'>
      <message>Error message</message>
   </error>
</response>
```

Preconfigured Remote Reports

EnterpriseTrack includes a collection of reports that extract data. This data can be used periodically and programmatically for reporting or integration purposes.

In This Section

Filtering and Setting Parameters

The following steps will help you identify and modify report filters before executing remote reports via API.

Identifying Filter Parameters

To identify the filter parameters you can change via API:

1) Log in to your EnterpriseTrack application. You must have permissions to access the **Reports** module.
2) From the Top Navigation Bar, select **Reports > Standard Reports**.
3) From the **List** pane, select a report by clicking on its name.
4) Click the **Filter** tab on the **Details** pane.
5) Click the **View JSON** button near the bottom of the **Filter** tab. Use the JSON to identify the filters that you can set. Only the filters specified in the JSON can be set via API.

Modifying Filter Parameters

To modify filter parameters:

1) Open a text editor and paste the JSON.
2) Make changes to the JSON.

For filters that are of type List, separate the values using a | symbol, for example {"pcs": "Six Sigma|IT"}. The following filters are of type List and support multiple values: title, status, area_of_expertise_list, pcs, level1, level 2, level3, level4, level5, functional_area, project_source, process, product, project_on_time_status, project_manager, funnel_status, idea_status, pcs_idea, and activity status.

For filters that are initiative specific and have values that unique within an initiative, separate them using ~. For example, if you want to specify a single role within an initiative, use: {"role":"Six Sigma~Black Belt"}. If you want to specify multiple roles that are initiative specific, separate each role with a |, for example: {"role":"Six Sigma~Black Belt|Six Sigma~Project Leader"}. The following fields are initiative specific: role_multilist, phase_type, project_type, roadmap, activity_type, and nonwbs_activity type.

Notes:

- In the JSON only include the parameter tags you want to change. The filter parameters and values in the JSON will override the values specified in the UI. If a parameter tag is not specified in the JSON, then the value specified in the UI is used; and if a parameter tag has a null value, then all options are available.
- Enter the date in the format that is specific to your configuration.

Invoking Remote Reports

Use the Post method to submit the form fields to the following URL:

`https://<server>/SiteWand/Submission/<account_name>/etws/ReportRPC`

Form Field	Description
command	execute
login_id	Your EnterpriseTrack login ID. The case sensitivity for this value conforms to that used by your EnterpriseTrack system.
password	Your EnterpriseTrack password The case sensitivity for this value conforms to that used by your EnterpriseTrack system.
report_name	The name of the report.
report_filter_json	Copy the JSON from the report Filter tab. For more information, see topic Filtering and Setting Parameters.

Note: The `/SiteWand/Submission` portion of the URL *is* case sensitive. Unless otherwise noted, all other text in the URL *is not* case sensitive.

The following is an example with values for the placeholders:

`https://ABC.example.com/SiteWand/Submission/CompanyDEF/etws/ReportRPC`

Output

The output of the function call is a stream of content type determined by the report's output. If the report output is HTML, then the output is a text/html stream. If the report output is Excel, then the output is a binary stream of content type application/vnd.ms-excel.

Result Code	Result Reason	Description	Corrective Action
ERR_APPROVED_TIMESHEET_EXISTS	Once a timesheet has been approved, no updates can be made.	Timesheet already approved	From an interactive EnterpriseTrack session, re-open the timesheet. Updates can then be made from either an interactive session or using the Integration API.
ERR_AUTHENTICATION	Invalid login information.	Login failed	Specify valid (case sensitive) values for both of the following: • user_login_id=<*login_id*> • password=<*pwd*>
	Login ID is required. Please provide a value.	Login ID required	
	Password is required. Please provide a value.	Password required	Specify valid (case sensitive) values for both of the following: • user_login_id=<login_id> • password=<pwd>
	The login ID/password combination is not valid. Please try again.	Password expired	Reset or obtain a new password.
	Unauthorized access to the integrate-dispatcher.	Not logged in	Verify that you are logged in successfully before executing the API.
