



OpenAir

NS Connector Guide

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Overview

This guide documents OpenAir's NetSuite Connector. To simplify its use, we refer to the NetSuite Connector as either NS Connector, Connector, or the integration.

The integration provides a seamless data flow between OpenAir and NetSuite. As a result, financial and project management operations improve and users of both systems gain visibility into services delivery, billings, and expenses. Connector uses a simple process for data exchange that allows you to maximize time, effort, and ensure data accuracy as information is entered once and shared between systems.

With Connector, you can:

- Use both web-based systems any time and on any platform. They are available 24/7 and the integration can be run on demand or at multiple scheduled times. Use the exchange rate integration for multiple currencies, and in OneWorld accounts, multiple base currencies are supported for cross rates.
- Access your OpenAir account from within NetSuite using Single Sign-On. Create OpenAir records in NetSuite and view OpenAir applications and transactions directly from your NetSuite account. See [Configuring NetSuite Single Sign-On](#).
- Transfer updates real-time for many different NetSuite records when you click Save in NetSuite. You can also transfer lead and prospect information to OpenAir. See [Configuring the Real-Time Integration](#).
- Collect lead and opportunity management information in NetSuite, generate quotes and contracts using OpenAir's project work breakdown structure, send item estimates back to the NetSuite opportunity, and close the deal. Push lead, prospect, contact, and customer information to OpenAir.
- Use OpenAir project templates in NetSuite to pre-populate projects with commonly used tasks, billing rules, loaded costs, revenue recognition rules, auto-bill settings, and project approvers. OpenAir project templates provide an efficient way to capture and reuse information specific to a particular customer or type of project.
- Update projects in NetSuite with OpenAir project management data. Transfer project stage from NetSuite to OpenAir and automatically create a Workspace in OpenAir when you establish a project in NetSuite and transfer it to OpenAir.
- Capture customer and project information from Salesforce.com, pull it into OpenAir, and push it to NetSuite.
- Ensure consistency and data integrity by sending items such as goods and services as well as expense categories to OpenAir as activities and expense items.
- Provide employee/user information from NetSuite and use OpenAir for project planning, resource assignment, time recording, invoices, and expense reports. Monitor a project's progress using OpenAir's Earned Value Management metrics.
- Transfer NetSuite sales orders to OpenAir and generate customer purchase orders, project billing rules, revenue recognition rules, and invoices. Time billing rules can include an activity filter and sales order line descriptions can become billing rule charge descriptions in OpenAir. Send OpenAir invoices back to NetSuite. Use sales order features to enhance the information that displays on the resulting NetSuite invoices, including tax breakdowns for multiple currency environments. See [Configuring the Sales Order Integration](#).
- Customize your NetSuite account to be able to select classifications on Projects and Customers. The Employees form already displays classifications. Select desired values for departments, classes, locations, and subsidiaries in OneWorld accounts when you create or edit the records. Transfer the classification values to OpenAir to use as hierarchies. Then, map the classification values identified in NetSuite to OpenAir Project, Customer, and User demographic forms. You can edit existing

OpenAir hierarchies and use them as part of this integration. See [Configuring the Classifications to Hierarchies Integration](#).

- Transfer OpenAir revenue recognition transactions and invoices to NetSuite while work is in progress in OneWorld accounts. Run a scheduled script in NetSuite to automatically generate intercompany journal entries from journal entries and invoice line items that show incremental revenue accrual on balance sheets. See [Configuring Work In Progress Accounting and Intercompany Journal Entries](#).
- Transfer NetSuite purchase orders and vendor bills to OpenAir that include NetSuite vendor information and product information marked for export to OpenAir. See [Configuring the Purchases/Vendor Bills Integration](#).
- Transfer NetSuite vendor information and set up a corresponding vendor account or user account in OpenAir. The vendor to vendor transfer is used in the Purchases/Vendors integration. See [Configuring the Purchases/Vendor Bills Integration](#).
- Generate invoices, expense reports, and revenue transactions in OpenAir and furnish them to NetSuite. Export taxes with OpenAir expense reports and with Canadian taxes, override tax amounts on OpenAir expense reports. See [Configuring the Tax Export Integration](#) and [Configuring Tax Override for Canadian Expense Reports](#).
- Optimize performance of the exchange. Use defaults to exchange only the most recent transactions or use other filtering options to meet your business needs. Refer to [Specifying Integrations, Filtering, and Features in OpenAir](#).
- Customize field mapping and filtering. Refer to [Data Mapping in the Integration](#) and [Using Advanced Settings](#).

Use Connector to continually exchange information and improve your ability to meet performance goals and deliver projects on time and on budget. The following diagram provides an illustration of how you might use the two applications together.



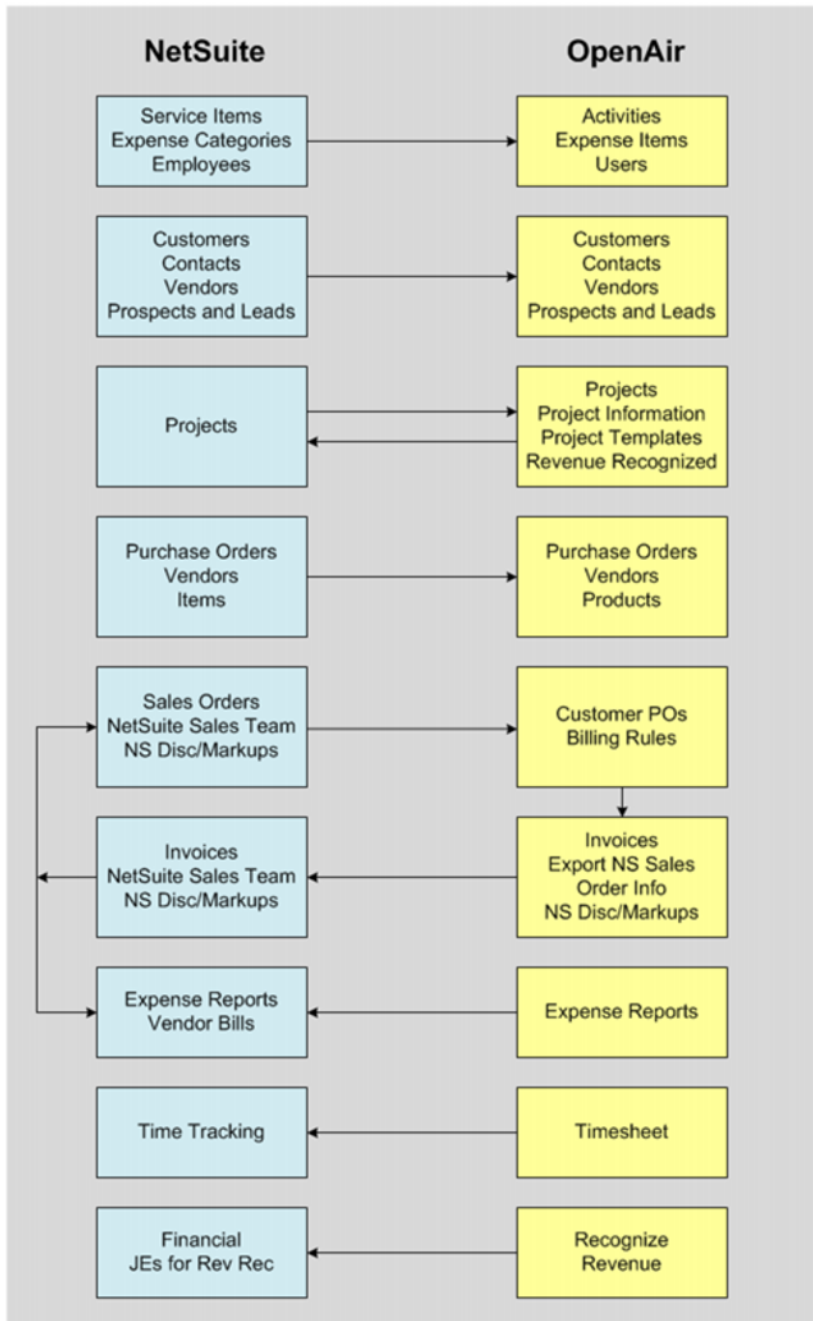
Workflow Between OpenAir and NetSuite

The general integration workflow is as follows:

1. First, create employees, leads, prospects, customers, contacts, vendors, expense categories, projects, and service items in NetSuite. Use an OpenAir project template to copy tasks, billing rules, loaded costs, revenue recognition rules, auto-bill settings, and project approvers. Then, when projects transfer to OpenAir, they already contain much of the essential information for a customer or project type. Include sales orders and items for project goods and materials.
2. Next, use the **NetSuite integration** form in OpenAir to pull the NetSuite data into OpenAir.
3. After your NetSuite data has been pulled into OpenAir, manage your project in OpenAir: track time against tasks, submit expense reports, and create invoices for completed project tasks according to your project parameters. When you enable tax location as the tax calculation method, expense reports display tax breakouts.
4. Regularly (you can schedule it), or as needed, use the **NetSuite integration** form in OpenAir to push designated project information and invoice data to NetSuite and pull any modified data from NetSuite into OpenAir. For example, if you create sales orders in NetSuite, Connector links the invoices created in OpenAir to your NetSuite sales orders. You can initialize invoices in OpenAir and the integration gathers information from the NetSuite Sales Order form much like the "Next Bill" button functions in NetSuite.
5. When payments are recorded in NetSuite, this information can flow to OpenAir, including expense report reimbursements to employees, and customer invoice payments. Credit memos and customer deposits applied to invoices can also be shared.
6. After you transfer invoices to NetSuite, you can post the transactions to your general ledger, including revenue recognition transactions, and perform other reporting tasks.
7. Repeat the steps above as necessary.

Data Flow Between OpenAir and NetSuite

The following diagram illustrates the basic flow of data between NetSuite and OpenAir.



To update the data shared between NetSuite and OpenAir, run the integration manually, schedule the integration, or set up real-time synchronization for save events in NetSuite or approval events in OpenAir. You can also get and send data in both directions during an integration run or exchange data in only one direction by selecting or clearing the desired check boxes. For more information, see [Running the Integration](#).

Workflow Between OpenAir and NetSuite for CRM+ Users

NetSuite CRM+ enables a set of NetSuite features focused only on customer relationship management. The following CRM+ integration points are supported in the integration. Integration points work bidirectionally between NetSuite and OpenAir. Any integration points not listed below are currently not supported for NetSuite CRM+.

Fully Supported:

- Class/Department/Location to Hierarchy node
- Employees to Users
- Customers to Customers
- Projects to Projects
- Items to Services
- Expense categories to Expense items
- Contacts to Contacts
- Sales orders to Customer POs
- Cases to Project tasks

Partially Supported:

- Expense reports, but without references to customer : project on Expense lines, support for taxes, or expense reimbursements
- Time entries, but without references to support cases

Time entries; however, in NetSuite CRM+ accounts, you can enter time against a support case from the support case's time tracking subtab, but are unable to do so from the time entry form. Therefore, the when time entries are migrated between systems, they are unlinked from any support case they were attached to.

Time Entries; however, the linkage between time entries and support cases is not supported. The integration will still run, but the time entry will not reference the support case in NetSuite.

Getting Started

To understand and use the integration effectively, complete the following steps.

1. Familiarize yourself with the high-level work and data flows between NetSuite and OpenAir:
 - See [Workflow Between OpenAir and NetSuite](#)
 - See [Data Flow Between OpenAir and NetSuite](#)
2. Review detailed topics about how data is mapped between NetSuite and OpenAir. See [Data Mapping in the Integration](#).
3. Gain access to the OpenAir and NetSuite applications.
 - **NetSuite** — Contact your NetSuite Professional Services representative for detailed instructions, current bundle version, and implementation assistance. See [Contacting NetSuite and OpenAir](#).
 - **OpenAir** — Contact OpenAir Support (see [Contacting NetSuite and OpenAir](#)) and request that the following internal switch be enabled in your account: Enable the NetSuite

integration. Once enabled, an **Integration: NetSuite** link displays in Administration > Global Settings under Account.

4. Set up the integration in NetSuite:

Enable features for projects, custom records, SuiteScript, and SuiteTalk Web Services, install the integration bundle, enable optional features, set preferences, and specify export options for each record. See [Configuring NetSuite for the Integration](#).

Data that can be transferred include users, customers, contacts, projects, items, expense categories, vendors, purchase items, sales orders, expense report reimbursements, invoice payments, purchase orders, and customer deposits and credit memos applied to invoices. See [NetSuite Records Available for Export to OpenAir](#).

5. Set up the integration in OpenAir:

In OpenAir, log into the **NetSuite integration** form, choose data export options, and specify advanced settings as needed. See [Configuring OpenAir for the Integration](#) and [Using Advanced Settings](#).

Data that can be transferred include approved expense reports, invoices, time, and revenue recognition transactions. In addition, customers and projects that are generated in Salesforce.com and pulled into OpenAir can be transferred to NetSuite with a related Salesforce.com ID. See [OpenAir Data Available for Export to NetSuite](#).

6. Run the integration.

After the integration has been set up in NetSuite and OpenAir, you can specify whether you send data immediately or you can schedule up to 24 regular data transfers per day. See [Running the Integration](#).

7. After the initial integration has been run, you can work with the integrated data in NetSuite and in OpenAir. See [Using the Integration](#) for details on how to work with the record data after it has been transferred into each application.

8. Set up email options so that you can receive an email with integration results as well as an alert for error conditions. See [Configuring Email Options](#).

Integration Role Permissions

Administrators can set up integration roles with precise privileges. The integration role permissions are:

- View the NetSuite integration
- View and run the NetSuite integration
- View and edit the NetSuite integration settings
- Allow employee to export invoices to NetSuite
- Allow employee to export Expense reports to NetSuite
- Allow employee to export project data to NetSuite
- Allow employee to export timesheets to NetSuite
- Allow employee to export recognition transactions to NetSuite
- Allow employee to export purchase requests to NetSuite

Create Integration User Roles

1. Navigate to Administration > Global Settings > Users > Roles.
2. Click the **Create** button and click **Role** under New.
3. Name the role, and select the role permissions this role will use. Integration role permissions are found under **Integration**.

4. Click **Save** or **Save & create another**.

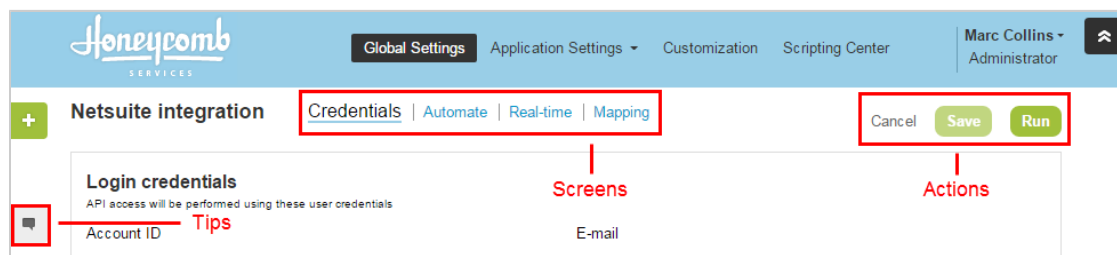
New User Interface

Overview

The October 17, 2015 release introduced a new user interface to allow mappings to be viewed and set visually. The UI is accessed from the **Administration > Global Settings > Integration: NetSuite** link.

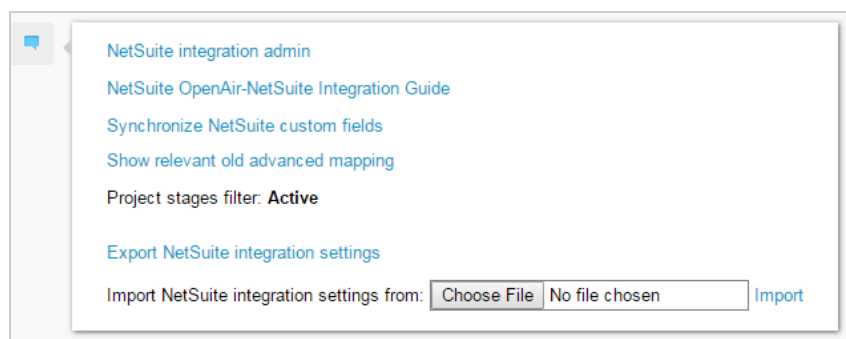
Perform the following steps to change to the new UI

1. Export your settings from the old UI.
2. Request the “Enable the new NetSuite integration UI” switch from Support.
3. Import your settings from the Tips button while in the NetSuite integration screen.
4. If you are exporting from one account to another account, reapply the custom imports and exchange rate integrations under Administration > Global Settings > Integration:NetSuite > [Tips button] > NetSuite Integration Admin > Custom imports and Exchange rate integration.
5. Verify that your integration works as expected.

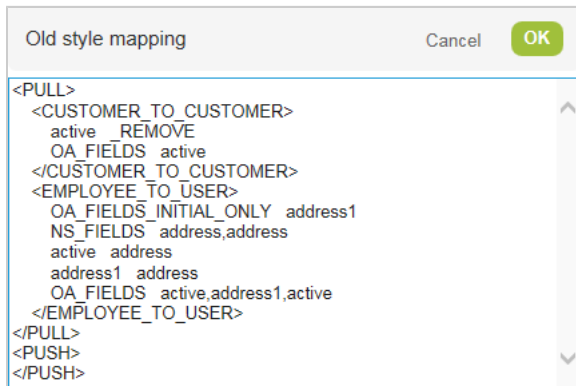


- **Screens** — The new user interface contains four screens:
 - **Credentials** — Set up login and single sign-on credentials for the integration
 - **Automate** — Set up scheduled integration runs
 - **Real-time** — Set up the integration to run when various approval events occur in OpenAir
 - **Mapping** — Set up chapters and define field-level mappings for the integration
- **Actions** — The new user interface separates the **Save** and **Run** actions.
- **Tips** — Additional features are available from the [Tips Menu](#).

Tips Menu



- **NetSuite integration admin** - Displays the same form as used by the old UI to further configure the integration to meet specific business needs. See [Configuring Additional Settings, Preferences, and Customizations in NetSuite](#) for details.
- **OpenAir-NetSuite Integration Guide** - Displays this user guide.
- **Synchronize NetSuite custom fields** - Manually synchronizes the NetSuite custom fields used in the [Mapping](#) screen drop-down lists.
- **Show relevant old advanced mapping** - Shows the old style advanced mapping tags created from the Mapping screen.



Note: To see the mapping tags the workflow needs to be enabled and the changes saved.

- **Workflow specific information** — Appears between the “Show relevant old advanced mapping” and “Export NetSuite integration settings” links.
- **Export NetSuite integration settings** — Exports integration settings as a JSON file. Requires administrator privileges.
- **Import NetSuite integration settings from:** — Imports settings stored in a JSON file to the integration. Requires administrator privileges.

Note: The Export and Import functions can be used to transfer integration settings between accounts, archive settings, and migrate accounts to the new Connector UI.

Credentials

Netsuite integration
Credentials
Automate
Real-time
Mapping
Cancel
Save
Run

Login credentials
API access will be performed using these user credentials

Account ID
TSTDRV12345678

E-mail
mcollins@netsuite.com

Password
Password

Confirm password
Password

TBA Consumer key
TBA Consumer key (available from endpoint version 2016.2)

TBA Consumer secret
TBA Consumer secret (available from endpoint version 2016.2)

Web Service Role
Administrator

Application ID
Application ID (required from endpoint version 2016.2)

[Retrieve Netsuite roles](#)

☐ Netsuite sandbox account
Check this if credentials are for a sandbox account

☐ Netsuite beta account
Check this if credentials are for a beta account

Single sign-on credentials
Outbound single sign-on verification will be performed using these credentials

Consumer key
Consumer key

Shared secret
Shared secret

The **Credentials** form provides the information needed to establish the integration with NetSuite. The screen provides the same information as provided by the Login credentials section in the old UI. See [Filling in the NetSuite Integration Form in OpenAir](#) Filling in the NetSuite Integration Form in OpenAir.

Automate

Netsuite integration | Credentials | Automate | Real-time | Mapping | Cancel | Save | Run

Automatically run the integration

Active ☒ Day: 1st of the month at 3am - 4am Times are in U.S. Eastern Time

+ Add schedule

Email the errors to: E-mail
You can enter multiple email addresses, also complete log will be attached to the email.

Email the results to: E-mail
You can enter multiple email addresses, "Email the results to:" is required if "Email the errors to:" has been specified.

☐ Send HTML email ☐ Do not include additional details for NetSuite integration errors

☐ Email log for manual integration run

The **Automate** form provides the information needed to schedule regular data exchanges. The screen provides the same information as provided by the **Automatically run the integration** section in the old UI. See [Configuring Scheduling Options](#) for more details.

Real-time

The **Real-time** form allows you to set trigger events which cause a data exchange from OpenAir to NetSuite.

Note: This feature requires the **multi-threading support** feature. To be used with SuiteCloud+.

Netsuite integration | Credentials | Automate | Real-time | Mapping | Cancel | Save | Run

Real-time integrations

Active ☒ Object: Invoice on Approval Event: Approval

Active ☒ Object: Expense report on Approval Event: Approval

+ Add real-time integration

Mapping

The mappings screen allows you to visually set mappings between fields by simply selecting the required mappings from the drop-down lists provided.

Netsuite integration | Credentials | Automate | Real-time | Mapping | Cancel | Save | Run

Workflows

- Employees (Employees)
- Clients (Customers)
- Projects (Projects)
- Customer POs (Sales Orders)
- Expense Reports (Expense Reports)
- Invoices (Invoices)
- Send OA Credit (negative invoice) as NS credit memo
- + New workflow

Fields

Mapping groups

Filters

| Active | NetSuite field | Direction | OpenAir field |
|--------|------------------------------------|-----------|---------------------------|
| ON | Invoice.entity | + | Customer.id OR Project.id |
| ON | Invoice.tranDate | + | Invoice.date |
| ON | Invoice.tranId | + | Invoice.number |
| ON | Invoice.job | + | Invoice.project_id |
| ON | Invoice.custbody_oa_invoice_number | + | Invoice.number |
| ON | Invoice.createdDate | + | |

+ Mapping row | + Pullback row | Add mapping or pullback rows

The mapping is organized into [Workflows](#), [Mapping Groups](#), and [Field Mappings](#). From the heading you can see the OpenAir record in the terminology used by the account with the NetSuite record in brackets. Click on a workflow to see the mappings on the right.