ERR_AUTHORIZATION_POLICY	Authorization policy cannot be blank.	Authorization policy required	Specify one of the following values: • authorize_with_lo

Result Code	Result Reason	Description	Corrective Action
	The authorization policy code passed is invalid, it should have the value as "authorize_with_login_resource", "authorize_with_record_locator_resource", or "authorize_with_authorization_policy_given_resource".	Invalid authorization policy	gin_resource ▸ authorize_with_record_locator_resource ▸ authorize_with_authorization_policy_given_resource
	The user credentials (provided in Authorization_Policy_User_Source) do not match to any existing user in the system.	Could not authorize user	Specify valid (case sensitive) values for both of the following: ▸ user_login_id=<login_id> ▸ password=<pwd>
	The user credential provided does not have permission to Execute APIs as Proxy.	Insufficient permission for authorized user	Obtain the necessary permission(s).
	In case of timesheet operation, the authorization resource should be same as resource whose effort is being updated.	Users did not match	Log in with the credentials of the resource whose effort is being updated.
ERR_BLANK_WORK_ASSIGNMENT_DESC	The activity name is missing.	Activity name required	Specify a value for activity name.
ERR_BLANK_WORK_ASSIGNMENT_ID	The external work assignment ID is missing.	External work assignment ID required	Specify a value for external work assignment ID.
ERR_BLANK_WORK_ASSIGNMENT_TYPE	The activity type is missing.	Activity type required	Specify a value for activity type.

Result Code	Result Reason	Description	Corrective Action
ERR_CANNOT_ASSIGN_RESOURCE_AS_ACTIVITY_OWNER	Resource cannot be assigned as activity owner due to allowed role restriction for this activity.	Unable to assign given resource as activity owner.	Verify that the resource role has the necessary permission(s), or retry with a different role and resource.
ERR_INVALID_ACTIVITY_PERCENT_COMPLETION	The activity percent completion should have a valid numeric value between 0 and 100.	Invalid activity percent completion value	Verify that you specified an integer or floating point value between 0 and 100 (inclusive).
ERR_INVALID_ACTIVITY_STATUS	The activity status passed is not valid.	Invalid activity status	Determine what values are configured for your EnterpriseTrack application. Then, specify one of the configured values.
ERR_INVALID_AET_FOR_ACTIVITY	The activity AET should be one of Timesheet, Resource Level (Detail), or Resource Level (Summary).	Invalid activity effort type	Specify one of the following values: - Timesheet - Resource Level (Detail) - Resource Level (Summary)
ERR_INVALID_API	The Integration function name that you specified is not valid.	Invalid function name	- If you have not successfully logged in, all function names (other than Login) are considered invalid.
	Integration function name is required. Please provide a value.	API function name required.	
ERR_INVALID_API_VERSION	The API version information you specified is not supported.	Invalid API version number	Specify the following value as et-integration-api-1.0.

Result Code	Result Reason	Description	Corrective Action
	API version is missing. Please provide valid API version.	API version required.	
ERR_INVALID_CONFIG	The API '{api_name}' does not have any configured permission.	Invalid permission.	Obtain the necessary permissions.
ERR_INVALID_CONFIG_ ACTIVITY_TYPE	The associated project initiative does not have the activity type configured as "EXTERNAL_WA. "	No matching external work assignment.	Contact your EnterpriseTrack administrator and request that the application be configured to allow integration activities.
	The work assignment type passed is invalid. It should have the value as INTERNAL or EXTERNAL.	Invalid work assignment type.	Contact your EnterpriseTrack administrator and request that the application be configured to allow integration activities.
ERR_INVALID_DATA	The format of your JSON data is not correct.	Invalid data format.	Verify that: • The format you specified corresponds to the format of the data you provided. • The format of the data you provided conforms to the standard for that format. • You have actually provided data, or included enough data to identify a unique result.
	Input data is required. Please provide a value.	Input data required.	
	The information provided did not identify a unique category for timesheet data.	More category data required.	
	Invalid location for char-set. It should be first attribute in global-properties.	Invalid char-set location.	

Result Code	Result Reason	Description	Corrective Action
	Invalid char_set. System supports the format: {encoding_format}	Unsupported char-set	
	The date cannot be blank.	Date required	Specify a value for the date.
ERR_INVALID_DATE_FORMAT	The format of the data you provided does not correspond to the format specified in the global_properties object.	Invalid date format	Verify that the format you specified corresponds to the format of the data you provided.
	The date format cannot be blank.	Date format required	Specify a value for the date format.
ERR_INVALID_DATE_PERIOD	Data cannot be entered for the week earlier than project start week.	Date before project start date	Verify that the: • Date is not earlier than the project start date. • Date is not after the project realization date.
	Data cannot be entered for the week later than project realization week.	Date after project realization date	
ERR_INVALID_DIVISION	The values given for project {divisionUIName} field are not valid.	Invalid division	Specify a valid division.
ERR_INVALID_FUNCTIONAL_AREA	The values given for project {functionalAreaUIName} field are not valid.	Invalid functional area	Specify a valid functional area.

Result Code	Result Reason	Description	Corrective Action
ERR_INVALID_INCLUDE_CLOSED_WA	The include closed work assignment (include_closed_wa) passed is invalid. It should have the value of TRUE or FALSE.	Invalid include closed work assignment	Specify one of the following values: ▸ TRUE ▸ FALSE
ERR_INVALID_INCLUDE_EXTERNAL_WA	The include external work assignment (include_external_wa) passed is invalid. It should have the value of TRUE or FALSE.	Invalid include external work assignment	Specify one of the following values: ▸ TRUE ▸ FALSE
ERR_INVALID_LANGUAGE	The language ID passed is not supported.	Invalid language ID	Specify a valid language ID.
ERR_INVALID_LOCATION	The values given for project {locationUIName} field are not valid.	Invalid location	Specify a valid location.
ERR_INVALID_MAX_ROWS	The data provided for input max rows is not a valid number.	Invalid max rows	Verify that the max rows value is a positive integer.
ERR_INVALID_OPERATION_TYPE	The Work Assignment type passed is invalid, it should have the value as INTERNAL or EXTERNAL.	Invalid work assignment type	Specify one of the following values: ▸ INTERNAL ▸ EXTERNAL

Result Code	Result Reason	Description	Corrective Action
	The work assignment type passed is invalid. It should have the value of INTERNAL, EXTERNAL, PROJECT_TIME_CATEG, NON_PROJECT_TIME_CATEG, or NON_WORKING_TIME_CATEG.	Invalid work assignment type	Specify one of the following values: ▸ INTERNAL ▸ EXTERNAL PROJECT_TIME_CATEG ▸ NON_PROJECT_TIME_CATEG ▸ NON_WORKING_TIME_CATEG
ERR_INVALID_OVERTIME_HOURS	Overtime hours is invalid. Please provide only positive numbers.	Invalid overtime hours format	Verify that: ▸ The value for the number of hours is a positive integer. ▸ Overtime hours do not exceed the total hours.
	The number of overtime hours cannot exceed the number of total hours.	Overtime hours exceed total hours	
ERR_INVALID_PCS	The values given for project "PCS" field are not valid.	Invalid PCS	Specify a valid PCS.
ERR_INVALID_PHASE	The values given for project {phaseUIName} field are not valid.	Invalid phase	Specify a valid phase.
ERR_INVALID_PROCESS	The values given for project {processUIName} field are not valid.	Invalid process	Specify a valid process.
ERR_INVALID_PRODUCTS	The values given for project {productUIName} field are not valid.	Invalid product(s)	Specify a valid product(s).

Result Code	Result Reason	Description	Corrective Action
ERR_INVALID_PROJECT	The project information you specified does not match any existing project.	No matching project found	Verify that all information you specified corresponds to an existing project.
ERR_INVALID_PROJECT_ON_TIME_STATUS	The values given for project on time status field are not valid.	Invalid project on time status	Specify a valid project on time status.
ERR_INVALID_PROJECT_SOURCE	The values given for project {projectSourceUIName} field are not valid.	Invalid project source	Specify a valid project source.
ERR_INVALID_PROJECT_STATUS	The values given for project status field are not valid.	Invalid status	Determine what values are configured for your EnterpriseTrack application. Then, specify one of the configured values.
ERR_INVALID_PROJECT_TYPE	The values given for project type field are not valid.	Invalid project type	Specify a valid project type.
ERR_INVALID_REGION	The values given for project {regionUIName} field are not valid.	Invalid region	Specify a valid region.