Note: Default mappings created when a workflow is added appear in light grey text, and cannot be deleted; however, they can be disabled and their settings can be changed as with other mappings.

Advanced mappings using the old tag notation are supported from the [Advanced](#) icon for each field's row level. See [Advanced](#)

Filters using the old tag notation are supported on each mapping group from the [Filters](#) link, if available. See [Filters](#).

Workflows

Enable / disable workflow

Workflow settings

Settings

Workflows in order of execution

- Employees (Employees)
- Clients (Customers)
- Projects (Projects)
- Customer POs (Sales Orders)
- Expense Reports (Expense Reports)
- Invoices (Invoices)
- Send OA Credit (negative invoice) as NS credit memo
- + New workflow

Filters

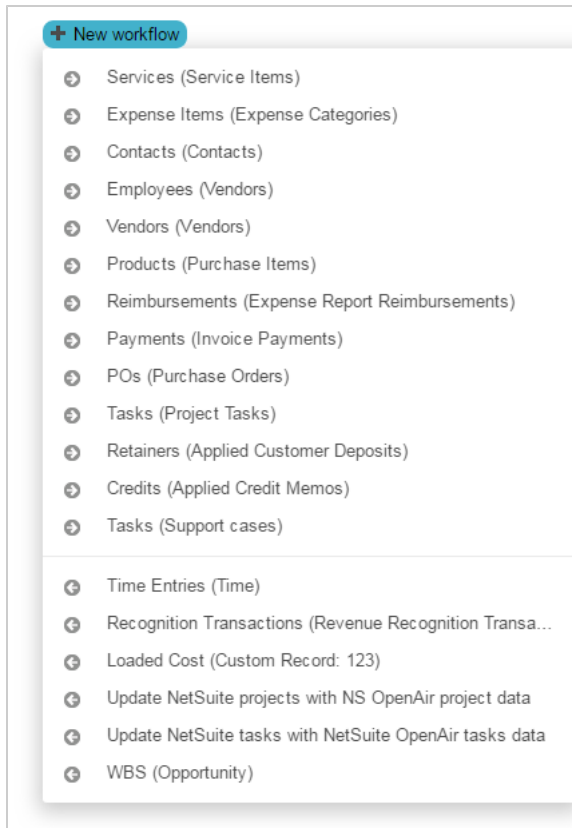
| Active | NetSuite field | Direction | OpenAir field |
|--------|------------------------------------|-----------|---------------------------|
| ON | Invoice.entity | + | Customer.id OR Project.id |
| ON | Invoice.tranDate | + | Invoice.date |
| ON | Invoice.tranId | + | Invoice.number |
| ON | Invoice.job | + | Invoice.project_id |
| ON | Invoice.custbody_oa_invoice_number | + | Invoice.number |
| ON | Invoice.createdDate | + | |

Workflows are listed down the left-hand side in the order of execution. Adding a new workflow places the workflow in the correct predefined order for the integration.

Each workflow has several mapping groups, which appear as tabs above the list of fields. If the list of mapping groups is too long to display completely on screen, click the ... icon to open a list containing the hidden groups.

Workflow settings can be configured by clicking the [Settings](#) link. See [Workflow Settings](#).

Workflows can be enabled/disabled or deleted.



Click the **New workflow** button to add a new workflow. Notice that workflows are organized according to whether the workflow is pulling data **from NetSuite** or pushing data **to NetSuite**. On adding a workflow, the workflow is selected as disabled with its default mappings loaded as enabled.

The available chapters are determined by the settings made in the **NetSuite integration admin form**. See [Configuring Additional Settings, Preferences, and Customizations in NetSuite](#) for more details.

Mapping Groups

Chapters contain mapping groups, which appear as tabs in the Mapping screen, and contain individual mapping fields. Every mapping group corresponds to one old-style Integration Point Tag. Pullback Integration Point Tags are merged with corresponding PUSH tags. See [Using Advanced Settings](#) for details.

Workflow Settings

Click the **Settings** link to view and change settings specific to the selected workflow. Settings remain with the workflow they are set for, and are a subset of the NetSuite integration admin settings which appeared in the previous UI. See [Configuring Additional Settings, Preferences, and Customizations in NetSuite](#) for more details.

Settings

☒ Enable purchaser integration.
 ☐ Map NetSuite employee class to employee hierarchy

☐ Map NetSuite employee department to employee hierarchy
 ☐ Map NetSuite employee location to employee hierarchy

☐ Map NetSuite employee subsidiary to employee hierarchy
 ☐ Disable Export to NS OpenAir filtering for employees in NetSuite integration

Cancel OK

Field Mappings

Direction of transfer

Selected mapping

Drop-down list

Check for initial only

Optional accounting system code for integration with external accounting systems.

Point to field for tooltip help

The green arrow on the left shows the direction of mapping flow. Checking the box on the right means that the field value is only set once and then never updated.


Click on the **drop-down list** button to select a new mapping. As you type characters the list is narrowed to make selection easier.

Hover your mouse over a search result to see a description the field. This feature only works for OpenAir fields and take the description from the OpenAir Data Dictionary.

Click the **+ Mapping row** link to add a new mapping row.

Click the **+ Pullback row** link (on relevant screens) to add a pullback row which defines values to be pulled back when a record is created. Pullback rows can be identified by an orange ➡ icon, and are mapped like standard mappings.

Advanced

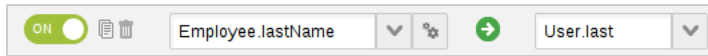
Click the Advanced icon  for a selected field to set advanced mappings using the old tag notation. Examples of possible mappings appear below:

Value to Value (Fixed)



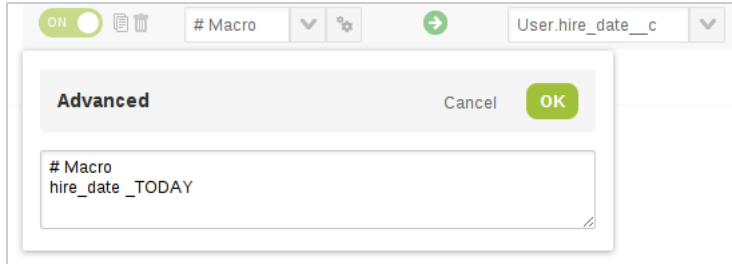
Configuration interface for Value to Value (from Schema). The interface includes a green 'ON' toggle, a trash icon, a text input field containing '1', a dropdown arrow, a gear icon, a green arrow icon, and a dropdown menu showing 'User.primary_filter_set'.

Value to Value (from Schema)



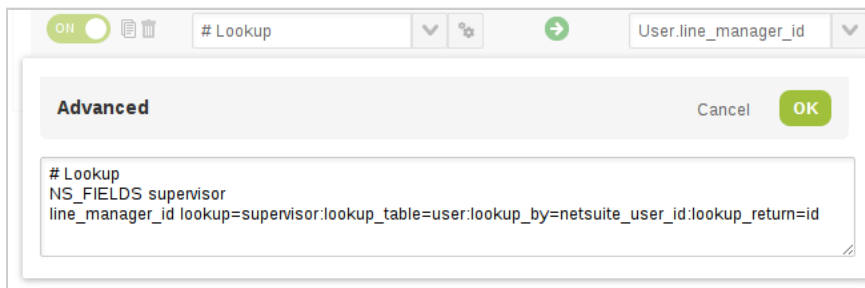
Configuration interface for Value to Value (Macros). The interface includes a green 'ON' toggle, a trash icon, a text input field containing 'Employee.lastName', a dropdown arrow, a gear icon, a green arrow icon, and a dropdown menu showing 'User.last'.

Value to Value (Macros)



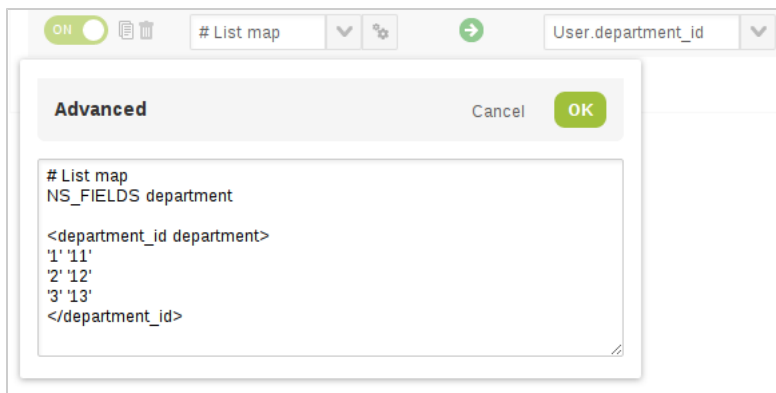
Configuration interface for Value to Value (Lookup). The interface includes a green 'ON' toggle, a trash icon, a dropdown menu showing '# Macro', a gear icon, a green arrow icon, and a dropdown menu showing 'User.hire_date__c'. An 'Advanced' dialog box is open, showing a text area with the macro definition: '# Macro' and 'hire_date__TODAY'. The dialog has 'Cancel' and 'OK' buttons.

Value to Value (Lookup)



Configuration interface for Value to Value (List Map). The interface includes a green 'ON' toggle, a trash icon, a dropdown menu showing '# Lookup', a gear icon, a green arrow icon, and a dropdown menu showing 'User.line_manager_id'. An 'Advanced' dialog box is open, showing a text area with the lookup definition: '# Lookup', 'NS_FIELDS supervisor', and 'line_manager_id lookup=supervisor:lookup_table=user:lookup_by=netsuite_user_id:lookup_return=id'. The dialog has 'Cancel' and 'OK' buttons.

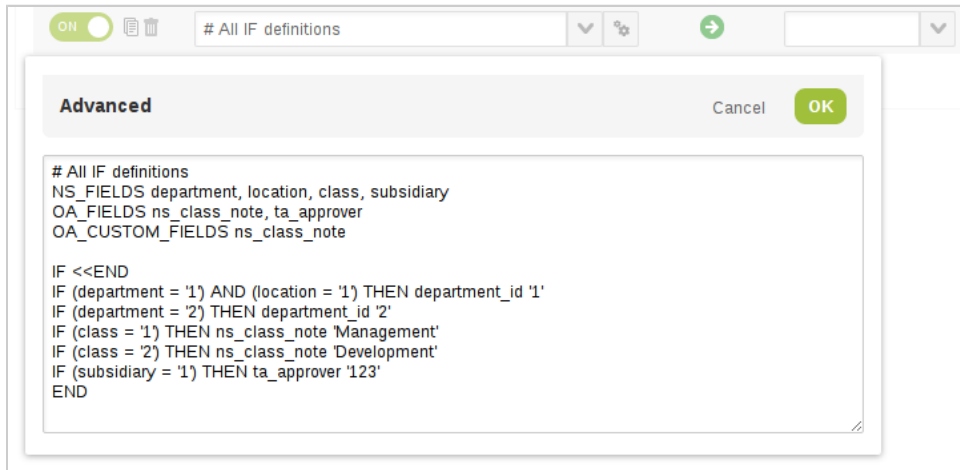
Value to Value (List Map)



Configuration interface for Values to values (All IF Definitions). The interface includes a green 'ON' toggle, a trash icon, a dropdown menu showing '# List map', a gear icon, a green arrow icon, and a dropdown menu showing 'User.department_id'. An 'Advanced' dialog box is open, showing a text area with the list map definition: '# List map', 'NS_FIELDS department', '<department_id department>', '1' '11'', '2' '12'', '3' '13'', and '</department_id>'. The dialog has 'Cancel' and 'OK' buttons.

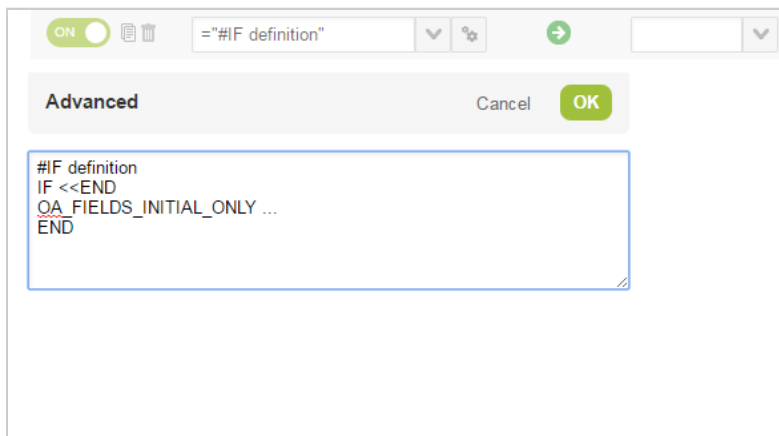
Values to values (All IF Definitions)

Note: For multiple IF definitions, the mappings must be set in the Advanced mapping window, must all be in the same line (as in the image below), and must not have any information in the column where data is flowing to (to OpenAir in the image below).



Mapping an Initial Only checkbox in a row

Note: To define an “Initial Only” checkbox in a workflow row, you must define it using either an OA_FIELDS_INITIAL_ONLY or NS_FIELDS_INITIAL_ONLY tag in the Advanced mapping window, as shown below:



You can use all the existing advanced tags in the Advanced window of the [Mapping](#) screen. See [Using Advanced Settings](#) for details.

Changes to Mapping Rules in the April 16, 2016 Release

When entering Advanced mappings in the old UI, it was necessary to include tags indicating which records the mapping belonged to. In the UI released April 16, 2016, each mapping line has its own Advanced mapping screen; it is no longer necessary to use the mapping line tags.

| Old | New |
|---|---|
| <code><INVOICE_TO_INVOICE></code> | |
| <code>OA_FIELDS terms</code> | <code>OA_FIELDS terms</code> |
| <code>NS_FIELDS terms</code> | <code>NS_FIELDS terms</code> |
| <code>terms lookup=terms:lookup_table=payment_</code> <code>terms:lookup_by=name:lookup_return=netsuit</code> <code>e_terms_id</code> | <code>terms lookup=terms:lookup_table=payment_</code> <code>terms:lookup_by=name:lookup_return=netsuit</code> <code>e_terms_id</code> |
| <code></INVOICE_TO_INVOICE></code> | |

Filters

The screenshot shows the 'Mapping' screen for 'Employees (Employees)'. A 'Filters' dialog is open, showing a filter configuration. The filter text is: `NS_FIELDS department`
`FILTER <<END`
`department = '1,3'`
`END`. A red arrow points from the 'Employee.department' field in the mapping table to the 'department' field in the filter text.

You add user defined filters from the **Filters** link of the [Mapping](#) screen. When filters exist, the Filters link will appear in bold. See [Adding User-Defined Filtering](#) for details.

If your filter is using a field that you have not mapped you can still use the old tag notation to reference the field.

Note: You will not be able to save the settings if your filter references a field that has not been mapped.

Netsuite Integration settings has errors

⇒ department was not declared in NS_FIELDS for EMPLOYEE_TO_USER filter, used in department = '1,3'

Changes to Mapping Group Filter Notation in the April 16, 2016 Release

When entering Filter notation in the old UI, it was necessary to include tags indicating which records the filter belonged to. In the UI released April 16, 2016, each workflow has its own Filters mapping screen; it is no longer necessary to use the mapping line tags.

| Old | New |
|--|--|
| <code><INVOICE_TO_INVOICE></code> | |
| <code>OA_FIELDS date</code> | <code>OA_FIELDS date</code> |
| <code>FILTER <<END</code> | <code>FILTER <<END</code> |
| <code>(date > '2016-03-01' AND date < '2016-12-31')</code> | <code>(date > '2016-03-01' AND date < '2016-12-31')</code> |
| <code>END</code> | <code>END</code> |
| <code></INVOICE_TO_INVOICE></code> | |

Configuring the Integration

To begin exchanging information between NetSuite and OpenAir, ensure you have login access to both systems. Then, request that NetSuite and OpenAir Professional Services configure your account for the integration. This chapter describes the configuration steps they perform. Review the following to gain an understanding of the configurations. Read the instructions for filling in the **NetSuite integration** form in OpenAir and requesting additional integrations, filtering and features. Finally, refer to [Running the Integration](#). Decide on the records you will exchange using the integration.

- Review the information about how information is mapped between OpenAir and NetSuite. See [Data Mapping in the Integration](#).
- Review the NetSuite set up information. See [Configuring NetSuite for the Integration](#).
- Review the OpenAir set up information. See [Configuring OpenAir for the Integration](#).
- Review instructions for filling in the **NetSuite integration** form. See [Filling in the NetSuite Integration Form in OpenAir](#).
- Review the additional integrations, filtering, and features that are available in the integration. See [Specifying Integrations, Filtering, and Features in OpenAir](#)
- Review the optional features available in the integration. See [Configuring Optional Features](#).

After both software applications are configured and you have made selections on the **NetSuite integration** form, you can run the integration and transfer data. See [Running the Integration](#).

Configuring NetSuite for the Integration

NetSuite Professional Services configures your NetSuite account so that you can use the integration. They do the following:

1. Enable integration features in NetSuite. These features allow NetSuite to transfer and share the appropriate records and project data with OpenAir. For more information, see [Enabling Integration Features in NetSuite](#).
2. Disable the option to combine detail items on Expense Reports when using the integration. For more information, see [Disabling Combine Detail Items on Expense Reports](#).
3. Specify additional settings, preferences, and customization depending on your needs. For more information, see [Configuring Additional Settings, Preferences, and Customizations in NetSuite](#).

Enabling Integration Features in NetSuite

NetSuite Professional Services enables the following NetSuite features:

- Projects and/or Advanced Projects (if not already enabled)
- SuiteBuilder Custom Records
- Client SuiteScript and Server SuiteScript
- SuiteTalk (Web Services)
- Single Sign-on (optional)

In addition, NetSuite Professional Services installs the OpenAir Integration bundle (Bundle 2851). This adds custom fields and custom scripts required in NetSuite for the integration to work. It also adds

OpenAir integration preferences to the Custom Preferences subtab in General Preferences for the OpenAir Integration.

There are other integration features that you can have installed in your account. They include:

- [OpenAir: Single Sign-on](#)
- [OpenAir: Real-time Integration](#) (used in conjunction with Single Sign-on)
- [OpenAir: WIP Accounting](#) (OneWorld accounts)

If desired, you can also modify terminology so that it is consistent in both applications. See [Application Terminology](#).

OpenAir Integration

The OpenAir Integration selections specify the types of records to export by default to OpenAir. To specify the desired records to automatically export, go to Setup > Company > General Preferences and select the Custom Preferences tab. NetSuite selects the Export to OpenAir check box on all new records you create for the entities specified. You can change this setting on individual records as needed by clearing the check box on the NetSuite entity form.

Refer to the following form.

OpenAir Integration

- Enable Canadian Expense Tax Override ☐
- Exchange Rate Integration - OneWorld ☐
- OpenAir Forex Time Zone Adjust ☐
- Enable OpenAir Invoice Tax Export ☐
- Enable OpenAir Purchase Integration ☐
- Vendor Bill to OpenAir PO Integration ☐
- Enable SFA Integration ☐
- Export Customers by Default ☐
- Export Projects by Default ☐
- Export Employees by Default ☐
- Export Vendors by Default ☐
- Export Service Items by Default ☐
- Export SO Line Default ☐
- Enable billing rules for SO discounts ☐
- Create rev rec rules on sales orders ☐
- Expense Report - Vendor Bill Integration ☐
- Exp Rep To Vendor Bill Taxes ☐

OpenAir: Single Sign-on

If you are using Single sign-on to transfer data from NetSuite to OpenAir while in the NetSuite application, you configure the NetSuite information on this section of the form. You specify the name of the SuiteSignOn record ID, maintain or edit the suitelet content height or width for everyone using the feature, and define any terminology overrides that may be different than the application titles in the OpenAir account.

OpenAir: Single sign-on

OpenAir SuiteSignOn record ID

Suitelet content height (px)

Suitelet content width (px)

Expenses terminology override

Home terminology override

Invoices terminology override

Projects terminology override

Purchases terminology override

Resources terminology override

Timesheets terminology override

Workspaces terminology override

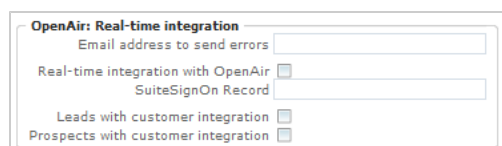
For information on configuring single sign-on as well as the PSA Center Tab and OpenAir account access from the Dashboard in your NetSuite account, see [Configuring NetSuite Single Sign-On](#) and [Implementing the PSA Center Tab and Suitelet Scripts](#).

OpenAir: Real-time Integration

If you are using the OpenAir real-time integration, you configure the NetSuite information on this section of the form. Remember, in order to use this feature, you must already have configured the OpenAir: Single sign-on feature.

Enter the email address errors should be sent to. Ensure the check box is selected for Real-time integration with OpenAir, and type the SuiteSignOn Record. This is the ID of the SuiteSignOn record, not the name. To find the ID, go to Setup > Integration > SuiteSignOn.

To enable additional customer integration features for use with leads and prospects, also select the check boxes for Leads with customer integration and Prospects with customer integration.



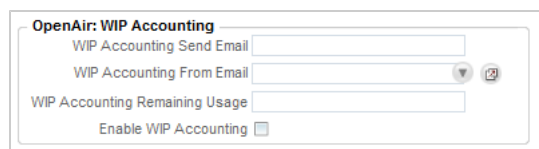
The screenshot shows a form titled "OpenAir: Real-time integration". It contains the following fields and controls:

- "Email address to send errors": A text input field.
- "Real-time integration with OpenAir": A checkbox that is checked.
- "SuiteSignOn Record": A text input field.
- "Leads with customer integration": A checkbox that is checked.
- "Prospects with customer integration": A checkbox that is checked.

For information on configuring the Real-time integration as well as the Leads and Prospects with customer integrations, see [Configuring the Real-Time Integration](#) and [Configuring NetSuite Single Sign-On](#).

OpenAir: WIP Accounting

If you are using the OpenAir: WIP Accounting integration with OneWorld accounts, you configure the NetSuite information on this section of the form. Select the check box to enable the feature and enter the email address of the person who should receive the logs from a schedule script run as well as the user the logs are sent from. Set a value in the WIP Accounting Remaining Usage. For more information about this WIP Accounting Remaining Usage field as well as how the future works, see [Configuring Work In Progress Accounting and Intercompany Journal Entries](#).