ERR_INVALID_RESOURCE	The resource information you specified does not match any existing resource.	No matching resource found	Verify that all information you specified corresponds to an existing resource.
ERR_INVALID_ROADMAP	The values given for project {roadmapUIName} field are not valid.	Invalid roadmap	Specify a valid roadmap.

Result Code	Result Reason	Description	Corrective Action
ERR_INVALID_ROLE	The role information you specified does not match any existing role.	No matching role found	Verify that all information you specified corresponds to an existing role.
ERR_INVALID_TEAM_MEMBER	The combination of role and resource information you specified cannot be matched.	No match found for this combination of role and resource	Verify that all information you specified exists for the resource you specified.
ERR_INVALID_TOTAL_HOURS	Total hours is invalid. Please provide only positive numbers.	Invalid total hours format	Verify that the value for the number of hours is a positive integer.
ERR_INVALID_TOTAL_OVERTIME_HOURS	The data provided for the total or overtime hours is not an integer	Invalid total overtime hours format	Verify that the value for the number of hours is a positive integer.
ERR_INVALID_UPDATE_ACTION_CODE	The update action code that you specified is not supported.	Invalid update action code	Specify one of the following values: - REPLACE - INCREMENT
ERR_NO_DATA_TO_UPDATE	Both percent completion and activity status cannot be blank.	No data to update	Specify values for the percent completion and activity status.
ERR_NON_EXISTING_ACTIVITY	The activity ID you specified does not exist	Activity ID not found	Verify that you have specified a valid activity ID.

Result Code	Result Reason	Description	Corrective Action
ERR_PERMISSION	Your credentials do not include permission to perform revisions to one (or more) of the following : <permission_name>	Insufficient permission.	Obtain the necessary permissions from your EnterpriseTrack administrator.
ERR_PROJECT_CLOSED	The current project status does not allow this operation.	Project closed.	Verify that you specified an Open (or equivalent) project.
ERR_PROJECT_LOCKED	Updates are not allowed on this project since it has been locked for MS Project updates.	Project locked for MSP update	Once the synchronization is complete, you can try again.
ERR_RESOURCE_NOT_ACTIVITY_OWNER	The work assignment you specified is assigned to a different resource.	Resource not assigned to this activity	Verify that the activity you specified is assigned to the resource you specified.
ERR_TIMESHEET_ENTRY_NOT_ALLOWED	Timesheets are not enabled for this resource.	Timesheet disabled for this resource	Verify that timesheets are enabled for the resource.
	A manager is not assigned to the resource, therefore timesheets cannot be created.	Manager not assigned to resource	From an interactive EnterpriseTrack session, assign a manager to the resource and then try again.
	Timesheets are not enabled for this resource.	Resource cannot enter timesheet	From an interactive EnterpriseTrack session, enable the Can Enter Timesheet option for this resource or the project team.

Result Code	Result Reason	Description	Corrective Action
	The user does not have adequate permission to enter Non Project/Non Working Time.	The user does not have permission for Non Project/Non Working Time	Obtain the necessary permissions.
	The resource does not have permission to enter project level time.	Insufficient permission	Obtain the necessary permissions.
	Your credentials do not include permission to either create or edit timesheets for this resource.	Insufficient permission	Obtain the necessary permission.
	The resource does not have permission to enter activity level time.	Insufficient permission	Obtain the necessary permission.
ERR_TIMESHEET_EXCESS_HOURS	The number of hours cannot exceed the daily limit configured in EnterpriseTrack.	Number of hours exceeds daily limit	Verify the: • Number of hours currently reported for the resource • Maximum number of hours configured for your EnterpriseTrack instance
ERR_UNSUPPORTED_INPUT_FORMAT	The input format that you specified is not supported.	Invalid input format	Specify a valid data format for the following: input_type=<in_type> See the function documentation for supported formats.
	Input type is required. Please provide a value.	Input format required	Specify a value for the input type.

Result Code	Result Reason	Description	Corrective Action
ERR_UNSUPPORTED_OUTPUT_FORMAT	The output format that you specified is not supported.	Invalid output format	Specify a valid data format for the following: output_type=<out_type> See the function documentation for supported formats.
	Output type is required. Please provide a value.	Output format required	Specify a value for the output type.
ERR_UPDATE_ACTIVITY	(Message corresponds to that found in the EnterpriseTrack UI.)	Failed to update activity	Follow the recommendation.
ERR_WORK_ASSIGNMENT_ LOCKED	Updates are permitted only to Open work assignments.	Closed work assignment	Verify that you have specified a work assignment that is open (or the equivalent).
SUCCESS	(Null)	Successful execution of Integration function.	No action required.
SYSTEM_ERROR	Operation has failed. Contact the system administrator.	Unexpected system error	Please contact system administrator.

Timesheet Functions

The Timesheet Detail report can be rendered to extract timesheet data or timesheet corrections data using the following functions respectively.

- GetTimesheetData
- GetTimesheetCorrections

In This Section

getTimesheetData Function

The getTimesheetData function extracts timesheet data for the Timesheet Detail report.

In This Section

Invocation Syntax

The syntax for the invocation of the getTimesheetData function is as follows.

<*api_session*>?api_name=getTimesheetData&output_type=<*output_type*>
&input_data=<*input_params*>

Invocation Parameters

The parameters for the invocation of the GetTimesheetData function are described in the following table. Unless otherwise specified, all values are not case sensitive.

Name	Data Type	Placeholder or constant	Description
api_name	String	*getTimesheetData*	The name of the timesheet function.

Name	Data Type	Placeholder or constant	Description
output_type	String	*<output_type>*	Specifies the data format of the output. The report output can be generated in the following formats: ▸ CSV ▸ XLSX
Input_data	String	<input_params>	The location of the input parameters file. This value is case sensitive.

Input Parameters

The input parameters described in the following table provide the search criteria (filter data) needed to identify the data for the Timesheet Detail report. This information should be provided in JSON formatted data specified by *<input_params>*. Unless otherwise specified, all values are not case sensitive.

Name	Data Type	Value Required?	Placeholder or Constant	Description
report_format	String	Yes	Not applicable	The report format. Corresponds to the Show Actual Effort breakdown at day level filter on the report. Valid values include: ▸ Summary ▸ Daily (default)
timesheet_from_date	Date	Yes		The start date of the Timesheet Detail report. Corresponds to the Timesheet From Date filter on the report.
timesheet_to_date	Date	Yes		The end date of the Timesheet Detail report. Corresponds to the Timesheet To Date filter on the report.
report_project_time	String			Corresponds to the Show Project Overhead Categories filter on the report. Defaults to Yes.

Name	Data Type	Value Required?	Placeholder or Constant	Description
report_non_project_and_non_working_time	String			Corresponds to the Show Non-project Overhead Categories filter on the report. Defaults to Yes.
report_activity_time	String			Corresponds to the Show Activity Details filter on the report. Defaults to Yes
report_zero_effort_rows	String			Corresponds to the Suppress rows where Actual Total Effort is zero filter on the report. Defaults to No.
report_cost	String			Corresponds to the Show Cost filter on the report. Defaults to Yes.
report_disabled_categories	String			Corresponds to the Include disabled Time Reporting Categories filter on the report. Defaults to Yes.
timesheet_status	String			Corresponds to the Timesheet Status filter on the report. Specify as comma-separated values.
timesheet_submitter	Object	Yes		Corresponds to the Submitter filter on the report. Enter the first name or the last name. The first matching resource will be used. Only one submitter can be specified on the report.
timesheet_approver	Object	Yes		Corresponds to the Approver filter on the report. Enter the first name or the last name. The first matching resource will be used. Only one approver can be specified on the report.
pcs	String			Corresponds to the Initiative filter on the report. Specify comma-separated values.
Project_id	String	Yes		Corresponds to the Project ID filter on the report.