The screenshot shows a form titled "OpenAir: WIP Accounting". It contains the following fields and controls:

- "WIP Accounting Send Email": A text input field.
- "WIP Accounting From Email": A text input field with a dropdown arrow and a help icon.
- "WIP Accounting Remaining Usage": A text input field.
- "Enable WIP Accounting": A checkbox that is checked.

Application Terminology

If you want to use the same terminology in both applications, NetSuite Professional Services can also help you rename records/transactions. See [Changing Default Terminology](#).

Disabling Combine Detail Items on Expense Reports

Expense report line items cannot be grouped when sending expense reports from OpenAir to NetSuite. Therefore, if you plan on exchanging expense reports between the two applications, NetSuite

Professional Services clears the check box for Time & Expenses located at Setup > Accounting > Accounting Preferences > Time & Expenses. If this is not done, you receive an error message during expense report export.

Configuring Additional Settings, Preferences, and Customizations in NetSuite

The following settings, preferences, and customizations may or may not need to be set depending on your existing NetSuite product configuration and how you intend to use the integration. If you customize NetSuite forms, use mandatory account classifications, or have customized records in one of the applications, then using advanced settings helps map data correctly when you run the integration. Generally, OpenAir Professional Services does your initial customization during set up and works with you to configure the integration so that it runs successfully. Refer to the following situations:

1. If you exchange Expense Report and Invoice data with OpenAir, set Expense Report and Invoice Preferences to auto-generate invoice and expense report numbers in NetSuite. Go to Setup > Company > Auto-Generated Numbers > Transactions and select Allow Override check boxes. This ensures that invoice and expense report numbers in NetSuite and OpenAir match.

Do not set this preference if you generate invoices in NetSuite that are not imported from OpenAir.
2. If you customize Invoice and Expense Report forms, then all mandatory fields must be mapped in the Advanced Settings section of the **NetSuite integration administration** form or by user-event scripts. Refer to [Using Advanced Settings](#) for more information and discuss your needs with OpenAir Professional Services. This can be done during initial set up or at a later time.
3. If you set preferences in NetSuite to make classes, departments, or locations mandatory classifications for records, then you must use custom field mapping or a user-event script to transfer this information to OpenAir records. Refer to [Using Advanced Settings](#) for more information. Again, discuss your needs with OpenAir Professional Services either during initial set up or at a later time.

Configuring OpenAir for the Integration

OpenAir Professional Services configures your OpenAir account so that you can use the integration. There are two OpenAir forms. The **NetSuite integration administration** form, which is completed by OpenAir Professional Services, contains switches that apply to the integration features and filtering. The **NetSuite integration** form, which you complete and can make changes to, contains the entities you exchange during an integration run. You may make changes to it as needed. After both NetSuite and OpenAir have been configured, you can transfer data by running the integration on demand or scheduling a run.

1. Review instructions for completing the **NetSuite integration** form in OpenAir. It validates your credentials, specifies data to transfer, schedules integration run times, and designates email recipients. For more information, see [Filling in the NetSuite Integration Form in OpenAir](#).
2. Review the **NetSuite integration administration** form. It provides additional integration settings and switches that are available to use in your account. They help you further refine the integration process. For more information, see [Specifying Integrations, Filtering, and Features in OpenAir](#) and contact OpenAir Support.
3. (Optional) If you wish to customize the integration further, the Advanced Settings text area allows you to specify data down to the field and record level. See [Using Advanced Settings](#) and

contact OpenAir Professional Services for assistance. Generally, OpenAir Professional Services works with you on required customization during initial set up. However, as new functionality is introduced, you may want to add to or change this customization. Contact OpenAir Professional Services for assistance at any time.

Filling in the NetSuite Integration Form in OpenAir

Use the **NetSuite integration** form in OpenAir to establish the integration with NetSuite. Specify records to get or import and records to send or export.

To set up the NetSuite Integration in OpenAir:

1. Contact OpenAir Support and ask them to enable the “Use 2016.2 communication endpoint” integration feature.

Note: We strongly recommend enabling the 2016.2 communication endpoint for new integrations.

2. In **NetSuite**, go to Setup > Integration > Manage Integrations > New. The **NetSuite integration** form appears.

3. Type a name for the integration in the “Name” field.
4. Type a description in the “Description” field (optional).
5. Select “Enabled” in the “State” dropdown list.
6. Type a note in the “Note” field (optional).

Get data from NetSuite

| | |
|---|---|
| <input type="checkbox"/> Cost Centers (Cost Centers) | <input type="checkbox"/> Job Codes (Job codes) |
| <input type="checkbox"/> Users (Employees) | <input type="checkbox"/> Customers (Customers) |
| <input type="checkbox"/> Projects (Projects) | <input type="checkbox"/> Services or Services (Service Items) |
| <input type="checkbox"/> Expense Items (Expense Categories) | <input type="checkbox"/> Contacts (Contacts) |
| <input type="checkbox"/> Vendors (Vendors) | <input type="checkbox"/> Products (Purchase Items) |
| <input type="checkbox"/> Customer POs (Sales Orders) | <input type="checkbox"/> Reimbursements (Expense Report Reimbursements) |
| <input type="checkbox"/> Payments (Invoice Payments) | <input type="checkbox"/> Project Tasks (Project Tasks) |
| <input type="checkbox"/> POs (Vendor Bills) | <input type="checkbox"/> Credits (Applied Credit Memos) |

Note: Please take a minute and review the following:

- To enable the Contacts, Vendors, Products, Customer POs, Reimbursements, POs (Purchase Orders) or POs (Vendor Bills), Payments, Retainers, and Credits check boxes, contact OpenAir Support. See [Contacting NetSuite and OpenAir](#).
- Refer to [Specifying Integrations, Filtering, and Features in OpenAir](#) for more information. In the example above, Sales Order line items transfer to OpenAir as Customer POs. Vendors may transfer to OpenAir as vendors, users, or both, depending on the integrations you are using. POs or vendor bills are related to either POs (Purchase Orders) or POs (Vendor Bills).

16. Select the check boxes for areas to send data to NetSuite.

Send data to NetSuite

| | |
|--|--|
| <input type="checkbox"/> Exp Reports (Expense Reports) | <input type="checkbox"/> Invoices (Invoices) |
| <input type="checkbox"/> Time Entries (Time) | <input type="checkbox"/> Recognition Transactions (Revenue Recognition Transactions) |
| <input type="checkbox"/> Send OA Credit (negative invoice) as NS credit memo | <input type="checkbox"/> Recognition rules (Custom Record: OpenAir: Revenue Rules for ARM) |
| <input type="checkbox"/> Recognition transactions (Custom Record: OpenAir: Revenue Transactions for ARM) | |

Note: To enable these features, contact OpenAir Support. See [Contacting NetSuite and OpenAir](#). Refer to [Specifying Integrations, Filtering, and Features in OpenAir](#) for more information. Vendors who transfer to OpenAir as users can send expense reports to NetSuite, and those expense reports become vendor bills in NetSuite. All employees who send OpenAir expense reports to NetSuite need to be a resource in the NetSuite project.

17. (Optional) If the switch to Enable NetSuite task import is enabled on the **NetSuite integration admin** form, the following pane displays. Use it to designate the field mapping for specific task information you want to transfer from OpenAir to NetSuite and type the corresponding NetSuite field. Refer to the following example. See [Implementing the Export of OpenAir Project Data to NetSuite](#).

Task update

You can update task data from OpenAir to NetSuite

Field mapping

| Task information | NetSuite field |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |

[Add rows]

☐ Update NetSuite tasks with NetSuite OpenAir tasks data

18. (Optional) If the switch to Export OpenAir project data to existing NetSuite projects is enabled on the **NetSuite integration admin** form, the following pane appears. Use it to designate the field mapping for specific project information you want to transfer from OpenAir to NetSuite and type the corresponding NetSuite field. Refer to the following example. See [Implementing the Export of OpenAir Project Data to NetSuite](#).

Project update

You can update project data from OpenAir to NetSuite

Field mapping

| Project information | NetSuite field |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |

[Add rows]

Project stages filter
No project stages specified.
 Only projects in these project stages will be updated in NetSuite. Edit the project stage to modify this list.

☐ Update NetSuite projects with NS OpenAir project data

19. To provide Advanced Settings for field mapping or filtering, first contact OpenAir Support and review [Using Advanced Settings](#). The field mapping and filtering options specified in Advanced Settings apply to the check box items enabled in the Get data from NetSuite section and the Send data to NetSuite section on the integration form. If your account uses Advanced Settings, OpenAir Professional Services completes the initial set up.



Important: We do not recommend using Advanced Settings before speaking with OpenAir Support. For more information, see [Contacting NetSuite and OpenAir](#).

20. To disable additional detail for debugging invoices upon export, select the check box. This feature is enabled by default because of its usefulness. In the event of an invoice export failure, the integration processes each error and makes additional calls to the NetSuite web services to help you determine any causes. A message displays and provides suggestions for resolving any errors.


☐ Do not include additional details for NetSuite integration errors

21. To schedule the integration to run automatically, select the check box and enter the desired day and time. To schedule multiple integration runs, contact OpenAir Support and request that the following switch be enabled: Enable additional scheduling options. When enabled, an add schedule drop-down list displays and you can schedule up to six additional integration runs. See [Configuring Scheduling Options](#).
 22. Enter email addresses for the recipients of the integration results. Place a comma between multiple addresses. In addition, you may request that when an error in an integration run occurs, an alert is sent via email. Enter email addresses for the recipients of this error email. See [Configuring Email Options](#).
 23. Click Save.
- You are now ready to run the integration. For more information, see [Running the Integration](#).

 **Note:** To transfer all records in the selected areas from NetSuite to OpenAir, select the check box on the **NetSuite integration administration** form that disables the Export to OpenAir filtering. See [Specifying Integrations, Filtering, and Features in OpenAir](#) for more information or contact OpenAir Support.

Token-Based Authentication


Token-Based Authentication makes all real-time integration features available to everyone. In addition, with Token-Based Authentication, your integration users will no longer need to change their integration passwords. The security is also stronger because of TBA's request-level signatures.

 **Note:** Using Token-Based Authentication does not enable multi-threading, and only allows interleaving.

In addition, Token-Based Authentication requires the 2016.2 Communication Endpoint. To enable it, please contact OpenAir Professional Services. We recommend testing your integration with this new endpoint on a sandbox before fully implementing it.

To enable Token-Based Authentication:

1. In NetSuite:
 1. Go to Setup > Company > Enable Features > SuiteCloud and select the **Token-Based Authentication** feature.
 2. Go to Setup > Integrations > Manage integrations and select the **Credentials** and **Token-Based Authentication** features.

 **Note:** NetSuite will provide you with a **TBA Consumer Key** and **TBA Consumer Secret** if this is the first time you are setting up an integration record with Token-Based Authentication support.

3. c. Assign integration users the "Full Access" role.
2. In OpenAir:
 1. Go to Administration > Global Settings > Account > Integration: NetSuite and click **Retrieve NetSuite role**.
 2. Select the **Full Access** role.
 3. Click **Save**.
 4. Contact OpenAir Professional Services and ask them to enable and configure the 2016.2 Communication Endpoint.

5. Go to Administration > Global Settings > Account > Integration: NetSuite and enter the TBA Consumer Key and TBA Consumer Secret from NetSuite in the OpenAir Integration Form.

Netsuite integration | Credentials | Automate | Real-time | Mapping

Cancel Save Run

Login credentials
API access will be performed using these user credentials

Account ID: E-mail:

Password: Confirm password:

TBA Consumer key: **TBA Consumer secret**:

Web Service Role: Application ID:

[Retrieve Netsuite roles](#)

6. Click **Save**.
7. Click the **Tips** button and click **Create TBA token**. A success message appears.

When Token-Based Authentication is enabled, the NetSuite Webservices Usage Log will not display login or logout webservice actions.

To see your TBA token, go to the “Access Tokens” page in your NetSuite account. The OpenAir token is called “openair_token”. You must be logged in with the Full Access role for integration users or have the proper TBA permissions as a NetSuite user.

To disable Token-Based Authentication:

1. In OpenAir, go to Administration > Global Settings > Account > Integration: NetSuite, delete the TBA Consumer Key from the TBA Consumer Key field, and click Save.

To reenale Token-Based Authentication:

1. In OpenAir, go to Administration > Global Settings > Account > Integration: NetSuite, re-enter the TBA Consumer Key into the TBA Consumer Key field, and click Save.

Specifying Integrations, Filtering, and Features in OpenAir

The **NetSuite integration administration** form provides features that further configure the integration to meet specific business needs, such as requirements for NetSuite OneWorld. It displays when you click the link in **tips** on the **NetSuite integration** form for NetSuite integration admin. Although you can view it, you cannot change it. To enable or disable the filtering and additional features, contact OpenAir Support. See [Contacting NetSuite and OpenAir](#). Refer to the **NetSuite integration administration** form to see the additional integrations, filtering, and features that are available in your account. Each of the additional integration settings is explained in more detail as follows.

Integration settings

Integration settings

Integration settings

Please contact OpenAir to change these settings.
The NetSuite/OpenAir integration will be performed using these settings.

Password:

A password is required to save changes to the settings below.

The settings on this form impact the integration and are protected by a password. Please contact OpenAir Support to enable new features or make changes.

Additional integrations

Enable 3-way Salesforce.com, NS OpenAir and NetSuite integration

Enable Salesforce.com information exports from OpenAir to NetSuite for customers and projects. An OpenAir action can be run to un-export that information so you can delete it manually in NetSuite and re-export it from OpenAir.

Enable NS OpenAir Loaded Cost to NetSuite custom record integration

When enabled, this integration will export/update the OpenAir Loaded Cost to a specified Custom Record in NetSuite.

This feature requires a new Custom Record and specified Custom Fields to be created. Discuss with your Professional Services Consultant before enabling this feature.

Enable OpenAir Expense report to NetSuite vendor bill integration

When enabled, vendor expense reports in OpenAir transfer to NetSuite as vendor bills.

Enable OpenAir project to NetSuite opportunity integration


An opportunity is associated with a project in NetSuite. That association is made either manually or by a custom workflow and scripting per the customer's business process. The opportunity should be populated in the list custom field created by the integration bundle; in the `custentity_oa_opportunity_id` custom field.

When this integration point is enabled in OpenAir, the integration will pull the project into OpenAir.

If the NetSuite project is associated with a NetSuite opportunity, the OpenAir project custom field `netsuite_project_opportunity_id` will have the internal ID of the NetSuite opportunity.

Any user with the proper permissions can create/update the OpenAir project's work breakdown structure.

When ready, a user with the user-level permission "The user can update a NetSuite opportunity from a project work breakdown structure" will see a new link in the tips of the project task list or outline view. The link is not available on the Gantt chart view. The link is called "Update the NetSuite opportunity line items". When the link in the tips is clicked, the NetSuite opportunity will be updated at the line-level.

 **Note:** The link can be moved and renamed with "Enable NetSuite opportunity export link in project navigation bar."

The update will rollup the default category/activity/service used on timesheets and sum the user planned hours from the task. The default category/activity/service maps to a NetSuite service item and the quantity on the NetSuite opportunity is the sum of the user planned hours for that service across the entire OpenAir project's work breakdown structure.

The opportunity may be updated as many times as needed.

Enable NS OpenAir project work breakdown structure to NetSuite opportunity integration

When enabled, a link to a NetSuite opportunity exports to an OpenAir project and displays in a custom field on project properties. OpenAir work breakdown structure information can be added and transfers to items on the NetSuite opportunity.

Enable NS OpenAir to NetSuite recognition transaction integration

When enabled, revenue recognition from OpenAir is recognized in NetSuite. The Invoices check box must be selected on the NetSuite integration form.

Enable NetSuite PO integration

Enable NetSuite purchase orders transfer to OpenAir. Must also enable NetSuite product integration and vendor to OpenAir vendor integration. (See below.)

Enable NetSuite credit memo integration for invoices

Enable NetSuite credit memos applied to OpenAir invoices push to OpenAir. OpenAir creates a negative invoice for the credit memo and the total credited amount displays on the original OpenAir invoice.

Enable NetSuite customer deposit integration for invoices

Enable push of NetSuite customer deposits to OpenAir and create retainer for invoices.

Enable NetSuite expense report/vendor bill reimbursement integration

Enable push of NetSuite expense report/vendor bill payment information to OpenAir as an OpenAir reimbursement.

Enable NetSuite intercompany journal creation for recognition transaction and invoice export

Enable transfer of OpenAir revenue recognition transactions and invoices to NetSuite. Run a script to automatically create intercompany journal entries in NetSuite. Cannot be used with sales order integration.

Enable NetSuite payment integration for invoices

Enable push of NetSuite invoice payment information to OpenAir and create payment transaction on the OpenAir invoice.

Enable NetSuite product integration

Enable push of the following 'Export to OpenAir Product' NetSuite items to OpenAir: Inventory, Kit/Package, Non-inventory, Other Charge, and Service.

Enable NetSuite real-time integration

When you enable the real-time integration and make changes to NetSuite customer, employee, and project records, the changes automatically transfer to OpenAir after you save them in NetSuite.

Enable NetSuite sales order to NS OpenAir customer PO integration

Enable push of NetSuite sales orders to OpenAir Customer POs.

Enable NetSuite single sign-on

When enabled, an OpenAir sign-on can be created in a portlet, subtab or Suitelet on the NetSuite Dashboard.

Enable NetSuite subsidiary import

Enable import of NetSuite subsidiary information and designate the category to which NetSuite subsidiaries should be mapped. Use with switch for One World integration optimizations.

Enable NetSuite task import

When enabled, NetSuite project tasks are imported into OpenAir, resulting in OpenAir project tasks. This also enables the **Task update** section on the NetSuite integration form to configure the updating of NetSuite project task records with OpenAir project task data.

Enable NetSuite vendor bills to NS OpenAir POs integration

Enable transfer of NetSuite vendor bills to OpenAir. Must also enable NetSuite product integration and vendor to OpenAir vendor integration. (See below)

Enable NetSuite vendor to NS OpenAir user integration


When enabled, user accounts are established in OpenAir for vendors who transfer from NetSuite as users.


Enable NetSuite vendor to NS OpenAir vendor integration

When enabled, vendor accounts are established in OpenAir for vendors who transfer from NetSuite as vendors.

Enable feature to set import errors on NetSuite records

When enabled, the corresponding NetSuite record is updated with any error message that occurs when importing the record into OpenAir. The error message is similar to the error message seen in the integration log with the addition of a date and time stamp based on Eastern Time.


 **Note:** If a prior run of the integration had set an error message in NetSuite and the next run of the integration successfully imports the record into OpenAir, the corresponding NetSuite record will be updated to remove the error message.

 **Important:** If this features is enabled and there is a high volume of records with errors, the integration will run noticeably slower.

Enable high-frequency real-time support

When enabled, you can make multiple updates to the same record within a short period of time, for example, within the same minute. This feature guarantees that if additional updates are made to a record as it is being sent for real-time integration, the additional changes are also immediately integrated.

To enable this switch, the “Enable NetSuite real-time integration” switch must also be enabled.

 **Note:** Changing a record while it is being integrated in real-time may result in other records being re-integrated to guarantee the integration. Records which are re-integrated are shown in the log.

Enable tax export on Expense reports

When enabled, taxes on Expense Reports are exported to NetSuite and are broken down based on tax location.

Enable time entries export to NetSuite

When enabled, time entries on OpenAir timesheets are exported to NetSuite as Time Tracking.

Export NS OpenAir project data to existing NetSuite projects

When enabled, project data is exported from OpenAir to NetSuite.

Import all NetSuite contacts associated with NetSuite clients marked 'Export to NS OpenAir'

When enabled, all contacts associated with every customer exported to OpenAir transfers from NetSuite to OpenAir.

Import all NetSuite contacts associated with NetSuite projects marked 'Export to NS OpenAir'

When enabled, all contacts associated with every project exported to OpenAir transfer from NetSuite to OpenAir.

Import taxes applied to exported invoices

When enabled, invoices transferred from OpenAir to NetSuite return to OpenAir and display the total tax on the invoice in OpenAir.

Note: There are options to disable export filtering on entities imported from NetSuite into OpenAir. When the check boxes for these Filtering options are checked, filtering is disabled and all associated records are transferred. Also, when Export to OpenAir for projects is enabled, the NetSuite setting to Limit Time and Expenses to Assignees is automatically unchecked and disabled if the Advanced Projects module is enabled in NetSuite. If that setting is enabled in NetSuite, the expense reports do not transfer.

Classification options

When you use the Classifications to Hierarchies Integration, these Classification options allow you to map the NetSuite custom entity fields as well as default employee and subsidiary fields from NetSuite to OpenAir Hierarchies.

Options include:

- Map NetSuite customer class to client hierarchy
- Map NetSuite customer department to client hierarchy
- Map NetSuite customer location to client hierarchy
- Map NetSuite customer subsidiary to client hierarchy
- Map NetSuite employee class to user hierarchy
- Map NetSuite employee department to user hierarchy
- Map NetSuite employee location to user hierarchy
- Map NetSuite employee subsidiary to user hierarchy
- Map NetSuite project class to project hierarchy
- Map NetSuite project department to project hierarchy

- Map NetSuite project location to project hierarchy
- Map NetSuite project subsidiary to project hierarchy

For NetSuite Customer and Project entities, you must create a custom entity field in NetSuite. It should be a List/Record custom field that contains relevant NetSuite classifications. Send the information to OpenAir Support so that they can type the custentity in the blanks provided.

See [Configuring the Classifications to Hierarchies Integration](#) for more information.

Filtering options

If you select to disable Export to OpenAir filtering and run the integration, all entities will be transferred from NetSuite to OpenAir in the areas selected regardless of whether or not they are marked for export.

If not selected, when you run the integration, data transfers only for those entities with the Export to OpenAir check box selected in NetSuite.

Disable Export to OpenAir filtering for clients in NetSuite integration

Check to export all clients to OpenAir.

Disable Export to OpenAir filtering for users in NetSuite integration

Check to export all users to OpenAir.

Disable Export to OpenAir filtering for projects in NetSuite integration

Check to export all projects to OpenAir.

Disable Export to OpenAir filtering for services in NetSuite integration

Check to export all services to OpenAir.

Disable Export to OpenAir filtering for vendors in NetSuite integration

Check to export all vendors to OpenAir.

Disable NetSuite service type filtering for services in NetSuite integration

When you disable NetSuite service type filtering, all types of items are transferred as OpenAir activities.

Include NetSuite leads marked 'Export to OpenAir' in the clients import (creates OpenAir clients)

When you enable Include NetSuite leads marked 'Export to OpenAir' and have the customer import selected under Get data from NetSuite, leads transfer to OpenAir as customers.

Include NetSuite prospects marked 'Export to OpenAir' in the clients import (creates OpenAir clients)

When you enable Include NetSuite prospects marked 'Export to OpenAir' and have the customer import selected under Get data from NetSuite, prospects transfer to OpenAir as customers.

Other features

Adjust quantity based on % invoiced for time charges related to NetSuite sales order lines with quantities that do not reflect hours. Occurs on export of invoices. Requires OpenAir Integration Bundle 1.14 or higher

Adjust quantity based on % invoiced for time charges allows invoicing a % of time allotted versus hours.

Allow manual override of Canadian taxes on Expense report export

When you enter Canadian taxes on OpenAir Expense reports prior to exporting them to NetSuite, the integration respects the manually entered Canadian taxes.

Always attempt to send all viable time entries

This option allows you to integrate all viable time entries to NetSuite when a timesheet contains time entries which should not be exported.

When this feature is enabled, all time entries in a timesheet are checked for export to NetSuite, and if they are supposed to be integrated to NetSuite, the integration tries to send them.

When disabled, the timesheet integration ends after the first time entry which should not go to NetSuite is found (for example, if a NS project ID or category ID are missing).

Always export all task assignments when exporting project work breakdown structure to NetSuite opportunity

This will force this integration to always export each task assignment to NetSuite as an opportunity line item.

Always respect the NetSuite sales order client and project when exporting invoices

Respecting NetSuite sales order customer and project allows invoices to use NetSuite sales order information such as sales team.

Automatically create negative Expense report lines in NetSuite for non-reimbursable expenses

Create negative expense report lines and transfer them to NetSuite for expenses marked non-reimbursable in OpenAir. See [Working with Expense Reports in NetSuite](#).

Combine charges by service on invoices

Combine charges by activity to one line item on invoices transferred to NetSuite.

Create billing rules for NetSuite discount and markup lines on sales orders

Create billing rules for NetSuite discount and markup lines on sales orders and transfer this information to OpenAir billing rules and Customer POs to use in OpenAir invoices. Export invoices back to NetSuite. Manually create negative charges corresponding to those discounts and markups when you export the invoice to NetSuite.

Create new projects based on the project template specified in NetSuite

Create new projects based on the project template specified in NetSuite allows you to apply OpenAir templates to new NetSuite projects. Projects contain template contents when they transfer to OpenAir.

Create time billing rules in sales order integration with a service filter. Map sales order line description to billing rule Charge description

Create time billing rules for activities in sales orders and map a line description to a billing rule charge description.

Disable Expense report references on invoices in NetSuite integration - (see documentation before enabling)

If this switch is enabled to Disable Expense report references on invoices in the NetSuite integration, the Billable expenses functionality is not used. Expenses are exported to NetSuite as non-billable. Discuss with your Professional Services Consultant before enabling this feature.

Disable vendor bill linkage on invoices in NetSuite integration - (see documentation before enabling)

If this switch is enabled to Disable vendor bill linkage on invoices in NetSuite integration, you can rebill vendor bills not originally marked as billable.

Do not require a service on time entry export to NetSuite

If you use the time entry integration, time entries export with or without an activity or service item.

Do not set the foreign currency in NetSuite for foreign currency receipts when exporting Expense reports

If you enable the switch for do not set the foreign currency in NetSuite, when OpenAir expense reports transfer to NetSuite with foreign currency receipts, those receipts display in NetSuite in the user's base currency.

Do not use OpenAir project exchange rate on invoice and recognition transaction export

This feature will suppress the usage of the OpenAir project exchange rate on invoice and revenue recognition transaction export. The exchange rate used on the invoice and journal entry in NetSuite will be sourced from NetSuite. The project exchange rate in OpenAir will no longer be required when exporting invoices and revenue recognition transactions.

Do not use task planned hours for manual task projected billings when exporting project work breakdown structure to NetSuite opportunity

This option will not use the total planned hours from the task assignments for the quantity on the opportunity line item. Instead, it will default to 1.

This option can only be used with [Map task service to NetSuite item instead of task assignment job codes for manual task projected billings when exporting project work breakdown structure to NetSuite opportunity](#).

Enable NetSuite OneWorld integration optimizations

Enable OneWorld integration optimizations to speed up data transfer in OneWorld accounts.

Enable NetSuite opportunity export link in project navigation bar

This switch is only applicable when the [Enable OpenAir project to NetSuite opportunity integration](#) is enabled.

When enabled the “Update the NetSuite opportunity line items” link is moved from the Tips section into the header section next to the Edit project link and the link is renamed to Finalize WBS. The link is visible with all screens of a project.

Enable charges to map to NetSuite description items. This is used with the sales order integration

Enable charge details on invoices to map to NetSuite description items when using the sales order integration.

Enable additional scheduling options

Enable scheduling of integration runs.

Enable expense charge linkage with sales order lines

Enable ability for OpenAir expense charges to reference NetSuite sales order lines. Discuss with your Professional Services Consultant before enabling this feature.

Enable loaded cost export with the timesheet export

Enable the export of loaded costs on each time entry that is exported to NetSuite.

This feature uses the standard timesheet export. Please refer to the documentation for the timesheet export to understand that feature.

This feature does not account for primary loaded cost normalization feature. If the primary loaded cost is normalized after the export of time entries and costs to NetSuite, the normalized costs will not be reflected in NetSuite.

Up to three loaded cost levels are supported. The integration will export as many as have been enabled in the account.

Enable project workspace creation

Enable automatic creation of a workspace in OpenAir when you export a project from NetSuite.

Enable recognition rule creation in sales order integration

Create recognition rules along with billing rules on NetSuite sales orders and transfer both the billing rules and recognition rules to OpenAir.

Enable the OpenAir invoice link mapping to NetSuite

Enable the OpenAir invoice link to send the OpenAir invoice URL to NetSuite. It displays in a custom field.

Enable use of NetSuite time units of measure

This setting within the CustomerPOs (Sales Orders) workflow page forces OpenAir to integrate Sales Orders using supported time units of measure you have set up in NetSuite. Supported units of

measure are **Second, Minute, Hour, and Day**. When enabled, new mapping lines to two new OpenAir custom fields are added to the workflow:

- Transaction.quantityUOM > netsuite_sales_order_line_quantity_uom
- Transaction.unit > netsuite_sales_order_line_unit

These mapping lines also map to two new custom fields, respectively:

- transaction.quantityUOM
- transaction.unit

This setting requires that you set up the units of time measure in NetSuite before enabling it.

Exclude manual task projected billings from rollup when exporting project work breakdown structure to NetSuite opportunity

This will force the integration to never include manually overridden projected billings to be combined with task assignments.

Initialize invoices from corresponding sales orders when exporting invoices to NetSuite. This is used with the sales order integration

Initialize OpenAir invoice to gather data from NetSuite sales order before exporting invoice to NetSuite.

Keep customer reference on negative Expense report lines in NetSuite for non-reimbursable expenses

When you transfer negative Expense report lines to NetSuite, you can keep the Customer: Project reference.

Manually synchronize NetSuite custom fields used in the integration


Manually synchronize NetSuite custom fields. Professional Services Consultants enable this switch to use when debugging or upgrading accounts.

Map NetSuite transaction number to OpenAir number when importing vendor bills or purchase orders

This allows the NetSuite transaction number (tranId) from a vendor bill or purchase order to map to the OpenAir purchase request and purchase order number. See [Other Options](#).

Use 2016.2 communication endpoint

Select this option in the integration administration to use the 2016.2 communication endpoint. This feature must be enabled by OpenAir Support.

 **Note:** We strongly recommend enabling the 2016.2 communication endpoint for new integrations.

Map cost center on loaded cost export with the timesheet export

Map OpenAir cost center to the custom field "OpenAir: Cost Centers" on the NetSuite time entry. This switch requires the NetSuite custom record type, "OpenAir: Cost Centers" to be installed into the NetSuite account as part of the standard integration bundle.

Cost centers associated with the time entry can be used to source additional information needed in NetSuite to create journal entries.

Map country when exporting clients to NetSuite in 3-way Salesforce.com, OpenAir and NetSuite integration

Map country when exporting customers to NetSuite from Salesforce.com in the 3-way Salesforce.com, OpenAir and NetSuite integration.

Map task service to NetSuite item instead of task assignment job codes for manual task projected billings when exporting project work breakdown structure to NetSuite opportunity

This will map the category (default_category field) on the project task instead of job code as the source of the NetSuite item.

None of the task assignments will be exported for project tasks with manual projected billings when using this option.

Map the OpenAir project stage from the NetSuite project

Map the OpenAir project stage from the NetSuite project to the OpenAir project when you import it to OpenAir.

Map the OpenAir rate card from the NetSuite project

Map the OpenAir rate card from the NetSuite project to the OpenAir rate card when you import it to OpenAir. This requires the custom field "OpenAir: Project Rate Card" to be created in NetSuite.

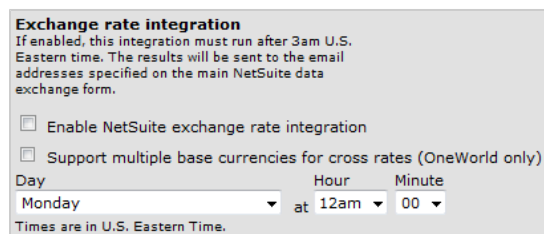
Map the charge type from the NetSuite credit memo

Specify a charge type on an invoice in OpenAir and it transfers and displays on the NetSuite Invoice line item.

NetSuite project update batch size (maximum of 20)

Specify number of projects to update in one web services call, from 1 - 20. Less than 20 may improve performance.

Exchange rate integration



Exchange rate integration
 If enabled, this integration must run after 3am U.S. Eastern time. The results will be sent to the email addresses specified on the main NetSuite data exchange form.

☐ Enable NetSuite exchange rate integration

☐ Support multiple base currencies for cross rates (OneWorld only)

Day: Monday Hour: 12am Minute: 00

Times are in U.S. Eastern Time.

Export exchange rates from NetSuite to OpenAir for multiple currencies. Once enabled, the integration can be run at any time.

Export multiple base currencies for cross rates in OneWorld accounts.



Note: Use the `getCurrencyRate` NetSuite API operation to retrieve exchange rates from NetSuite.

Workflow-specific Integration Settings

When using the Connector UI released in April 16, 2016, you can select or change these settings from the **Settings** link within the workflow which they affect. The relevant workflow is listed in parentheses after each setting title.

Disable NetSuite revenue recognition feature check for recognition transaction integration (Revenue Recognition Transactions)

When integrating Revenue Recognition transactions, NS/OA Connector first checks to ensure that the NetSuite “Revenue Recognition” switch is enabled before sending recognition transactions to NetSuite. However, when using NetSuite’s Advanced Revenue Management (ARM), the NetSuite Revenue Recognition switch must be disabled in NetSuite. The “Disable NetSuite revenue recognition feature check for recognition transaction integration” switch enables OpenAir to integrate revenue recognition transactions to NetSuite without performing this check.

Import taxes applied to exported OA Credit (negative invoice) (Send OA Credit (negative invoice) as NS credit memo)

Enabling this switch causes NS/OA Connector’s Credit/Rebill to include tax amounts in OpenAir credit invoices, which can then be passed to NetSuite credit memos. This switch supports two workflows in both the old and new UI:

- Crediting an existing invoice, for example, through OpenAir’s Credit/Rebill feature
- Creating a separate credit memo which is not linked to an invoice

To use this switch, you must enable the “Import taxes applied to exported invoices” switch in the Invoices (Invoices) workflow settings. This switch also requires bundle 2851 version 1.36.

Skip merge of matching clients with NS Internal ID

When integrating OpenAir clients to NetSuite customers, OpenAir identifies if the OpenAir internal id has a corresponding NetSuite internal id. If there is not a corresponding NetSuite internal id, OpenAir matches the OpenAir entity id to the same NetSuite entity id using a case insensitive search. When this setting is enabled, when OpenAir finds a record by entity id, it also checks if there is an existing NetSuite internal id for that entity. If the NetSuite internal id is blank, the record is updated. If the internal id is not blank, the integration ignores the record.

Using OpenAir Revenue Recognition Rules with NetSuite Advanced Revenue Management

OpenAir can integrate your revenue recognition rules and recognition transactions to NetSuite for use in Advanced Revenue Management. Please see [OpenAir Revenue Recognition with NetSuite Advanced Revenue Management](#).

Running the Integration

After Professional Services has configured your NetSuite and OpenAir accounts, you are ready to begin working with records and data in each application. Refer to the following:

- [Sharing Core Data](#) - Review records to verify that core data exists in both applications. This allows you to exchange information and manage projects between the two applications. While Professional Services does your initial set up, you need to maintain core data as you make changes or enhancements to your account.
- [Working with Records in NetSuite](#) - Review the records available for transfer from NetSuite to OpenAir, why you use them, and how you export them.
- [Working with Data in OpenAir](#) - Review the records available for transfer from OpenAir to NetSuite, why you use them, and how you export them.
- [Running the Integration](#) - Review the steps for running the integration. Also addressed is the ability to generate alerts when integration errors are encountered.

Each is explained in more detail in the following sections.

Sharing Core Data

When Professional Services configures your NetSuite and OpenAir accounts for the integration, the records necessary to ensure the integration functions properly are present in both applications. As your company grows and adds more customers, projects, and employees to your accounts or as you implement new features or make changes, you must add to that initial set up of core data and include records that reflect the growth and modifications made. By maintaining core data, you keep the foundation you need to successfully run the integration.

Shared core data may include information about customers, contacts, projects, employees, purchase items, vendors, and in some cases, vendors who become OpenAir users. It also may include service items for exporting invoices and expense categories or expense items for transferring expense reports. These core data must be in both applications for the same entities before you can exchange related transactional information to and from either application for expense reports, invoices, and revenue recognition transactions. They must also be present to use optional features like sales orders, purchase orders, vendor bills, expense report reimbursements, invoice payments, and customer deposits and credits applied to invoices. When you establish core data in both applications, you can exchange information at key points in the management process.

The following example shows how shared core data provides the framework for data exchange. An OpenAir user who is also a NetSuite employee creates an expense report in OpenAir. It references a customer and project. Expenses include meals and travel, expense categories or expense items that exist in both applications. In fact, all of these records must exist in both applications. Once the expense report is approved in OpenAir, it transfers to NetSuite when you run the integration. Because the core data exists in both applications, the expense report can transfer from OpenAir to NetSuite.

The shared core data in the previous example include a customer, project, user, and an expense report containing expense categories or items. With that common information, you may do one or more of the following:

- Create a NetSuite service order, transfer it to OpenAir, and run billing rules in OpenAir for the project based on the NetSuite service order.
- Calculate revenue transactions in OpenAir for completed activities/items the sales order transferred from NetSuite.
- Pay the expense report in NetSuite and transfer payment information back to the expense report in OpenAir.

- Use the expense report in charges on an OpenAir invoice and transfer it to NetSuite for payment and record keeping.
- Pay or credit invoices in NetSuite and apply those payments and credits to the invoice in OpenAir.
- Update general ledgers in NetSuite and create reports.

Core Data Records

The following records are common to both applications. While Professional Services makes sure that the records for core data match when they configure your account, your account will grow and change over time as you implement enhancements or make changes that require additional records. Review the record types below to understand how core records work together between the applications to make the integration run smoothly. Records included in core data are:

- Employees and Vendors established and transferred from NetSuite to OpenAir. Employee and user records must be in both applications before you can transfer expense reports, timesheets, or use time and expenses in billing rules. Vendors used in purchase orders must be in both applications before you can exchange purchase order information. See [Working with Employee Records in OpenAir](#) and [Working with Vendors in OpenAir](#).
- Customers established and transferred from NetSuite to OpenAir. Customer records must be in both applications before you can select them on expenses, timesheets, or projects and create subsequent billing rules and invoices. [Working with Customer Records in OpenAir](#).

Note: Customers can be transferred from OpenAir to NetSuite using the Salesforce.com integration. This provides NetSuite with a Salesforce.com ID from OpenAir and provides OpenAir with a NetSuite ID. If information changes and cannot be corrected in NetSuite, an un-export option exists. See [Configuring the Salesforce.com Integration for Customers and Projects](#) and [Working with Customers from Salesforce.com in NetSuite](#).

- Projects established and transferred from NetSuite to OpenAir. Project records must be in both applications before you can select them on expenses or timesheets or use them in subsequent purchase orders, billing rules, and invoices. If your account is multi-currency, you must also go into the Edit project or Properties form in OpenAir and type in an exchange rate. If it is not, this step is not necessary. See [Working with Project Records in OpenAir](#).

Note: Projects can be transferred from OpenAir to NetSuite using the Salesforce.com integration. This provides NetSuite with a Salesforce.com ID from OpenAir and provides OpenAir with a NetSuite ID. If information changes and cannot be corrected in NetSuite, an un-export option exists. See [Configuring the Salesforce.com Integration for Customers and Projects](#) and [Working with Projects from Salesforce.com in NetSuite](#).

- Items for services established and transferred from NetSuite to OpenAir. Service items from NetSuite are Activities in OpenAir. These records must be in both applications before you can use them on invoices or revenue recognition transactions. NetSuite Inventory, Kit/Package, Non-inventory, Other Charge, and Service items must be in both applications before you can use them on purchase orders. See [Working with Item Records in OpenAir](#).
- Expense categories established and transferred from NetSuite to OpenAir. Expense categories from NetSuite are Expense items in OpenAir. These records need to be in both applications before you can select them on receipts and transfer them in expense reports. See [Working with Expense Categories in OpenAir](#).

Customizing OpenAir List Views to Display NetSuite IDs

In OpenAir, you can easily customize list views to display a column for associated NetSuite IDs. This provides a quick way to determine which entities already exist in both applications since the IDs are on

the list view. Also, when you transfer a new record that has a name that is similar to an existing record, you can easily find the new record because it displays the NetSuite ID.

To customize OpenAir list views to display a NetSuite ID:

1. Click the arrow on the top left menu bar and select Customize list view. A pop-up window displays with available items.
2. Scroll down and highlight the NetSuite ID information you want to display.
3. Click Add selected items.
4. Highlight the item to move it to the most convenient display location.
5. Click OK.

Adding an OpenAir Record to Match a NetSuite Record

If a record exists in NetSuite and not in OpenAir, simply mark it for export to OpenAir. When you run the integration, it establishes the matching record in OpenAir. The integration transfers the information from NetSuite and creates a record in OpenAir that includes the assigned NetSuite ID number. See [Exporting NetSuite Records to OpenAir](#) and [Running the Integration](#).

Adding a NetSuite Record to Match an OpenAir Record

If a record already exists in OpenAir, but doesn't exist in NetSuite, you need to create it in NetSuite and transfer it to OpenAir. To use it in the integration, it must exist in both applications, and in OpenAir, it must display a NetSuite ID on the appropriate form. You create a matching record in NetSuite and transfer it to OpenAir when you run the integration. See [Exporting NetSuite Records to OpenAir](#) and [Running the Integration](#).

The following is an example of what you do to add an employee record in NetSuite to match an existing user record in OpenAir.

To establish an employee record in NetSuite and transfer it to OpenAir:

1. Create a record in NetSuite for the user. The name you enter in NetSuite should be identical to the name in the OpenAir user account.
2. Run the integration. Refer to [Running the Integration](#). OpenAir searches for the User record and adds a NetSuite User ID to the existing OpenAir account.
3. Navigate to OpenAir > Global Settings > Users and click on the User ID. Edit user demographic information form displays.
4. Scroll to the bottom of the form and verify that a NetSuite Employee ID displays.



Important: If the NetSuite record you created did not exactly match the OpenAir user account, a new user record is created in OpenAir. Now you have two records for the same user with slightly different information. Combine them into one record, keeping the original OpenAir information intact. Add the NetSuite Employee ID to the original OpenAir user account.

To add the NetSuite ID to the original OpenAir record:

1. Open the new record that was created when you ran the integration.
2. Copy the NetSuite ID. (In the previous example, it is a NetSuite Employee ID.)
3. Open the original OpenAir record. (In the previous example, it is a user account.)
4. Paste the ID into the NetSuite ID field. (In the previous example, it is a NetSuite Employee ID.)

5. Delete the newly created record. You don't need it because the NetSuite ID was entered into the original OpenAir record.

When you create one of the following record types in NetSuite and run the integration, the specified OpenAir form contains the following NetSuite ID.

| NetSuite Record | Transfers to OpenAir Form | NetSuite ID Added |
|-------------------------|--|--|
| Vendor | Depending on your implementation: Administration > Application Settings > Purchases Settings > Vendors Administration > Global Settings > Users and select a User ID | NetSuite Vendor ID |
| Customer | Administration > Global Settings > Customers and select a Nickname | NetSuite Customer ID |
| Projects | Projects > Projects and select a Project and then click Edit project or Properties link | NetSuite Job ID (You must also type in an exchange rate in the NetSuite Project Exchange Rate field and save the project.) |
| Contacts | Administration > Global Settings > Contacts and select a contact Name | NetSuite Contact ID |
| Item | Administration > Application Settings > Invoices Settings > Activities and select an Activity | NetSuite Item ID |
| Resale or Purchase Item | Administration > Application Settings > Purchases Settings > Products | NetSuite Purchase Item ID |
| Expense Category | Administration > Application Settings > Expenses Settings > Expense items and select an Expense item | NetSuite ExpenseCategory ID |
| Opportunity | Projects > Projects and select a Project and then click Edit project or Properties link | NetSuite Job ID and NetSuite Opportunity ID |

Working with Records in NetSuite

The integration is flexible in that you can choose how you want to use it and when you want to use it. It provides the overall structure to capture data in NetSuite and export that data to OpenAir. Lists of NetSuite records available for export as well as export methods follow.