Name	Data Type	Value Required?	Placeholder or Constant	Description
project_name	String			Corresponds to the Project Name filter on the report.
project_keyword	String			Corresponds to the Keyword filter on the report. Specify comma-separated values.
project_status	String			Corresponds to the Project Status filter on the report. Specify comma-separated values.
project_org_descriptor->division	String			Corresponds to the Division filter on the report. Specify comma-separated values.
project_org_descriptor->business_unit	String			Corresponds to the Business Unit filter on the report. Specify comma-separated values.
project_org_descriptor->sub_business_unit	String			Corresponds to the Sub unit filter on the report. Specify comma-separated values.
project_org_descriptor->location	String			Corresponds to the Location filter on the report. Specify comma-separated values.
project_org_descriptor->region	String			Corresponds to the Region filter on the report. Specify comma-separated values.
resource_login_id	String			Corresponds to the Login ID filter on the report.
resource_email	String			Corresponds to the Email filter on the report.
resource_last_name	String			Corresponds to the Last Name filter on the report.
resource_title	String			Corresponds to the Access Profile filter on the report. Specify multiple Access Profiles as comma-separated values.
resource_area_of_expertise	String			Corresponds to the Area of Expertise filter on the report.

Name	Data Type	Value Required?	Placeholder or Constant	Description
resource_manager	Object			Corresponds to the Manager filter on the report. Enter the first name or the last name. The first matching resource will be used. Multiple managers can be specified.
program	String			Corresponds to the Program filter on the report. Specify multiple programs as comma-separated values.
resource_org_descriptor->division	String			Corresponds to the Division filter on the report. Specify multiple divisions as comma-separated values.
resource_org_descriptor->business_unit	String			Corresponds to the Business Unit filter on the report. Specify multiple business units as comma-separated values.
resource_org_descriptor->sub_business_unit	String			Corresponds to the Sub unit filter on the report. Specify multiple sub units as comma-separated values.
resource_org_descriptor->location	String			Corresponds to the Location filter on the report. Specify multiple locations as comma-separated values.
resource_org_descriptor->region	String			Corresponds to the Region filter on the report. Specify multiple regions as comma-separated values.
labor_expense_type	String			Corresponds to the Labor Expense Type filter on the report. Specify multiple labor expense types as comma-separated values.
labor_expense_category	String			Corresponds to the Labor Expense Category filter on the report. Specify multiple labor expense categories as comma-separated values.

Name	Data Type	Value Required?	Placeholder or Constant	Description
report_currency		Yes		Corresponds to the Reporting Currency filter on the report. Defaults to the system currency unit.
output_custom_field_list				Corresponds to the Output Custom Fields filter on the report. Specify a list of custom fields to be included in the report output. Multiple custom fields can be specified as comma-separated values.

Input Example in JSON Format

The syntax for the GetTimesheetData data input parameters is as follows.

```
{
      "global_properties":{"char_set":"ISO-8859-1",
      "date_format":"yyyy/MM/dd",
      "language":"",
      "api_version":"et-integration-api-1.0"
},
"application_data":
{
      "timesheet_from_date":"2014/02/01",
      "timesheet_to_date":"2014/02/28",
      "timesheet_status":"Approved,Submitted",
      "timesheet_submitter":{"first_name":"","last_name":""},
      "timesheet_approver":{"first_name":"","last_name":""},
      "pcs":"",
      "project_id":"",
      "project_name":"",
      "project_keyword":"",
      "project_status":"",
      "project_org_descriptor":
```

```
 {
      "division":"",
      "business_unit":"",
      "sub_business_unit":"",
      "location":"",
      "region":""
 },
"resource_login_id":"",
"resource_email":"",
"resource_last_name":"",
"resource_title":"",
"resource_area_of_expertise":"",
"resource_manager":
        [
          {"first_name":"","last_name":""},
           {"first_name":"","last_name":""}
        ],
"resource_org_descriptor":
 {
      "division":"",
      "business_unit":"",
      "sub_business_unit":"",
      "location":"",
      "region":""
 },
"rpt_currency":"",
"labor_expense_type":"",
"labor_expense_category":"",
"program":"",
"report_format":"Daily",
"report_project_time":"Yes",
"report_non_project_and_non_working_time":"Yes",
"report_activity_time":"Yes",
"report_zero_effort_rows":"No",
```

```
        "report_cost":"Yes",
        "report_disabled_categories":"Yes",
        "output_custom_field_list":""
        }
}
```


Output

The Timesheet Detail report data is output in CSV or XLSX formats based on the filter criteria specified.

Output example

The CSV and XLS files from a successful GetTimesheetData function provide the data as two rows of data. The first row provides the names of the fields in the report, and the second row provides the values for the corresponding fields.