NetSuite Records Available for Export to OpenAir

The following are records you can export from NetSuite to OpenAir. In many cases, you must export records that include core data to be able to use the information in the integration. You can export each record individually or choose to export all records within the record types.

- Employees - Must establish employee records in NetSuite and transfer them to OpenAir before you can transfer a user's expense report or timesheet back to NetSuite, or use the user's time and

expenses in OpenAir billing rules for invoice charges. A NetSuite Employee ID custom field displays on the User Edit demographic information form.

- Vendors - Must establish vendor records in NetSuite and transfer them to OpenAir either as a vendor account or as a user account. Depending on your implementation, a NetSuite Vendor ID custom field displays on the Vendor form or the User Edit demographic information form. See [Working with Vendors in OpenAir](#).
- Customers - Must establish customer records in NetSuite and transfer them to OpenAir before you can select them on expenses, timesheets, or projects and create subsequent billing rules and invoices. A customer must exist in NetSuite before a contact associated with the customer can be transferred to OpenAir. A NetSuite Customer ID custom field displays on the Customer Edit demographic information form.
- Projects - Must establish project records in NetSuite and transfer them to OpenAir before you can select them on expenses or timesheets or use them in subsequent purchase orders, billing rules and invoices. A project must exist in NetSuite before a contact or sales order associated with the project can be transferred to OpenAir. A NetSuite Job ID custom field displays on the Edit project or Properties form.

Creating multi-currency projects and invoices is a standard feature of OpenAir, but needs to be enabled in NetSuite. To enable multi-currency customer support in the integration, upgrade to NetSuite bundle 1.31 and enable multi-currency customers in NetSuite.

Multi-currency projects, invoices and other sales transactions can then be synchronized between NetSuite and OpenAir.

- Contacts - Must establish a contact record in NetSuite before you can use it in OpenAir. A NetSuite Contact ID custom field displays on the Edit contact form.
- Opportunities - Must establish an opportunity in NetSuite and associate it with a NetSuite project before you can transfer it to OpenAir. The customer must exist in OpenAir. NetSuite Job ID and NetSuite Opportunity ID custom fields display on the Edit project or Properties form.
- Items for Services or Activities - Must establish item records in NetSuite before you can use them on OpenAir timesheets, invoices or revenue recognition transactions. A NetSuite Item ID custom field displays on the Edit activity form. When you transfer an opportunity to OpenAir to develop a project's work breakdown structure for opportunity items, the OpenAir Timesheets activities must exist as items in NetSuite and contain rate information. See [Configuring the Opportunity to Project Integration](#).
- Items for Purchase - Must establish items in NetSuite before you can use them in purchase orders that transfer to OpenAir. The purchase item can be an Inventory, Kit/Package, Non-inventory, Other Charge, or Service item. A custom field for NetSuite Purchase Item ID is added to the OpenAir Product form. In addition, if the revenue recognition integration is enabled, the following custom fields are also added: NetSuite Product Subtype, NetSuite Income Account ID, NetSuite Product Type, and NetSuite Deferred Revenue Account ID. A check box field indicated if the NetSuite Product Is Fulfillable.
- Expense Categories - While these are not defined as a record in NetSuite, you transfer expense categories to OpenAir so you can select them on receipts and transfer them back to NetSuite on expense reports. A NetSuite ExpenseCategory ID displays on the Edit expense item form. See [Working with Expense Categories in OpenAir](#) and [Filling in the NetSuite Integration Form in OpenAir](#).
- Sales Orders - Must establish sales order records in NetSuite and transfer them to OpenAir before you can use them on OpenAir billing rules, OpenAir recognition rules, or invoices. Depending on your integration, the following custom fields are added to the OpenAir Customer POs form: NetSuite Discount Customer PO, NetSuite Sales Order Line ID, NetSuite Project ID, NetSuite Sales Order Net Amount, and NetSuite Sales Order ID, NetSuite Sales Order Line Quantity, and NetSuite Item ID. Other check box fields include: Calculate Quantity From % Invoiced, NetSuite Sales Order Line Discount Customer PO, and NetSuite Sales Order Header Discount Customer PO. An Activities form may include the following check box: NetSuite description item use for charges in invoice export. This check box is used only with the "Enable charge details on invoices to map to NetSuite

description items when using the sales order integration” feature. See [Configuring the Sales Order Integration](#).

- Purchase Orders and Vendor Bills - Must establish vendors and purchase items in NetSuite and transfer them to OpenAir before you can use them on purchase orders and vendor bills transferred to OpenAir.
- Expense Report Reimbursements - When expense reports transfer from OpenAir to NetSuite, payments made in NetSuite can transfer back to OpenAir and display as reimbursements. The NetSuite Payment ID displays in Notes.
- Invoice Payments - When invoices transfer from OpenAir to NetSuite, payments made in NetSuite can transfer back to OpenAir as invoice payments. The NetSuite Payment ID displays in Notes.
- Customer Deposits Applied to Invoices - When invoices transfer from OpenAir to NetSuite, customer deposits applied in NetSuite can transfer back to OpenAir as retainers. The NetSuite customer deposit ID displays in Notes.
- Credit Memos Applied to Invoices - When invoices transfer from OpenAir to NetSuite, a credit memo applied in NetSuite can transfer back to OpenAir as a negative invoice. If you enter an OpenAir charge type, it also transfers back to NetSuite and displays on the NetSuite Invoice line item. Each line of the NetSuite credit memo becomes a negative charge in OpenAir and OpenAir creates a new negative invoice. The total credited amount displays on the original OpenAir invoice as the reason for credit. The credit memo import respects the value set on the OpenAir charge type for each negative charge created in OpenAir.
- Import Taxes Applied to Exported Invoices - When invoices transfer from OpenAir to NetSuite, taxes on the total amount are applied in NetSuite and can transfer back to OpenAir. The total tax amount displays on the OpenAir invoice.

Exporting NetSuite Records to OpenAir

In NetSuite, you can select the types of records you want to exchange with OpenAir, and, within each record type, select individual records to exchange.

To export NetSuite records to OpenAir:

1. Select one or more records or entity data you want to exchange with OpenAir. See [NetSuite Records Available for Export to OpenAir](#) for a list of available records/entity data.
2. In NetSuite, go to the list view of the record type or an individual record and check the Export to OpenAir check box. Remember that you can also set a default value for this check box for all entities. Go to Setup > Company > General Preferences and click on the Custom Preferences subtab. Select the check boxes of the entities to export by default.
Note that a check box is not available for expense categories. For more information, see [Working with Expense Categories in OpenAir](#).
3. Ensure the integration is configured properly. See [Configuring NetSuite for the Integration and Configuring OpenAir for the Integration](#).
4. Run the integration to transfer the NetSuite data to OpenAir.
For a list of specific data transferred for each NetSuite record, see [Data Mapping in the Integration](#).
5. After you have exported the data, you can work with it in OpenAir. For details on how to work with each specific record type in OpenAir, see [Working with NetSuite Record Data in OpenAir](#).

Working with Data in OpenAir

Working with data in OpenAir through the integration is flexible. Choose how and when to use it. Once you transfer records from NetSuite to OpenAir, add information to those records, manage projects in

OpenAir, and submit timesheets and expenses for those projects. Later, transfer that information back to NetSuite, either on a case-by-case basis or all records of a type. Lists of OpenAir records available for export as well as different export methods follow.

OpenAir Data Available for Export to NetSuite

Data from OpenAir that transfers to NetSuite includes:

- Approved expense reports - When OpenAir user records have a NetSuite Employee ID and expense items have a NetSuite Expense Category ID, you can transfer approved expense reports from these users for the expense items to NetSuite.
- Approved timesheets - When OpenAir user records have a NetSuite Employee ID, customer records in OpenAir have a NetSuite Customer ID, projects have a NetSuite Job ID, and activities associated with tasks have a NetSuite Item ID, you can transfer approved timesheets from these users to NetSuite.
- Invoices - When customer records in OpenAir have a NetSuite Customer ID, projects have a NetSuite Job ID, and billing rule charges are based on sales orders transferred from NetSuite and edited in OpenAir, you can include those customers, projects, and charges on invoices and export them to NetSuite. You can also initialize OpenAir invoices to gather data from the NetSuite Sales Order form like you would use the Next Bill button in NetSuite to pre-populate an invoice. Additional charge details can also transfer to NetSuite with the OpenAir invoice. See [Configuring the Sales Order Integration](#).

Creating multi-currency projects and invoices is a standard feature of OpenAir, but needs to be enabled in NetSuite. To enable multi-currency customer support in the integration, upgrade to NetSuite bundle 1.31 and enable multi-currency customers in NetSuite.

Multi-currency projects, invoices and other sales transactions can then be synchronized between NetSuite and OpenAir.

- Revenue recognition transactions - When customer records in OpenAir have a NetSuite Customer ID, projects have a NetSuite Job ID, and billing rule charges are based on sales orders transferred from NetSuite and edited in OpenAir, you can include those customers, projects, and charges on revenue recognition transactions and transfer them to NetSuite.
- Opportunity items - An opportunity associated with a project transfers to OpenAir when customer records in OpenAir have a NetSuite Customer ID and projects have a NetSuite Job ID and a NetSuite Opportunity ID. Items on a project's work breakdown structure can transfer back to the NetSuite opportunity. To use this feature, click the "Update the NetSuite opportunity line items" link on either the OpenAir Projects Phases/Tasks: List or Outline forms. A check box does not display under "Send data to NetSuite" on the **NetSuite integration** form. See [Configuring the Opportunity to Project Integration](#).
- Customers and projects that are generated in Salesforce.com and pulled into OpenAir can be transferred back to NetSuite with a related Salesforce.com ID. To use them in the integration, they must transfer back to OpenAir and acquire a NetSuite Customer ID and NetSuite Project ID respectively. See [Configuring the Salesforce.com Integration for Customers and Projects](#).



Note: Names for OpenAir records differ slightly from those in NetSuite. See [Terminology Mapping for the Integration](#) for a terminology mapping table.

Exporting OpenAir Data to NetSuite

In OpenAir, you can select the types of records you want to exchange with NetSuite, and, within each record type, select individual records to exchange. Or, you can exchange all records of a type.

To export OpenAir records to NetSuite:

1. Select one or more records you want to send to NetSuite. See [OpenAir Data Available for Export to NetSuite](#).
2. In OpenAir:
 - To send an individual record, go to the bottom of the form and click the Export to NetSuite link.
 - To send multiple expense reports, invoices, customers and projects from Salesforce.com, and revenue recognition transactions, go to Administration > Global Settings > Integration: NetSuite and select the appropriate check boxes.
3. Ensure the integration is configured properly. See [Configuring NetSuite for the Integration](#), [Configuring OpenAir for the Integration](#), and [Configuring Optional Features](#).
4. Run the integration to transfer the OpenAir data to NetSuite. Schedule a time to automatically run the integration or click the Save & Run button.
 For a list of specific data transferred for each NetSuite record, see [NetSuite to OpenAir Data Mapping](#).
5. After you have exported the data, you can work with it in NetSuite. For details on how to work with each specific record type in NetSuite, see [Working with OpenAir Data in NetSuite](#).

Running the Integration

The OpenAir **NetSuite integration** form allows you to manage the transfer of information between the two applications by either getting data from NetSuite or sending OpenAir data to NetSuite or both. Log in to your OpenAir account, go to the **NetSuite integration form** and select the check boxes for data to exchange. You can:

- Select to run the integration for specific data entities only, such as customers or invoices.
- Get and send all data at the same time.
- Run the integration in only one direction. For example, if you want to only pull data from NetSuite into OpenAir, select one or more entities under Get data from NetSuite. Do not select entities under Send data to NetSuite.
- Schedule the integration to run automatically at a time and interval you select or schedule multiple integration runs.
- Specify that alerts be sent when error logs are generated. The complete log is sent and error messages start with ERROR.
- Run the integration on demand. Click the Save & Run button.

To run the integration, you need role permissions in both OpenAir and NetSuite. In OpenAir, you need access to Global Settings under Administration. The link to Integration: NetSuite must display under Account. In NetSuite, you need a Web Services user account with necessary permissions for performing operations in NetSuite.


To run the integration:

1. In OpenAir, go to Administration > Global Settings > Account and select Integration: NetSuite. The **NetSuite integration** form appears. See [Filling in the NetSuite Integration Form in OpenAir](#).
2. Type Login credentials for System, Account ID, Email, and Password. The account ID is provided by NetSuite Professional Services or can be found in NetSuite at Setup > Integration > Web Services Preferences.

3. In the **NetSuite integration** form, review the choices you have made for the data transfer and make any necessary changes. To review the features enabled, click the **NetSuite integration admin** link in tips and review the form that appears.
4. If desired, schedule the integration to run automatically. Select the check box and enter the day, hour, and minute to run the integration. You can also request a switch be enabled to allow you to schedule multiple integration runs. See [Configuring Scheduling Options](#).
5. If desired, specify that alerts be sent via email when errors occur during an integration run. You can even select to receive an HTML email with error messages highlighted in red. See [Configuring Email Options](#).
6. Specify email addresses to send results to and separate each with a comma. See [Configuring Email Options](#).
7. Click Save to save the settings you just made or click Save & Run to run the integration immediately.

In addition to the above method, the integration can be run on demand for the following record types from the Tips menu:

- Invoices
- Expense reports
- Timesheets
- Revenue recognition transactions
- Project information
- Task information
- WBS to NetSuite Opportunity

 **Note:** WBS to NetSuite Opportunity can only be triggered manually.

To Sync On-Demand from the Tips Menu

1. Navigate to an invoice, expense report, timesheet, revenue recognition transaction, project, task, or WBS to NetSuite Opportunity.
2. Click the Tips button. The Tips menu appears.
3. Click **Export to NetSuite** for invoices, expense reports, timesheets, or revenue recognition transactions. Click **Send to NetSuite** for project information, task information, and WBS to NetSuite Opportunities.

You can also sync on-demand using API functions. For more information, see the [OpenAir User Scripting Guide](#), Chapter 2, NSOA functions.

After you select the records you will transfer and run the integration, you may want to take a few minutes to understand the additional optional features available in the integration and review the steps for implementing them. As stated previously, when Professional Services does your initial configuration, the features are set up for you. However, as enhancements are made to the integration, you may choose to implement some or all of the new optional features. Remember, you can always contact Professional Services and ask for help in setting up and implementing new features. To decide which additional optional features you want to use, see [Configuring Optional Features](#).

Configuring Optional Features

This chapter provides instructions for implementing the optional features in the integration. Since the development of the integration is ongoing, new features and functionality are being added. Even though these features may not have been in your initial set up, they are available and you can use them. It also provides guidance for using them, especially if the workflow is unfamiliar. Remember that you can always contact OpenAir Support for more information and assistance. To enable new features, request that the latest OpenAir Bundle be installed. See [Contacting NetSuite and OpenAir](#) and open a support ticket.

To set up some optional features, you must configure specific settings in both applications. To set up other features, you must run the integration to establish and exchange data. Because of that, these procedures address steps you take in each application. We recommend that you log in to both your OpenAir account and your NetSuite account while you implement each of the following features.

- [Configuring the Classifications to Hierarchies Integration](#)
- [Configuring Email Options](#)
- [Configuring the Expense Report to Vendor Bill Integration](#)
- [Configuring the Invoices Integration](#)
- [Configuring Multiple Currencies](#)
- [Configuring the Exchange Rate Integration](#)
- [Configuring the Opportunity to Project Integration](#)
- [Configuring the Projects Integration](#)
- [Configuring the Purchases/Vendor Bills Integration](#)
- [Configuring the Real-Time Integration](#)
- [Configuring Multi-Threading Support](#)
- [Configuring Revenue Recognition](#)
- [Configuring the Sales Order Integration](#)
- [Configuring the Salesforce.com Integration for Customers and Projects](#)
- [Configuring Scheduling Options](#)
- [Configuring NetSuite Single Sign-On](#)
- [Configuring the Tax Export Integration](#)
- [Configuring Tax Override for Canadian Expense Reports](#)
- [Configuring the Time Entries Export Integration](#)
- [Configuring Work In Progress Accounting and Intercompany Journal Entries](#)

After both software applications have been configured properly, you can transfer data and use these specific features.

Configuring the Classifications to Hierarchies Integration

You can transfer NetSuite classifications to OpenAir and use them on OpenAir records as hierarchies. While classifications already exist on the NetSuite employee form, you can create a custom entity field to display them on projects and customers forms. Select desired values when you create or edit the entity records in NetSuite, and transfer the classification values to OpenAir. Once in OpenAir, each of

the NetSuite classification types becomes a hierarchy. Each hierarchy type also includes a list of the OpenAir records that use the hierarchy.

NetSuite classification types include department, classes, location, and in OneWorld accounts, subsidiaries. Subsidiary displays on customer, project, and employee forms in OneWorld accounts. Now, you can add the ability to select all of these classification types on the records you desire. This can be very helpful for reporting purposes. For example:

- Create departments for groups of employees such as sales teams or financial administration groups and track information on their performance.
- Create classes to categorize records involving finances, transactions, and groups of employees. Track income and expenses separately to gain insight into the performance of a class.
- Create locations for each of your company's locations so you can track the performance of employees and transactions by those locations. You can distinguish between physical locations such as a corporate headquarters and division offices or between functions such as warehouses in different geographic locations.
- If you have a OneWorld account, create subsidiaries to manage data for a hierarchical structure within the company. For example, Asian Pacific operations might be grouped under an APAC subsidiary and include child subsidiaries in Australia, Japan, and Hong Kong.

You can edit each hierarchy in OpenAir and select it to display on entity forms as custom fields. Using these custom fields, you can map the classification values from the NetSuite custom entity fields to OpenAir Projects, Customers, and Users for the classification options you have chosen to implement. If there is a parent/child structure for a classification in NetSuite, the classification is assigned the same level in OpenAir.

To enable the Classifications to Hierarchies integration in NetSuite:

1. To view or edit classifications in NetSuite, go to Setup > Company and select one of the Classifications: Departments, Locations, and Classes. In OneWorld accounts, Subsidiaries are also listed. You can create new classification values or choose to use the ones you have already identified.
2. To set up custom fields that display on NetSuite Customers and Projects forms for class, department, and location, go to Setup > Customization > Entity Fields > New and create the custom entity fields. See [To set up Custom Entity Fields in NetSuite for Classifications](#):

To enable the Classifications to Hierarchies integration in OpenAir:

This integration does not require a bundle upgrade. Once you specify classification options, the integration automatically creates hierarchies and hierarchy levels. However, if you have existing OpenAir hierarchies, you can specify mapping so that you can maintain current hierarchies and hierarchy levels.

1. **NetSuite integration administration form:** Contact OpenAir Support and request the Classification options you would like to have enabled. Refer to the following:
 - Identify the NetSuite entities and classifications. They transfer to the related OpenAir entities, and the integration creates new OpenAir hierarchies that can display on OpenAir entity forms.

| NetSuite Entity | NetSuite Possible Classifications | OpenAir Entity | Creates New OpenAir Hierarchies - Displays on OpenAir form |
|-----------------|-----------------------------------|----------------------|--|
| Customers | Class Department Location | Customers or Clients | Customer Class Customer Department Customer Location |

| NetSuite Entity | NetSuite Possible Classifications | OpenAir Entity | Creates New OpenAir Hierarchies - Displays on OpenAir form |
|-----------------|---|----------------|--|
| | Subsidiary - (OneWorld only) | | Customer Subsidiary (OneWorld accounts only) |
| Employees | Class Department Location Subsidiary - (OneWorld only) | Users | User Class User Department User Location User Subsidiary (OneWorld Accounts only) |
| Projects | Class Department Location Subsidiary - (OneWorld only) | Projects | Project Class Project Department Project Location Project Subsidiary (OneWorld Accounts only) |

- After you set up Custom Entity Fields in NetSuite, provide the name of the custom entity field (i.e., custentity#) to OpenAir Support so that the NetSuite custom field names can be added to the **NetSuite integration administration** form.
2. Once the integration is enabled, new check box custom fields display in your OpenAir account on Hierarchy forms. They relate to the NetSuite Classifications you select for OpenAir Hierarchy mapping as well as levels and nodes. To view the custom fields, go to Administration > Global Settings > Custom Fields. The following fields are hidden by default.
 - netsuite_hierarchy_node_class
 - netsuite_hierarchy_node_department
 - netsuite_hierarchy_node_id
 - netsuite_hierarchy_node_location
 - netsuite_hierarchy_node_subsidiary
 3. After selecting the mapping classification options for customers, employees, and projects, the following additional custom fields are created and also display as OpenAir Hierarchies. You can edit the hierarchies and select check boxes to display them when editing forms. There are also options to make input required, and you can choose to display them as a column on list views. Since there are four NetSuite classifications, you can create four hierarchies for each OpenAir entity type, i.e., user, customer, and project. The custom fields that transfer to OpenAir include:
 - netsuite_hierarchy_class
 - netsuite_hierarchy_department
 - netsuite_hierarchy_location
 - netsuite_hierarchy_subsidiary
 4. You can also use existing OpenAir hierarchies in this integration. Before assigning the new hierarchies that were created through the integration to OpenAir entities on OpenAir forms, delete the new hierarchies and map the information to an existing hierarchy. See [To map NetSuite classification types to existing OpenAir hierarchies](#):

Implementing NetSuite Classifications to OpenAir Hierarchies

To implement the classification to hierarchies exchange of information, review the NetSuite Classifications and see which you would like to use on records in OpenAir. You may use them all,

a subset, or add to the existing classifications. Next, you need to create custom entity fields in NetSuite and apply them to projects and customers forms so that you can select the values for the classifications. Remember, classifications already exist on employees forms, and if your account is a OneWorld account, subsidiaries already display. You have the option of exporting subsidiary values to OpenAir as well.

To set up Custom Entity Fields in NetSuite for Classifications:

1. Go to Setup > Customization > Entity Fields.
2. Type a Label.
3. Using the drop-down list, select the type as List/Record.
4. Under List/Record, select New. A New Custom List window displays.
5. Type the Name and any descriptive information.
6. Select the desired order.
7. Click Values and type a Value. Click Translation and type the value translated into other languages. Click Add to add information and display a space for additional values.
8. When done, click Save.
9. Select the check boxes to Store Value and Show in list. Then, you can use the same lists on another custom entity field.
10. Click the forms the custom entity field applies to and select the Apply to Forms button. Click Save. NetSuite displays it on the forms identified.
11. Make a note of the custentity and send it in a message to OpenAir Support for configuring the integration.

To map NetSuite classification types to existing OpenAir hierarchies:

1. Go to Administration > Global Settings > Custom Fields and select one of the custom fields automatically created by the integration. Clear the check box to Hide on data entry forms. Click Save.
2. Go to Administration > Global Settings > Hierarchies and select the hierarchy that was automatically created by the integration. Click the Delete button.
3. Locate the existing hierarchies you want to use in the integration and display the Edit form. Select the custom fields to indicate the type of NetSuite classification that corresponds to each hierarchy.
4. Click on the Levels link and click on a Level. Select the custom fields to indicate the type of NetSuite classification that corresponds to each hierarchy level. Enter the depth of that level in the NetSuite ID custom field. For example, if this is the parent level, enter 1 in the NetSuite ID custom field. If it is one level below the parent, enter 2 in the NetSuite ID custom field.
5. Click the Nodes link and select the node name. The Edit hierarchy node form displays. Ensure the nodes correspond to the parent and child relationships found in NetSuite.



Note: The NetSuite ID entered in the custom field on the OpenAir Edit hierarchy node form should correspond to the NetSuite ID of the classification in NetSuite. To verify this in NetSuite, go to Setup > Company > Locations.

Configuring Email Options

The integration allows you to receive email notifications every time you run the integration automatically. You may also specify individuals to receive an email notification only when an error

occurs. For integrations that routinely schedule multiple runs in one day, it may be helpful to view results only when an anomaly occurs.

Note: Select the **Email log for manual integration run** check box if you wish to receive email notification when the integration is run manually by pressing the "Save & Run" button or when the "Import NetSuite exchange rates for today" link is clicked. When the box is not checked the log that is printed to the browser for a manual integration run will not be sent via email.

The two types of email options are:

- **Email the results to** — sends an email of the results of each integration run to the recipients specified.
- **Email the errors to** — sends an email to the recipients specified only when errors occur during the integration run. The email message is titled ERROR, and if you specify the HTML option, error messages are highlighted in red. A complete log is attached to the email message.

To enable Email Options in OpenAir:

Both of these email features are automatically enabled in your account for scheduled runs. You can implement their use by entering the requested information at the bottom of the **NetSuite integration** form. Go to Administration > Global Settings and select the link for Integration: NetSuite.

To set up Email the result to:

1. Type email addresses for the recipients of the integration results in the Email the results to text box.
2. Enter as many addressees as desired. Simply place a comma between multiple addresses.

Note: You must set up **Email the results to** before you can use the secondary option of simply having only errors sent via email.

3. Select the check box for Send HTML email if your email client supports enhanced formatting such as the addition of color. If selected, errors display in red.

Note: If the **Send HTML email** check box is selected, it is applicable to both configurations: Email the result to: and Email the errors to:


4. Select the **Email log for manual integration run** check box if you wish the recipients of the integration results to receive a copy of the log via email when the integration is run manually.

To set up Email the errors to:

1. Type email addresses for the recipients of the integration errors in the Email the errors to text box.
2. Select the check box for Send HTML email if your email client supports enhanced formatting such as the addition of color. If selected, errors display in red.
3. Enter as many addressees as desired. Simply place a comma between multiple addresses.


Note: You must set up **Email the results to** before you can use the **Email the errors to** feature.

4. Select the **Email log for manual integration run** check box if you wish the recipients of the integration errors to receive a copy of the log via email when the integration is run manually.

 **Note:** The log is filtered so only the errors are sent in the email.

Configuring the Expense Report to Vendor Bill Integration

You can export subcontractors or vendors to OpenAir as users and assign them as resources to projects. When they submit an expense report that is approved in OpenAir, it automatically transfers to NetSuite as a vendor bill during an integration run. The vendor bill can be for an individual or a parent vendor or subcontracting company. If you are using the Tax Export Integration for expense reports, you can also use it with this feature. It transfers specific taxes for a location to the vendor bill just as it does for expense reports. See [Configuring the Tax Export Integration](#).

 **Note:** Cross-subsidiary vendor-related project expenses are not supported. In OneWorld accounts, the vendor and the Customer : Project must be in the same subsidiary.

Authorizations that request advance approval of future expenses are not supported and receipts should be in the currency of the vendor or the parent vendor. You specify currency on the Vendor form in NetSuite. Since the NetSuite Vendor form does not list receipt dates or missing receipts, this information does not transfer from OpenAir.

All features available for the standard expense report integration apply, except for the creation of negative expense report lines. Currently, there is no way of automatically creating negative expense report lines in NetSuite for non-reimbursable expenses through this integration.

The NetSuite vendor bill displays expenses under the Expenses tab and references NetSuite expense categories that are related to OpenAir expense items. See [Sharing Core Data](#), [Working with Expense Categories in OpenAir](#), and [Working with Expense Reports in NetSuite](#). Custom mappings are available for both header and line-levels of the vendor bill. See [Using Advanced Settings](#).

All billable expenses from vendors display under the Billable Expenses tab when creating invoices. This is the same billable functionality that is in place for standard expenses and invoicing. When billing is run in OpenAir and expenses are re-billed to a customer, the invoice exports to NetSuite in the same way re-billed expenses export from an expense report. See [Working with Expense Reports in NetSuite](#).

This feature eliminates a previous limitation involving vendors and the purchase order integration. Previously, you could not use the vendor to user and vendor to purchase order integrations simultaneously. Now, you can use both integrations. Vendors can be transferred to OpenAir as users and can also be transferred to OpenAir as vendors and used as part of the purchase order integration.

To enable the Expense Report to Vendor Bill Integration in NetSuite:

1. Make sure you are using the latest version of the OpenAir Integration Bundle. It should be 1.18 or higher. Custom fields are added to your account for vendor bills.
2. Go to Setup > Company > General Preferences > Custom Preferences and select the check box for Expense Report - Vendor Bill Integration. If using the Tax Export Integration, select the check box for Exp Rep To Vendor Bill Taxes. See [Configuring the Tax Export Integration](#).

To enable the Expense Report to Vendor Bill Integration in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request that some or all of the following features be enabled:
 - Enable OpenAir Expense report to NetSuite vendor bill integration
 - Enable NetSuite vendor to OpenAir user integration

- Enable NetSuite expense report/vendor bill reimbursement integration (optional)
 - Enable tax export on Expense reports (optional)
2. **NetSuite integration** form: Select the check box for Expense Reports (Expense Reports) under Send data to NetSuite.

Note: The integration uses the Expense Reports (Expense Reports) check box under Send data to NetSuite. No additional check boxes are added to the **NetSuite integration** form.

Implementing the Expense Report to Vendor Bill Integration

The bundle adds custom fields to both the NetSuite Vendor form and the OpenAir user demographic form. Use these custom fields to implement the integration. If you are using both the purchase order integration and the expense report to vendor bill integration and you already have vendors set up in NetSuite that transfer to OpenAir, go back into the records in NetSuite and enter new information for this integration.

The following describes the custom fields on the NetSuite Vendor form.

| Custom Field | Description | Use |
|---|--|---|
| OpenAir: User Tax Nexus Type | Displays when the tax export integration is used and lists the Tax Nexuses created for your NetSuite account | Select Tax Nexus Type from drop-down list. Required when tax export integration is used. |
| OpenAir: User or Vendor | Identifies if this record is used as a user or vendor in OpenAir | Select User or Vendor from drop-down list. Required when both purchase order and expense report to vendor bill integrations are used. |
| OpenAir: User Currency | Identifies user currency | Type user currency. This changes to a number after you save the form. |
| OpenAir: Parent Vendor | Identifies parent vendor | Select parent vendor from drop-down list |
| OpenAir: Map Exp. Rep. to Vendor Bill | Indicates when to map user expense report to a vendor bill | Select check box when expense reports should map to a vendor bill |
| OpenAir: Map Exp. Rep. To Parent Vendor | Indicates when to map user expense report to a parent vendor bill | Select check box when expense reports should map to a parent vendor bill |

There is also an OpenAir Expense Report Creator field that is added to vendor bills in NetSuite. It captures the user who created the expense report in OpenAir and displays automatically from the OpenAir record. The OpenAir expense report number also displays.

The following shows the custom fields that display on the OpenAir user demographic form.

☐ Export Expense reports from this user as NetSuite vendor bills
NetSuite Parent Vendor ID

☐ Export Expense reports from this user to the NetSuite parent vendor
NetSuite Vendor ID

It is important that you select the vendor and parent vendor information on the vendor record in NetSuite. When you run the integration, the ID numbers display automatically on the OpenAir user demographic form and correspond to the selections you made in NetSuite. The appropriate check boxes are also selected and indicate whether the OpenAir user bills are sent to NetSuite as a vendor bill or a parent vendor bill.

It is also important to verify in OpenAir that you have the proper custom fields for the integrations you have enabled. While you may not have to do anything, there is one situation in which you may have to edit a custom field. Review the following information.

| If you are using... | Custom field is automatically created for... | Action |
|---|---|--|
| Only one vendor integration | The integration you are using. It is associated with either the vendor or user entity. | No action required |
| Vendor to vendor and vendor to user integrations | netsuite_vendor_id (assoc. with vendor) netsuite_vendor2_id (assoc. with user) | No action required |
| Vendor to user integration AND want to add the vendor to vendor integration now | netsuite_vendor_id (assoc. with user) - This field was created when you began using the vendor to user integration. netsuite_vendor_id (assoc. with vendor) - This is a new custom field for the vendor to vendor integration. | <ul style="list-style-type: none"> ■ Edit old custom field assoc. with user to be netsuite_vendor2_id ■ Ensure field not used with other integration. ■ Edit reports if field is used on reports. |

To send Expense Reports from OpenAir to NetSuite Vendor Bills:

1. In NetSuite, set up vendor and parent vendor records and transfer to OpenAir through the integration. See [Running the Integration](#).
2. In OpenAir, assign vendors to projects, approve vendor expense reports submitted against those projects, and transfer the information to NetSuite through the integration. See [Running the Integration](#).
3. In NetSuite, reimburse vendor bills and transfer the information to OpenAir through the integration. See [Running the Integration](#).
4. In OpenAir, go to Expenses > Expense reports > Reimbursed and click on an expense report. Click Reimbursements to see reimbursement to Vendor Bills from NetSuite.

Configuring the Invoices Integration

You can create invoices in OpenAir and transfer them to NetSuite. Then, you can record credit memos, payments, and deposits against them in NetSuite, run the integration, and export that information back to OpenAir. Credit memos are imported as negative invoices in OpenAir with the credited amount reflected on the original OpenAir invoice. Payments form part of the OpenAir invoice record and deposits become OpenAir retainers. The invoices integration allows a high degree of flexibility in managing your projects, recording financial information, and tracking invoices and related payments and deposits.

You can also import invoice taxes from NetSuite into the OpenAir invoice, including GST and PST taxes. Set up the Advanced Taxes accounting feature in NetSuite and enable Tax Options in OpenAir. Set up

nexus in NetSuite for the countries or locations from which taxes will be paid and create or identify the tax codes or tax groups for each nexus. When you export an invoice to NetSuite, taxes on the total amount are calculated in NetSuite and import back to the invoice in OpenAir.

If you have specific OpenAir project-related header information that you would like to transfer to NetSuite, you can do so using the Advanced Settings text area on the **NetSuite integration** form.

To enable the Invoice feature in NetSuite:

1. Go to Setup > Company > Enable Features > Accounting and select the check boxes for A/R and A/P. This provides the ability to invoice your customers when you deliver goods or services. You can also offer payment terms and track payments.
2. If you are going to use the import invoice taxes integration, go to Setup > Company > Enable Features > Accounting and select the check box for Advanced Taxes under Advanced Features. Then, go to Setup > Company > General Preferences and select the check box under the Custom Preferences tab for Enable OpenAir Invoice Tax Export.
3. Make sure you are using the latest version of the OpenAir Integration bundle. The NetSuite credit memo integration requires 1.22 or higher. Custom fields are added to your account for invoices.

To enable the Invoices features in OpenAir:

There are a number of invoice related features you can optionally choose to enable in the integration. Refer to the following:

1. **NetSuite integration administration** form: Contact OpenAir Support and request that some or all of the following features be enabled:
 - Import taxes applied to exported invoices
 - Enable NetSuite credit memo integration for invoices
 - Map the charge type from the NetSuite credit memo (used with the credit memo integration feature)
 - Enable NetSuite payment integration for invoices
 - Enable NetSuite customer deposit integration for invoices
 - Enable the OpenAir invoice link mapping to NetSuite
 - Disable NetSuite service type filtering for activities in NetSuite integration (Choose this filtering option if you do not want to limit activities to service type.)
 - Combine charges by activity on invoices (Choose this option if you want to roll up non-expense charges by category, service, or activity on invoices.)
 - Always respect the NetSuite sales order customer and project when exporting invoices (Choose this option to transfer NetSuite sales order information such as Sales Team back to NetSuite on invoices you export from OpenAir.)
2. **NetSuite integration** form: Select the related check boxes under Get data from NetSuite.
 - Select the Payments (Invoice Payments) check box if you have the payment integration for invoices enabled
 - Select the Retainers (Applied Customer Deposits) check box if you have the customer deposit integration for invoices enabled
 - Select the Credits (Applied Credit Memos) check box if you have the credit memo integration for invoices enabled.
3. **NetSuite integration** form: Select the check box for Invoices (Invoices) under Send data to NetSuite.

Implementing the Invoices Integration

Once you enable the features you want in the invoices integration and run the integration, invoice information is exchanged between the two applications. Use the OpenAir invoice layout flexibility along with NetSuite's financial record keeping to maximize your project management. When you record invoice information in NetSuite on an invoice imported from OpenAir, it transfers back to OpenAir when you run the integration. Limitations include:

- When an expense charge is manually created in an OpenAir invoice, it can be sent to NetSuite if there is a service assigned to it, however, it displays in NetSuite as a service charge instead of a billable expense.
- An invoice must contain only NetSuite services or an error message displays. You cannot transfer services that are manually created in OpenAir on an invoice to NetSuite.

Each of the invoices integrations is implemented a little differently. Refer to the following procedures for more information.

- [Importing Invoice Taxes](#)
- [Credit Memo Integration for Invoices](#)
- [Payment Integration for Invoices](#)
- [Customer Deposit Integration for Invoices](#)
- [Combining Non-Expense Charges on Invoices](#)
- [Exporting OpenAir Project Information to NetSuite Invoice](#)
- [Exporting NetSuite Sales Order Information with OpenAir Invoice](#)

Importing Invoice Taxes

You can send an OpenAir invoice to NetSuite, calculate taxes in NetSuite, and transfer the total tax amount on that invoice back to OpenAir. The tax amount displays on the OpenAir invoice. Taxes are in the currency specified for that customer in NetSuite. To use this feature, advanced taxes must be enabled in NetSuite.

To set up tax locations in NetSuite and import invoice taxes to OpenAir:

1. In NetSuite, go to Setup > Accounting > Nexuses and create nexuses for the countries or locations from which taxes will be paid.
2. In NetSuite, create or identify the Tax Codes or Tax Groups for each nexus. Tax codes and tax groups pay tax as configured in the nexus.
3. In NetSuite, go to Lists > Relationships > Customer and select a customer. Click the Financial tab and enter tax information. You may have to select the Standard Customer Form to display the Financial tab.
4. In OpenAir, create and approve an invoice for a NetSuite customer for which you have identified financial tax information.
5. Run the integration. Refer to [Running the Integration](#).
6. In OpenAir, go to Invoices > Approved and select the invoice. It displays the total tax amount on the OpenAir invoice based on the financial information specified for that customer in NetSuite.

Credit Memo Integration for Invoices

A credit memo in NetSuite applied to an invoice originating in OpenAir can transfer back to OpenAir. If you specify a charge type in OpenAir, it transfers with the invoice and displays on the NetSuite Invoice

line item. When you import it, OpenAir creates a negative invoice with the total negative charge and includes the charge type. It displays both the NetSuite invoice number and the NetSuite credit memo ID numbers as well as the following information:

- Charges on line items on the negative invoice show a negative quantity or negative number of hours.
- The Credit field on the negative invoice has a value equal to -1 times the credit amount.

A credit is added to the OpenAir invoice that is being credited by the credit memo. In addition, any tax for the credit memo is also imported in the OpenAir negative invoice when you have selected the OpenAir feature to Import taxes applied to exported invoices. To enable this feature, create a support ticket and send it to OpenAir Support. See [Contacting NetSuite and OpenAir](#).

To apply NetSuite credit memos to OpenAir invoices:

1. In OpenAir, go to Invoices and create and approve an invoice for a project and company with a NetSuite ID. Run the integration to export it to NetSuite.
2. In NetSuite, ensure there is a transaction column field for Credit Memo to OpenAir and ensure it displays on the Invoice form when the Items subtab displays.
3. In NetSuite, go to Sales > Create Invoices > List and locate the invoice. Click the View link next to the invoice you imported from OpenAir. The Invoice form displays.
4. Click the Credit button. The Credit Memo form displays and the Items subtab expands to display invoice line items.
5. Click on the line that displays an invoice charge you would like to credit. Edit the amount and quantity information to reflect the credit. Do this for each line you would like to credit. The Items tab recalculates and displays the amount after credits are deducted.
6. Click the Apply subtab under the Items subtab.
7. Select the check box next to the invoice you are crediting and enter the Payment amount. If you uncheck and recheck the box, the amount automatically calculates and displays. It is the same amount as the item amount. Click Save.



Important: If more than one invoice displays, ensure that you check the box for the invoice you are currently working on in NetSuite.

8. In OpenAir, run the integration. The credit memo # and amount display on the original OpenAir invoice. In addition, OpenAir creates negative charges for each line on the credit memo and puts them in an OpenAir negative invoice.
9. In OpenAir, go to Invoices > Approved and select the negative invoice. The Applied NetSuite credit memo # displays along with the amount credited on the invoice and charge type is respected from the NetSuite invoice line item.



Note: For existing NetSuite invoices that do not have a charge type specified, credit memos created from them also do not have a charge type specified. However, you can select a charge type on the credit memo and it will be respected in the integration. If no charge type is specified, the integration determines charge type by looking at quantity, i.e., hours or fixed fee.

To apply OpenAir credit memos (negative invoices) to NetSuite invoices:

1. In OpenAir, ensure that you have the “Enable NetSuite credit memo integration for invoices” switch enabled in NetSuite integration administration.

To enable this switch:

1. Navigate to Administration > Integration: NetSuite, then click the Tips button and click "NetSuite integration admin."
 2. Enter your NetSuite integration password in the Password field, select the checkbox for "Enable NetSuite credit memo integration for invoices", and click **Save**.
 3. Click **Close** to return to the NetSuite integration.
2. If using the new UI, click **New workflow** and select "Send OA Credit (negative invoice) as NS credit memo" to add this workflow if it has not already been added. Adding this workflow creates the mappings necessary to send negative invoices from OpenAir to NetSuite.
- If using the old UI, select the checkbox for **Send OA Credit (negative invoice) as NS credit memo**.
3. Any additional advanced mappings which you need should follow the following format:

```
<CREDIT_TO_CREDIT_MEMO>
  OA_FIELDS ...
  NS_FIELDS ...
</CREDIT_TO_CREDIT_MEMO>
```

```
<CREDIT_MEMO_ITEM>
  NS_FIELDS ...
  OA_FIELDS ...
</CREDIT_MEMO_ITEM>
```

Payment Integration for Invoices

You can apply payments in NetSuite to charges on an invoice imported from OpenAir and transfer that information back to OpenAir, thereby decreasing the invoice amount in OpenAir. Payments display on the Invoice and the Payments form in OpenAir and can also be listed in detail reports.

To apply NetSuite payments to OpenAir invoices:

1. In OpenAir, go to Invoices and create and approve an invoice for a project and company with a NetSuite ID. Run the integration to export it to NetSuite.
2. In NetSuite, go to Transactions > Sales > Create Invoices and locate the invoice. Click the View link next to the invoice you imported from OpenAir. The Invoice form displays.
3. Click the Accept Payment button.
4. Enter payment information and click Save.
5. Run the integration.
6. In OpenAir, go to Invoices > Approved and select the invoice. The payment displays on the Invoice. Click the Payments link and payment information displays on the Payments form, including the NetSuite payment ID #.

Customer Deposit Integration for Invoices

You can transfer information about customer deposits made in NetSuite to retainers in OpenAir. Subsequently, payments are deducted from the retainer amount in OpenAir for that customer's invoices. The retainer information displays on the Retainer form in OpenAir and can be listed in detail reports.

Note: Only the amount of the NetSuite customer deposit applied to the invoice is transferred to OpenAir. For example, if the customer deposit in NetSuite is \$10,000, but only \$1,000 is applied to the OpenAir invoice, the integration creates a \$1,000 retainer in OpenAir and draws \$1,000 for the invoice.

To apply NetSuite customer deposits to OpenAir invoices:

1. In OpenAir, go to Invoices and create and approve an invoice for a project and company with a NetSuite ID. Run the integration to export it to NetSuite.
2. In NetSuite, go to Transactions > Customers > Record Customer Deposits. The Customer Deposit form displays.
3. Select the Customer and enter the Payment Amount, as well as any additional payment or account information. Click Save.
4. Go back to Transactions > Customers > Record Customer Deposits > List. Click the View link next to the deposit.
5. Click the Apply button. The list of invoices for that customer displays.
6. Select the check box by the invoice you want to pay and enter the payment amount.
7. Click Save.
8. Run the integration.
9. In OpenAir, go to Invoices > Approved and select the invoice. The draw against retainer payment displays on the Invoice.
10. Go to Retainers > All and select the customer. The Edit the retainer form displays the retainer information that was applied to the invoice. Information includes the NetSuite customer deposit ID # and the OpenAir invoice #.

Combining Non-Expense Charges on Invoices

You can roll up non-expense charges on invoices so that they display as one line item on a NetSuite invoice. While this does not change the way the invoice displays in OpenAir, it does change the way invoices display in NetSuite. Non-expense charges roll up by project and then by category, service, or activity and display as one line item under the Items subtab on the NetSuite invoice. First, the integration combines the charges by project, and then it rolls them up by category, service, or activity.