An exceptionally simplified excerpt from a CSV file is as follows:

```
Location,Location Chargeback Code,Region,Region Chargeback Code,Project
Id,Project Name,Project Manager,Project Type,Actual Standard
Effort,Actual Standard Cost,
Fairfield CT,80,North America,10,TimeSheet Data Report,John
Doe,IT,10,0,150000
```

getTimesheetCorrections Function

Extracts the Timesheet Detail Report with corrections data.

In This Section

Invocation Syntax

The syntax for the invocation of the getTimesheetCorrections function is as follows.

<*api_session*>?api_name=getTimesheetCorrections&output_type=<*output_type*>
&input_data=<*input_params*>

Invocation Parameters

The parameters for the invocation of the GetTimesheetCorrections function are described in the following table. Unless otherwise specified, all values are not case sensitive.

Name	Data Type	Placeholder or constant	Description
api_name	String	*GetTimesheetCorrections*	The name of the timesheet function.
output_type	String	*<output_type>*	Specifies the data format of the output. The report output can be generated in the following formats: ▸ CSV ▸ XLSX
Input_data	String	<input_params>	The location of the input parameters file. This value is case sensitive.

Input Parameters

Input parameters for the Timesheet Detail Report with Corrections are identical to those listed in the table for the Timesheet Detail Report using the getTimesheetData API. Additionally, the following input parameters listed below must be specified for extracting the Timesheet Detail Report with Corrections.

Name	Data Type	Value Required?	Placeholder or Constant	Description
correction_from_date	Date	Yes	Not applicable	Corresponds to the Correction From Date filter on the report.
correction_to_date	Date	Yes	Not applicable	Corresponds to the Correction To Date filter on the report.

Input Example in JSON Format

The syntax for the GetTimesheetCorrections input parameters is as follows.

```
{
      "global_properties":{"char_set":"ISO-8859-1",
      "date_format":"yyyy/MM/dd",
      "language":"",
      "api_version":"et-integration-api-1.0"
```

```
},
"application_data":
{
      "timesheet_from_date":"2014/02/01",
      "timesheet_to_date":"2014/02/28",
      "correction_from_date":"2014/02/20",
      "correction_to_date":"2014/02/20",
      "timesheet_status":"Approved,Submitted",
      "timesheet_submitter":{"first_name":"","last_name":""},
      "timesheet_approver":{"first_name":"","last_name":""},
      "pcs":"",
      "project_id":"",
      "project_name":"",
      "project_keyword":"",
      "project_status":"",
      "project_org_descriptor":
       {
            "division":"",
            "business_unit":"",
            "sub_business_unit":"",
            "location":"",
            "region":""
       },
      "resource_login_id":"",
      "resource_email":"",
      "resource_last_name":"",
      "resource_title":"",
      "resource_area_of_expertise":"",
      "resource_manager":
              [
                {"first_name":"","last_name":""},
                 {"first_name":"","last_name":""}
              ],
      "resource_org_descriptor":
```

```
        {
             "division":"",
             "business_unit":"",
             "sub_business_unit":"",
             "location":"",
             "region":""
        },
       "rpt_currency":"",
       "labor_expense_type":"",
       "labor_expense_category":"",
       "program":"",
       "report_format":"Daily",
       "report_project_time":"Yes",
       "report_non_project_and_non_working_time":"Yes",
       "report_activity_time":"Yes",
       "report_zero_effort_rows":"No",
       "report_cost":"Yes",
       "report_disabled_categories":"Yes",
       "output_custom_field_list":""
       }
}
```


Output

The Timesheet Detail Report with corrections data is output in CSV or XLSX formats based on the filter criteria specified.

Output Example

The CSV and XLSX files from a successful GetTimesheetCorrections function provide the data as two rows of data. The first row provides the names of the fields in the report, and the second row provides the values for the corresponding fields.

An exceptionally simplified excerpt from a CSV file is as follows:

```
Location,Location Chargeback Code,Region,Region Chargeback Code,Project
Id,Project Name,Project Manager,Project Type,Actual Standard
Effort,Actual Standard Cost,
Fairfield CT,80,North America,10,TimeSheet Data Report,John
Doe,IT,10,0,150000
```

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