This feature does not roll up billable expenses. To change the display of billable expenses in NetSuite, go to Setup > Accounting > Invoicing Preferences > Combine Expense Items on Invoices.

There was a previous limitation that involved using this feature in conjunction with the Sales Order integration. That limitation no longer exists. You can use all of the features in the Sales Order integration and still combine non-expense charges on invoices. See [Configuring the Sales Order Integration](#). However, charges that do not reference a customer PO are rolled up by project and then item. If time and fixed-fee charges do reference a customer PO, they are rolled up by customer PO/ sales order line and display on the NetSuite invoice.

Note: This feature does not use the ordering logic available on invoice layouts. The order of the combined charges is grouped by project and then service item, but the actual order of the service items per project is random.

Exporting OpenAir Project Information to NetSuite Invoice

You can export OpenAir project information to the NetSuite invoice header. This allows you to transfer project-specific information, which may be in the form of OpenAir custom fields, to display in the NetSuite invoice header. Use this project-specific information for reporting. See [PUSH Integration](#)

[Point Tags](#) in [Using Advanced Settings](#). You may want to consult with OpenAir Professional Services for assistance in configuring this feature. See [Contacting NetSuite and OpenAir](#).

To enable exporting OpenAir Project Information to NetSuite in NetSuite:

Go to Setup > Accounting > Accounting Preferences. Select the Items/Transactions tab. Under Sales & Pricing, ensure the check box is NOT selected for Consolidate Projects on Sales Transactions.

To enable exporting OpenAir Project Information to NetSuite in OpenAir:

Go to Administration > Application Settings > Invoices Settings and select the check box for One project per invoice.

Exporting NetSuite Sales Order Information with OpenAir Invoice

When an OpenAir invoice is connected to a NetSuite sales order, NetSuite copies the customer and project information, including the sales team, to the NetSuite version of the invoice. This is similar to the functionality that exists when you create an invoice from a sales order in NetSuite and click Bill or Bill Next. See [Exporting NetSuite Sales Order Information with OpenAir Invoice](#) in [Configuring the Sales Order Integration](#).

Configuring Multiple Currencies

When you do business in different countries, you often need to share financial data and account for transactions using foreign and default or base currencies. If you use multiple currencies in either NetSuite or OpenAir, set up and enable multiple currencies in both accounts as part of the integration.

To enable Multiple Currencies in NetSuite:

Go to Setup > Company > Enable Features > Company and select the check box for Multiple Currencies under International and Save.

To enable Multiple Currencies in OpenAir:

1. Contact OpenAir Support and request that the following internal switch be enabled in your account: Enable multi-currency.
2. Go to Administration > Global Settings > Currencies under Organization. Click the link for Multi-currency. Select the currencies you are using and click Save. The first currency is the default currency.

Configuring the Exchange Rate Integration

When using multiple currencies in NetSuite and OpenAir, it is helpful to ensure both applications use the latest exchange rates and cross rates, and that the values are the same. The exchange rate integration has two options and they can be used together.

- First, you can enable a switch and configure the integration to set up an automatic exchange rate update on a daily basis. When you use this, OpenAir automatically pulls NetSuite exchange rates and sets the same rates in OpenAir for today's date. It is not possible to pull rates for other days.

- Second, you can enable an additional switch to support multiple base currencies for cross rates in OneWorld accounts.

Note: Both applications should be using the same list of currencies. To verify that NetSuite and OpenAir are using the same list of currencies, refer to the following:

- In NetSuite, go to Lists > Accounting > Currency Exchange Rates.
- In OpenAir, go to Administration > Global Settings > Currencies and select Multi-currency.

To enable the Exchange Rate integration in OpenAir:

1. Enable the use of multiple currencies in both NetSuite and OpenAir. Refer to [Configuring Multiple Currencies](#).
2. **NetSuite integration administration** form: Contact OpenAir Support and request the following: Enable NetSuite exchange rate integration.
3. Request that OpenAir Support specify a time to run the integration.

To enable support for multiple base currencies for cross rates in OneWorld accounts:

1. Enable the NetSuite exchange rate integration. See previous procedure: [To enable the Exchange Rate integration in OpenAir](#).
2. **NetSuite integration administration** form: If your NetSuite account is a OneWorld account, contact OpenAir Support and request the following: Support multiple base currencies for cross rates (OneWorld only).
3. In NetSuite, go to Setup > Company > General Preferences and select the Custom Preferences tab. Select the check box: Exchange Rate Integration - OneWorld.
4. In OpenAir, schedule the integration to run to import exchange rates from NetSuite. The integration log is sent to the email addresses specified on the **NetSuite integration** form. See [Configuring Email Options](#).

Note: OpenAir calculates the cross rates between two non-base currencies against the root subsidiary base currency in NetSuite. NetSuite does not calculate cross rates between two non-base currencies, only base currency to foreign currency rates.

Note: Use the getCurrencyRate NetSuite API operation to retrieve exchange rates from NetSuite.

Configuring the Opportunity to Project Integration

You can create an opportunity in NetSuite and transfer an associated project to OpenAir. Once the project is in OpenAir, develop a work breakdown structure for the project that includes phases/tasks and hours and transfer the default timesheet activities and planned hours as items back to the opportunity in NetSuite, where you can then edit and further enhance them. Total planned hours are combined and a total for each item displays on the NetSuite Opportunity form. Pricing is applied in NetSuite.

Using the OpenAir Projects application helps you better define an opportunity and scope out a potential project. There is an internal switch your company can optionally enable to determine the activity from tasks/phases in the work breakdown structure. You may add tasks and users to a project in OpenAir as needed and transfer the updates to the opportunity in NetSuite as many times as required. Updates are made on a project-by-project basis for each opportunity using a link in tips on

either the OpenAir Projects Phases/Tasks: List or Outline forms. These updates do not function as part of an integration run and cannot be scheduled.

Note: Since the integration uses planned hours instead of assigned hours, you can assign planned hours to a user or you can choose to assign planned hours per task or use task assignment at the project level.

This integration uses service items from NetSuite and the related OpenAir Timesheet or Invoices activities, so these records need to be present in both applications. The corresponding NetSuite service items must contain rate information. The integration uses the default rate the first time items are added to the opportunity. Subsequent updates respect the rates if they were changed. Customers must also exist in both applications as well. See [Sharing Core Data](#).

To enable the Opportunity to Project Integration in NetSuite:

1. Make sure you are using the latest version of the OpenAir Integration Bundle. It should be 1.19 or higher. A custom field is added to the Projects form for OpenAir: Opportunity. To associate a project with an opportunity, select the opportunity number using the drop-down list. This task can be automated using a SuiteScript. See below.
2. Ensure rate information is associated with items. Go to Lists > Accounting > Items and click on an item. Click on Pricing to edit or add rate information.
3. (Optional) Contact OpenAir Professional Services and request that a SuiteScript be deployed to automatically create a project from an opportunity and associate the two. If deployed, a custom field is added to the Opportunity form for OpenAir: Create Project.

To enable the Opportunity to Project Integration in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request that the following feature be enabled: Enable OpenAir project to NetSuite opportunity integration.
2. Specify which OpenAir users have permission to perform updates to NetSuite opportunities on the OpenAir user demographic form. Select the check box under Projects Options for: The user can update a NetSuite opportunity from a project work breakdown structure. The following link is added to Projects: Update the NetSuite opportunity line items. It displays on the Projects forms for task list or task outline in tips.
3. (Optional) If desired, contact OpenAir Support and request that the following internal switch be enabled: Enable the feature to determine the activity to be set in transactions by searching the task and phase work breakdown structure. This allows you to set an activity at the phase/task level and have it apply also at the task level.

Implementing the Opportunity to Project Integration

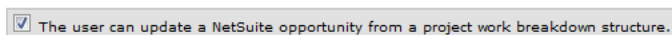
The bundle adds custom fields to both applications. They include:

- NetSuite project form:



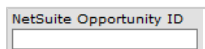
A screenshot of a NetSuite form field. The label is 'OpenAir: Opportunity'. It is a dropdown menu with a small arrow icon on the right. Below the dropdown is a small icon of a document with a magnifying glass.

- OpenAir user demographic form:



A screenshot of a checkbox in the OpenAir user demographic form. The checkbox is checked, and the text next to it is 'The user can update a NetSuite opportunity from a project work breakdown structure.'

- OpenAir project properties form:



A screenshot of a text field in the OpenAir project properties form. The label is 'NetSuite Opportunity ID'. The field is empty.

To implement the Opportunity to Project integration:

1. In NetSuite, go to Transactions > Sales > Create Opportunities. Identify the Company and add a Project. Complete other required information. Click Save.
2. In NetSuite, go to Lists > Relationships > Projects > List and locate the project that was created from the opportunity. Find the OpenAir: Opportunity custom field. You may need to change your project form to display the field. Use the drop-down list and select the opportunity number of the opportunity you just created. Click Save.

Note: You can contact OpenAir Professional Services and request that a SuiteScript be deployed to automatically create a project from an opportunity and associate the two.

3. In OpenAir, run the integration. See [Running the Integration](#).
4. In OpenAir, go to Projects > Projects and select the project associated with the opportunity you just created. The Internal ID of the NetSuite Opportunity is listed on the Properties form. Add or update any additional project information and Save.
5. In OpenAir, add work breakdown structure information such as phases/tasks, duration, and user assignments.

Note: Any hours assigned to a project task that is not associated with a Timesheets or Invoices activity are skipped. Only activities with NetSuite IDs transfer to items in the NetSuite opportunity. See [Sharing Core Data](#).

6. To transfer the project information back to the NetSuite opportunity, click the link in tips for: Update the NetSuite opportunity line items

Note: If you do not see the link in tips to Update the NetSuite opportunity line items, contact your Administrator. Permission to perform an update of NetSuite opportunity line items is provided on the OpenAir user demographic form.

7. To view the updated items on the NetSuite opportunity, in NetSuite go to Transactions > Sales > Create Opportunities > List and select the opportunity.

Configuring the Projects Integration

You can exchange project information between NetSuite and OpenAir and use strengths of each application for different project management functions. When you establish a project in NetSuite, you can select a project stage. Then, when you transfer the project to OpenAir, the project stage also transfers. Subsequently, you can update the project in NetSuite by exporting OpenAir project management data. See [Implementing the Import of Project Stages from NetSuite to OpenAir](#) and [Implementing the Export of OpenAir Project Data to NetSuite](#).

When you create a project in NetSuite, you have the option of automatically creating a related Workspace in OpenAir. This provides your project with a work area for teams to access, exchange, and discuss information. See [Implementing the Creation of OpenAir Workspaces when Transferring a Project from NetSuite to OpenAir](#).

You can also create project templates in OpenAir and use them in NetSuite to create new projects. When you run the integration, the project transfers to OpenAir with the information specified. This is similar to the OpenAir functionality that allows you to create a new project from another project and identify the components to duplicate. Using project templates, you can pre-populate new projects with commonly used tasks, billing rules, loaded costs, revenue recognition rules, auto-bill settings, project approvers, and more. It provides a way to efficiently capture and reuse information specific to a particular customer or type of project. See [Implementing OpenAir Project Templates](#).

To enable the Projects Integration in NetSuite:

Make sure you are using the latest version of the OpenAir Integration bundle. It should be version 1.22 or higher for creating project workspaces when you transfer a project from NetSuite to OpenAir. Version 1.21 or higher is required for project stages. The bundle adds the following custom fields to your NetSuite account:

- Custom record for customrecord_oa_project_stages
- Entity custom field on the project form for OpenAir: Project Stage
- Saved search for OpenAir project stages
- Entity custom field on the project form for OpenAir: Create Project Workspace
- Duplicated project settings used in project templates

To enable the Projects Integration in OpenAir:

1. **NetSuite integration administration** form: Contact Openair Support and request that one or all of the following switches be enabled:
 - Map the OpenAir project stage from the NetSuite project
 - Enable project workspace creation
 - Export OpenAir project data to existing NetSuite projects
 - Create new projects based on the project template specified in NetSuite
 - NetSuite project update batch size (maximum of 20). While you can update up to 20 projects during one web services call, for performance reasons, you may chose to update less. See [Contacting NetSuite and OpenAir](#).
2. **NetSuite integration** form: Select the Customers and Projects check boxes under Get data from NetSuite on the **NetSuite integration** form.

Each of the projects integrations has steps to follow for implementation. Refer to the following procedures for more information.

- [Implementing the Import of Project Stages from NetSuite to OpenAir](#)
- [Implementing the Creation of OpenAir Workspaces when Transferring a Project from NetSuite to OpenAir](#)
- [Implementing the Export of OpenAir Project Data to NetSuite](#)
- [Implementing OpenAir Project Templates](#)

Implementing the Import of Project Stages from NetSuite to OpenAir


When you create a project in NetSuite and import it to OpenAir, you can set the project stage in NetSuite and transfer it to OpenAir. First, set up project stages in NetSuite. They must be identical to the project stages in OpenAir. Then, select the OpenAir: Project Stage on the NetSuite Project form. When you run the integration, the project stage transfers to OpenAir.

You may choose to do this only upon the initial import using [OpenAir Fields Initial-Only](#) advanced settings code or every time the project is transferred. If the OpenAir: Project Stage field is left blank on the NetSuite Project form, the integration does not update the project stage in OpenAir. This ensures that a project stage is not accidentally removed.

To set up the import of a project stage from NetSuite to OpenAir:

1. Identify OpenAir project stages. In OpenAir, go to Administration > Application Settings > Projects Settings and select Project stages. The list view displays current OpenAir project stages.

2. Enter the same project stages in NetSuite. In NetSuite, go to Setup > Customization > Record Types and locate OpenAir: Project Stages. Click List (a link to the right). The OpenAir: Project Stages List displays.
3. Click the New button. New OpenAir: Project Stages form displays.
4. Type an OpenAir project stage in the Name field and click Save. Repeat this procedure until you have entered a list of project stages in NetSuite that is identical to the list of project stages in OpenAir.

 **Note:** In the future, if you update OpenAir project stages, make the same update to the project stages in NetSuite so the lists match. Project stages in both applications must be identical or you will receive an error message when you run the integration.

5. In NetSuite, go to Lists > Relationships > Projects > New and create a new project. Enter project information and select a project stage using the OpenAir: Project Stages drop-down list.
6. Run the integration to transfer the project from NetSuite to OpenAir. The project stage also transfers. See [Running the Integration](#). If you want to import the project stage only on the initial integration run, use advanced settings for [OpenAir Fields Initial-Only](#). An example of the code is provided.

Implementing the Creation of OpenAir Workspaces when Transferring a Project from NetSuite to OpenAir

When you create a project in NetSuite, you can select a check box so that the integration automatically creates a project Workspace in OpenAir. Once you have enabled the feature, a check box displays on the NetSuite Projects form.

To set up the import of an OpenAir project workspace when transferring a project from NetSuite to OpenAir:

1. In NetSuite, go to Lists > Relationships > Projects.
2. Enter or edit project information.
3. Select the check box for OpenAir: Create Project Workspace. Click Save.
4. In OpenAir, run the integration. See [Running the Integration](#).

The integration transfers the project to OpenAir and creates a project Workspace.

Implementing the Export of OpenAir Project Data to NetSuite

Implementing the export of OpenAir project data to NetSuite requires several steps. First, select the OpenAir project stages eligible for project update as well as the specific project information you would like to transfer. Second, associate the information with a corresponding NetSuite field that will hold the updated information on the OpenAir **NetSuite integration** form.

Once you enable the export of OpenAir project data to Netsuite, a new Project update pane displays on the **NetSuite integration** form. It includes a check box that you can select to update NetSuite projects with OpenAir project data. But, before you use this functionality, you must specify the information you want updated. Complete the field mapping for project information to transfer from OpenAir as well as the NetSuite field that will hold the updated information. You must also identify the project stages that projects are in when eligible for updating. They display under the Project stages filter. Refer to the following example.

Project update

You can update project data from OpenAir to NetSuite

Field mapping

| Project information | NetSuite field |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |

[Add rows]

Project stages filter
No project stages specified.
 Only projects in these project stages will be updated in NetSuite. Edit the project stage to modify this list.

☐ Update NetSuite projects with NS OpenAir project data

Prior to using this feature, please review the following additional information:

- As with any new feature, it is important to test exporting OpenAir project information to NetSuite away from your production environment. You may need to set up additional initial-only custom mappings on the project import to ensure you are not overwriting data. See [Using Field Declarations](#).
- Limited support exists for mapping OpenAir custom picklist fields to NetSuite custom list/record fields. If the source of the OpenAir custom picklist field is imported from NetSuite, the mapping searches for the NetSuite Internal ID from the OpenAir entity and updates the field specified in the mapping. This is the case when you create a project owner custom field in NetSuite so that you can transfer the project owner from OpenAir. When the project owner has a NetSuite ID, the integration locates the record in NetSuite.
- NetSuite field names are case-sensitive when used in field mapping on the **NetSuite integration** form, although custom fields are not.

To set up the export of project data from OpenAir to NetSuite:

1. In OpenAir, ensure the feature has been enabled and save the **NetSuite integration** form. After you save it, two custom fields are added to the **Project stages** form: a NetSuite Status ID text box and a check box for Allow projects in this project stage to be updated in NetSuite.
2. In OpenAir, go to Administration > Application Settings > Projects Settings and select Project stages. Click on a project stage that you want to mark as eligible to transfer information to NetSuite. Only active projects in specified stages are available to be updated in NetSuite. The Edit form displays.
3. Scroll down and select the check box to: Allow projects in this project stage to be updated in NetSuite.
4. Type the NetSuite Status ID for the related NetSuite project stage. To locate the Internal ID in NetSuite, go to Setup > Accounting > Lists. Locate the Project Status list entries. The Internal ID displays to the left of the Description. If the Internal IDs do not display in your NetSuite account, go to Home > Set Preferences and select the check box to Show Internal IDs under Defaults.

Note: To add a new project stage to your NetSuite account, go to Setup > Accounting > Lists > New. Click on Project Stages and add the new information. There does not need to be a 1:1 mapping between NetSuite statuses and OpenAir project stages. More than one OpenAir project stage may map to one NetSuite project status.

5. Click Save to save changes to the Edit project stage form.

To use the NetSuite integration form to export OpenAir project data:

1. In OpenAir, go to Administration > Global Settings and click the link for Integration: NetSuite. NetSuite integration form displays.
2. Scroll down to Project update. Select Field mapping project information using the drop-down list.
3. Type a corresponding NetSuite field. This is where the OpenAir project information displays on NetSuite project forms.

Note: NetSuite field names are case-sensitive. To review a list of NetSuite fields and associated field names, go to www.netsuite.com/portal/developers/resources/suitetalk-documentation.shtml. Click on the link for the **SuiteTalk Schema Browser**. It lists field names for each entity.

4. If you want to export OpenAir project data to NetSuite during this integration run, select the check box to Update NetSuite projects with OpenAir project data.
5. Click Save or Save & Run.

To use the OpenAir project properties form to export data to NetSuite:

1. In OpenAir, go to Projects > Projects and select a project.
2. Click the link for Edit project or Properties. The form displays.
3. Scroll to Tips. If changes have been made to the project since the last time the integration was run, the following link displays: Send project information to NetSuite. If you click the link, the OpenAir information you specified on the **NetSuite integration** form exports to NetSuite for the project selected.

Implementing the Export of OpenAir Task Data to NetSuite

Implementing the export of OpenAir task data to NetSuite requires several steps. First, select the specific task information you would like to transfer. Second, associate the information with a corresponding NetSuite field that will hold the updated information on the OpenAir **NetSuite integration** form.

Once you enable the import of OpenAir task data to Netsuite, a new Task update pane displays on the **NetSuite integration** form. It includes a check box that you can select to update NetSuite tasks with OpenAir task data. But, before you use this functionality, you must specify the information you want updated. Complete the field mapping for task information to transfer from OpenAir as well as the NetSuite field that will hold the updated information. Refer to the following example.

Task update

You can update task data from OpenAir to NetSuite

Field mapping

| Task information | NetSuite field |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |

[Add rows]

☐ Update NetSuite tasks with NetSuite OpenAir tasks data

Prior to using this feature, please review the following additional information:

- As with any new feature, it is important to test exporting OpenAir task information to NetSuite away from your production environment. You may need to set up additional initial-only custom mappings on the task import to ensure you are not overwriting data. See [Using Field Declarations](#).
- Limited support exists for mapping OpenAir custom picklist fields to NetSuite custom list/record fields. If the source of the OpenAir custom picklist field is imported from NetSuite, the mapping searches for the NetSuite Internal ID from the OpenAir entity and updates the field specified in the mapping. This is the case when you create a project owner custom field in NetSuite so that you can transfer the project owner from OpenAir. When the project owner has a NetSuite ID, the integration locates the record in NetSuite.

To set up the export of task data from OpenAir to NetSuite:

1. In OpenAir, ensure the feature has been enabled and save the **NetSuite integration** form.

To use the NetSuite integration form to export OpenAir task data:

1. In OpenAir, go to Administration > Global Settings and click the link for Integration: NetSuite. NetSuite integration form displays.
2. Scroll down to Task update. Select Field mapping task information using the dropdown list.

Note: There is one predefined mapping in the integration.

This mapping automatically sets the NetSuite project task status as follows:

- 0% = Not Started
 - Less than 100% = In progress
 - 100% = Completed
3. Type a corresponding NetSuite field. This is where the OpenAir task information displays on NetSuite project forms.

Note: Note: NetSuite field names are case-sensitive. To review a list of NetSuite fields and associated field names, go to <http://www.netsuite.com/portal/developers/resources/suitetalk-documentation.shtml>. Click on the link for **SuiteTalk Schema Browser**. It lists field names for each entity.

4. If you want to export OpenAir task data to NetSuite during this integration run, select the check box to Update NetSuite tasks with OpenAir tasks data.
5. Click Save or Save & Run.

To use the OpenAir task properties form to export data to NetSuite:

1. In OpenAir, go to Projects > Tasks and select a task.
2. Click the link for Edit task or Properties. The form displays.

3. Click Tips. If changes have been made to the task since the last time the integration was run, the following link displays: Send task information to NetSuite. If you click the link, the OpenAir information you specified on the **NetSuite integration** form exports to NetSuite for the task selected.

Implementing OpenAir Project Templates

To implement this feature, first you establish project templates in OpenAir and then you go into NetSuite and add them to the OpenAir Project Template list. You can accept the default duplication selections that display or change them. Specify a project template when you create a new project in NetSuite. Then, when you run the integration, it applies the latest version of that template to the new project. The project transfers to OpenAir and includes the duplicated records you specify as well as the information defined in the OpenAir project template. Before you implement OpenAir templates, decide which fields you will use and define default values. Each is explained as follows.

In NetSuite, custom fields are created automatically to hold the information contained in a number of OpenAir project forms. Some fields display by default in NetSuite on the Project form under a tab for OpenAir Project Templates. However, you can configure that form to display all fields or only the fields you choose. When displayed, you select records for duplication. You can show or hide OpenAir project components associated with the NetSuite custom fields. Refer to the following table for a list of custom fields.

| OpenAir Project Template Function | NetSuite Custom Field |
|---|--|
| Duplicate revenue recognition rules | custentity_oa_copy_revrec_rules |
| Duplicate project billing rules | custentity_oa_copy_prbill_rules |
| Duplicate project auto-bill settings | custentity_oa_copy_prbill_auto_settings |
| Duplicate project pricing | custentity_oa_copy_project_pricing |
| Duplicate phase and task custom fields | custentity_oa_copy_custom_fields |
| Duplicate loaded costs | custentity_oa_copy_loaded_cost |
| Duplicate project approvers | custentity_oa_copy_approver |
| Duplicate recognition auto-run settings | custentity_oa_revrec_auto_settings |
| Duplicate issues | custentity_oa_copy_issues |
| Duplicate notification settings | custentity_oa_copy_notification_settings |
| Duplicate dashboard settings | custentity_oa_copy_dashboard_settings |
| Duplicate invoice layout settings | custentity_oa_copy_invoice_layout |
| Duplicate project budget | custentity_oa_copy_project_budget |
| Duplicate cost types | custentity_oa_copy_cost_type |
| Duplicate expense policy | custentity_oa_copy_expense_policy |

In OpenAir projects that you would like to use as a template, define default task values for task ID and names, priority, phase, task type, planned hours, percent complete, dates, assignments, and other entries. You can also establish default project information, customer information, custom fields, notifications, and additional information including billing and recognition rules, billing settings, issues, invoice layouts, and workspace information.

Refer to the following procedures.


- To create an OpenAir Project Template:

- To add OpenAir Project Templates to NetSuite:
- To show or hide duplication custom fields in NetSuite:
- To apply an OpenAir Project Template to a new NetSuite project:


To create an OpenAir Project Template:

These instructions apply to creating OpenAir Project Templates to use when establishing new projects in NetSuite.

1. In OpenAir, select a project you would like to use as a template or create a new one. Go to Projects > Projects > New or New, from another project.
2. Type the Project name, which will be the template name.

 **Note:** If your account limits projects that can be used to create another project, there is a check box custom field on the Project form to indicate projects that can be copied. Select this check box.


3. Enter desired project information.
4. Click Save.

 **Note:** We recommend that you select Templates as the Project stage. This provides an easy way to organize and maintain your OpenAir Project Templates.

To add OpenAir Project Templates to NetSuite:

These instructions apply to adding a list of OpenAir Project Templates to NetSuite that display as options under the OpenAir Project subtab on the NetSuite Projects form.

1. To add one OpenAir Project Template to NetSuite, click the + button adjacent to the OpenAir Project Template drop-down list. The New OpenAir Project Templates window displays. Enter information, and Save.
2. To set up an entire list of OpenAir Project Templates available for use in NetSuite, go to Setup > Customization > Record Types. Click on the List link associated with OpenAir Project Templates. An OpenAir Project Templates List displays.
3. Click New. The OpenAir Project Templates form displays.
4. Enter the name of the OpenAir Template you would like to add and click Save. Repeat until you have entered all OpenAir Templates you want to have available for creating new projects in NetSuite. No other information is required.

 **Important:** The name you enter in NetSuite must be identical to the OpenAir Template name. Also, the project template name should be unique. When the integration looks up a project template in OpenAir, it uses the first project it finds with the name matching the project template.

To show or hide duplication custom fields in NetSuite:

These instructions apply to the fields that display on the NetSuite Project form when the OpenAir Project Template tab is selected.

1. In NetSuite, go to Setup > Customization > Entity Fields > and pick a custom field. Custom Entity Field displays with the name of the field you selected in the Label.

2. Click the Display tab. Display form shows the Display Type and Help gives the purpose of duplicating the custom field.
3. Change the Display Type using the drop-down list:
 - Hidden - restricts display
 - Normal - displays the field on the OpenAir Project Template form
4. Click Save.

To apply an OpenAir Project Template to a new NetSuite project:

These instructions apply to creating a NetSuite project using an OpenAir Project Template.

1. Go to Lists > Relationships > Projects > New.
2. Click the OpenAir Project Template tab.
3. Select an OpenAir Project Template using the drop-down list.
4. Select the check boxes of the records you would like to duplicate from the template in the new project you are creating.
5. Click Save.
6. In OpenAir, run the integration. See [Running the Integration](#). The integration finds the latest version of the OpenAir project template you specified, uses it to create the new NetSuite project, and displays it in Projects in OpenAir. Data you specified for duplication is present in the new project.

Note: If you create a project in NetSuite and specify a template, but the integration cannot match it to an OpenAir template, a new project is still created however, it does not contain duplicated records.

Configuring the Purchases/Vendor Bills Integration

There are two mutually exclusive integrations you can use for integrating NetSuite purchases and vendor bills with OpenAir purchase orders. They are:

- [NetSuite Vendor Bills to OpenAir Purchase Orders](#)
- [NetSuite Purchase Order Integration](#)

Each is described in its entirety in the following sections.

NetSuite Vendor Bills to OpenAir Purchase Orders

Use the NetSuite Vendor Bills to OpenAir Purchase Order integration to transfer vendor bills from NetSuite to OpenAir. This follows the standard OpenAir purchase order workflow by creating a full purchase request and purchase order. Establish vendors in NetSuite and mark them for export to OpenAir. Set up items used on vendor bills in NetSuite and mark them for export to an OpenAir product. Create vendor bills using these vendors and items and mark individual line items on the vendor bill for export to OpenAir. When you run the integration, it creates request items, purchase requests, purchase items, purchase orders (POs), and fulfillments in OpenAir.

Note: It is not necessary to manually select a Purchaser for Vendor Bills. The NetSuite employee creating the record is treated as the Purchaser, and is also integrated as the Requester in OpenAir.

To enable the NetSuite Vendor Bills to OpenAir Purchase Orders in NetSuite:

1. Ensure the OpenAir Integration Bundle is version 1.24 or greater. Then, go to Setup > Company > General Preferences and select the Custom Preferences tab. Select the check box for Vendor Bill to OpenAir PO Integration. The check box for Export to OpenAir still displays on the Items forms, but in addition, a new check box for Export to OpenAir Product also displays.
2. Configure employee preferences to use the purchase order integration if the employee who is going to use the purchases integration has view access to projects and items. Go to Home > Set Preferences > Custom Preferences and select the check box to: Validate OpenAir PO/Vendor Bill. This allows the integration to validate values entered into the vendor bill line items.

To enable the NetSuite Vendor Bills to OpenAir Purchase Orders in OpenAir:

1. **NetSuite integration administration** form: Contact Openair Support and request that the following switches be enabled: Enable NetSuite vendor bills to OpenAir POs integration, Enable NetSuite product integration, and Enable NetSuite vendor to OpenAir vendor integration.
2. **NetSuite integration** form: Select the Vendors (Vendors), Products (Purchase Items), and POs (Vendor Bills) check boxes under Get data from NetSuite on the **NetSuite integration** form.
3. If you have not already created a purchaser in OpenAir to use with this integration, do so now. Go to Administration > Application Settings > Purchases Settings and select Purchasers. When the Vendor Bills to OpenAir Purchase Orders integration is enabled, a check box displays on the Purchaser form. Select the check box to designate the purchaser for the NetSuite purchase order integration purchaser.

Note: To create a purchaser, you must define the following: Accounts payable locations, Receiving locations, Carriers, Shipping terms, and F.O.B. locations. Forms for each are available under Application Settings > Purchases Settings.

Implementing the NetSuite Vendor Bills to OpenAir Purchase Orders Integration

To implement this feature, first you establish NetSuite vendors. Next you create or edit NetSuite items and select the appropriate check box for export to OpenAir. If an item is going to be an OpenAir product, select the check box to export to OpenAir product. You may use NetSuite Inventory, Kit/Package, Non-inventory, Other Charge, and Service items.

Then, you create NetSuite vendor bills and use those vendors and items in them. You mark each line item on the purchase order to indicate whether or not it is billable as well as whether or not you want it to be exported with the vendor bill to OpenAir. Finally, you run the integration and the vendor bill and related vendor and item or product information is imported to OpenAir.

When you enable the NetSuite Vendor Bills to OpenAir Purchase Orders integration and save on the **NetSuite integration** form in OpenAir, the following custom fields are added to OpenAir forms:

| OpenAir Custom Field | OpenAir Association | Description of Use |
|-------------------------|---------------------|--|
| NetSuite Vendor Bill ID | Purchase request | Holds a concatenation of the NetSuite internal ID of the vendor bill and the NetSuite line ID. |

| OpenAir Custom Field | OpenAir Association | Description of Use |
|---|----------------------|---|
| NetSuite Vendor Bill ID | Request item | Holds a concatenation of the NetSuite internal ID of the vendor bill and the NetSuite line ID. |
| From NetSuite vendor bill | Purchase orders (PO) | Check box field that indicates that the purchase order came from a vendor bill. |
| NetSuite Purchase Order ID | Purchase orders (PO) | Holds NetSuite internal ID of the vendor bill. |
| NetSuite Vendor Bill ID | Purchase orders (PO) | Holds NetSuite internal ID of the vendor bill. |
| NetSuite Purchase Order Integration purchaser | Purchaser | Check box field that indicates which OpenAir purchaser should be used in this NetSuite Vendor to OpenAir Purchase Orders integration. |
| NetSuite Vendor Bill ID | Purchase item | Holds a concatenation of the NetSuite internal ID of the vendor bill and the NetSuite line ID. |
| NetSuite vendor bill line billable | Purchase item | Indicates if the purchase item is marked billable in NetSuite. This is used for rebilling the purchase item to the end customer and linking that invoice line to the vendor bill. |
| NetSuite Tax | Purchase item | Holds the NetSuite tax amount for this line. |
| NetSuite Product Type | Product | Holds the NetSuite item type. |
| NetSuite Product Is Fulfillable | Product | Check box field to indicate whether an item can be received or not. |

There are also two new entity integration points that you can use for custom mappings. They are:

| Optional Custom Mapping | Action |
|-----------------------------|---|
| VENDORBILL_TO_PURCHASEORDER | Maps fields from the corresponding vendor bill to the purchase order. |
| VENDORBILL_TO_PURCHASE_ITEM | Maps fields from the corresponding vendor bill to the purchase item. |

Note: NetSuite fields used in a <VENDORBILL_TO_PURCHASE_ITEM> mapping should also be listed with <VENDORBILL_TO_PURCHASEORDER> fields. Therefore, if you are using <VENDORBILL_TO_PURCHASE_ITEM>, you should also have a custom mapping for <VENDORBILL_TO_PURCHASEORDER>.

Prior to using this integration, please review the following information: [General Guidelines](#), [OpenAir Fulfillment](#), [Rebiling Vendor Bills Marked Billable in NetSuite](#), [Rebiling Vendor Bills NOT Marked Billable in NetSuite](#), [Other Integrations Required](#).

General Guidelines

- You cannot use this integration with the NetSuite feature to Combine Billable Items on Invoices. To ensure that you do not have this enabled in NetSuite, go to Setup > Accounting > Invoicing Preferences and make sure the check box is clear for Combine Billable Items on Invoices.
- Only NetSuite vendor bills that are in the following status import to OpenAir: Open or Paid in Full. Therefore, vendor bills that are Not Approved do not import to OpenAir.

OpenAir Fulfillment

- OpenAir fulfillments are based on item receipts for the NetSuite purchase order. The integration automatically creates fulfillments based on the line item quantity of the vendor bill.
- If the vendor bill line item quantity is increased after import into OpenAir, another fulfillment is created. This mirrors current OpenAir purchases functionality.
- If the vendor bill line item quantity is decreased after import into OpenAir, the integration issues a warning that the quantity cannot be adjusted. This also mirrors current OpenAir purchases functionality, which does not generally allow decreasing the quantity on a fulfillment.

Rebiling Vendor Bills Marked Billable in NetSuite

- By default, you can rebill NetSuite vendor bills to the end customer through OpenAir using the Billable Items tab on the NetSuite invoice. It works as follows:
 - The corresponding OpenAir purchase item has the following custom field checked on the Purchase item form: NetSuite vendor bill line billable.
 - The OpenAir purchase item and fulfillment can be billed via the project billing rules.
 - You can use Markups.
 - When you export the invoice back to NetSuite, the slip maps to the Billable items tab of the NetSuite invoice instead of the Items tab. This maintains the invoice link to the NetSuite vendor bill.
 - If the custom field for NetSuite vendor bill line billable on the OpenAir purchase item is not checked but the purchase is rebilled in OpenAir, it displays on the Items tab in the NetSuite invoice.
- Another option is to use the switch on the **NetSuite integration administration** form: Disable vendor bill linkage on invoices in NetSuite integration - (see documentation before enabling). When you enable this switch and rebill NetSuite vendor bills, you use the Items tab on the NetSuite invoice, however, it is no longer linked to the NetSuite vendor bill.
- There are two new entity integration points that you can use for custom mappings between OpenAir and NetSuite. See [Using Advanced Settings](#).

| Optional Custom Mapping | Action |
|----------------------------|--|
| INVOICE_PURCHASE_VB_LINE | Maps fields from the corresponding purchase_item back to the billable item line. |
| INVOICE_BILLABLE_ITEM_LINE | Maps fields from the corresponding slip back to the billable item line. |

Rebiling Vendor Bills NOT Marked Billable in NetSuite

- To rebill vendor bills not marked billable in NetSuite, ensure the custom field for NetSuite vendor bill line billable on the OpenAir purchase item is NOT checked.
- Rebilled items from the NetSuite vendor bill display on the Items tab of the NetSuite invoice. There is no linkage to the original NetSuite vendor bill.
- There is an additional custom mapping for product slips/charges you can use when rebilling purchases and not linking them to the vendor bill. See [Using Advanced Settings](#).

| Optional Custom Mapping | Action |
|-------------------------|---|
| IINVOICE_PURCHASE_LINE | Maps fields from the original NetSuite purchase order line that need to display on the NetSuite invoice line. |

Note: You can rebill vendor bills in NetSuite. However, you cannot rebill purchase orders in NetSuite.

Other Integrations Required

To use the Vendor Bills to OpenAir Purchase Orders integration, you must also enable the vendor to vendor integration and the item to product integration. Each is included in steps for setting up the Vendor Bills to OpenAir Purchase Orders integration. See also [Vendors to Vendors Transfer](#) and [Items to Products](#) in [Using the Integration](#).

To use the NetSuite Vendor Bills to OpenAir Purchase Orders integration:

1. In NetSuite, go to Lists > Relationships > Vendors > New and fill in the form information. Ensure you select the check box to Export to OpenAir, and depending on your integration, you may also need to select OpenAir: Vendor from the drop-down list.
2. In NetSuite, go to Lists > Accounting > Items > New and create an item of any type that is either For Purchase or For Resale. Fill in the form information and select the check box to Export to OpenAir Product.
3. In NetSuite, go to Transactions > Purchases/Vendors > Enter Bills > New. Fill in the form information.
4. Select the Items subtab, and enter Item and Vendor Name of records marked for Export to OpenAir as described in previous steps, and the Customer : Project.
5. Select whether the Item is billable. This impacts whether the vendor bill is rebillable. See [Rebiling Vendor Bills Marked Billable in NetSuite](#) and [Rebiling Vendor Bills NOT Marked Billable in NetSuite](#).
6. Select the check box to Export to OpenAir.
7. Run the integration. See [Running the Integration](#).
8. In OpenAir, go to Purchases > POs > All and select the vendor bill that was imported from NetSuite. It includes the Items you identified. They transfer into OpenAir as Purchase items. The PO also has a NetSuite Vendor Bill number, i.e., NS-VB-#.
9. In OpenAir, go to Projects > Projects and select the project identified on the Vendor Bill in NetSuite.
10. Go to Financials > Billing > New and select Purchase item billing rule. Fill in the information and click Save.
11. Run the Purchase item billing rule and create charges. Select the charges and click the button to Create project billing transactions and charges.
12. Go to Invoices > Invoices > New invoice and select the Customer : Project. Select the charges to include in the invoice and click Save.
13. To make changes to the charges on a Purchase item, click the Charges link and select edit. The Edit product charge form displays. Make desired changes and click Save.
14. Submit/Approve the invoice using the normal OpenAir procedure.
15. Click the Invoice link and export the invoice to NetSuite using the link on the bottom of the form or by running the integration. See [Running the Integration](#).
16. In NetSuite, go to Sales > Create Invoices > List and select the invoice you exported. Click the Billable Items tab to view the items from the NetSuite vendor bill. Ensure they are selected. Click Save and process the invoice in NetSuite using the normal NetSuite procedure.

Other Options

Map NetSuite transaction number to OpenAir number when importing vendor bills or purchase orders

That # gets mapped to OA purchase request and purchase order #

By default OpenAir generated purchase request and purchase order numbers are used.

When this option is enabled, the NetSuite transaction number (tranId) from a vendor bill or purchase order is mapped to the OpenAir purchase request and purchase order number.

Note: It is recommended not to enable this option. Enabling this option applies the default behavior prior to the Feb 15, 2014 release. Enabling could cause problems with OpenAir purchase request and purchase order numbers.

NetSuite Purchase Order Integration

Use the NetSuite Purchase Order integration to transfer purchase orders from NetSuite to OpenAir. Establish vendors in NetSuite and mark them for export to OpenAir. Set up items used on purchase orders in NetSuite and mark them for export to an OpenAir product. Create purchase orders using these vendors and items and mark individual line items for export to OpenAir. When you run the integration, all of the information to create and update purchase orders transfers to OpenAir including the vendor as well as the item, which transfers to OpenAir as a product. Since OpenAir uses purchase requests, request items, purchase orders, purchase items, and fulfillments, these are also created in OpenAir.

Note: The NetSuite Purchase Order integration is mutually exclusive with the Vendor Bills to OpenAir Purchase Orders integration unless the following OpenAir switch is enabled: Disable vendor bill linkage on invoices in NetSuite integration - (see documentation before enabling).

To enable the NetSuite Purchase Order Integration in NetSuite:

1. Ensure the OpenAir Integration Bundle is version 1.16.1 or greater. Then, go to Setup > Company > General Preferences and select the Custom Preferences tab. Select the check box for Enable OpenAir Purchase Integration. The check box for Export to OpenAir still displays on the Items forms, but in addition, a new check box for Export to OpenAir Product also displays on items.
2. Ensure the Advanced Receiving feature is enabled so that NetSuite purchase item receipts can be created. Go to Setup > Company > Enable Features > Transactions and select the check box for Advanced Receiving under Shipping & Receiving.

3. Configure employee preferences to use the purchase order integration if the employee who is going to use the purchases integration has view access to projects and items. Go to Home > Set Preferences > Custom Preferences and select the check box to: Validate OpenAir PO/Vendor Bill. Use this preference if you want to allow an employee to have view access to projects and items to be able to select the check boxes to indicate an item is billable as well as to export to OpenAir.

To enable the NetSuite Purchase Order Integration in OpenAir:

1. **NetSuite integration administration** form: Contact Openair Support and request that the following switches be enabled: Enable NetSuite PO integration, Enable NetSuite product integration, and Enable NetSuite vendor to OpenAir vendor integration.
2. **NetSuite integration** form: Select the Vendors (Vendors), Products (Purchase Items), and POs (Purchase Orders) check boxes under Get data from NetSuite on the **NetSuite integration** form.
3. If you have not already created a purchaser in OpenAir to use with this integration, do so now. Go to Administration > Application Settings > Purchases Settings and select Purchasers. When the NetSuite Purchase Order integration is enabled, a check box displays on the Purchaser form. Select the check box to designate the purchaser for the NetSuite purchase order integration.



Note: To create a purchaser, you must define the following: Accounts payable locations, Receiving locations, Carriers, Shipping terms, and F.O.B. locations. Forms for each are available under Application Settings > Purchases Settings.

Implementing the NetSuite Purchase Order Integration

To implement this feature, first you establish NetSuite vendors and NetSuite items and select the appropriate check boxes for export to OpenAir. If an item is going to be an OpenAir product, select the check box to export to OpenAir product. You may use NetSuite Inventory, Kit/Package, Non-inventory, Other Charge, and Service items. Then you create NetSuite purchase orders and use those vendors and items in them. You mark each line item on the purchase order to indicate whether you want it to be exported with the purchase order to OpenAir. Finally, you run the integration and the purchase order and related vendor and item or product information is imported to OpenAir.

The NetSuite Purchase Order integration does not handle a negative quantity on the purchase order line item. If the purchase order line item is a negative rate in NetSuite, the integration sets a negative total on the request item and purchase item in OpenAir.

When you enable the NetSuite Purchase Order integration and save on the **NetSuite integration** form in OpenAir, the following custom fields are added to OpenAir forms:

| OpenAir Custom Field | OpenAir Association | Description of Use |
|---|----------------------|---|
| NetSuite Purchase Order ID | Purchase request | Holds a concatenation of the NetSuite internal ID of the purchase order and the NetSuite line ID. |
| NetSuite Purchase Order ID | Request item | Holds a concatenation of the NetSuite internal ID of the purchase order and the NetSuite line ID. |
| NetSuite Purchase Order ID | Purchase orders (PO) | Holds NetSuite internal ID of the purchase order. |
| NetSuite Purchase Order Integration purchaser | Purchaser | Check box field that indicates which OpenAir purchaser should be used in this NetSuite Vendor to OpenAir Purchase Orders integration. |

| OpenAir Custom Field | OpenAir Association | Description of Use |
|---------------------------------|---------------------|--|
| NetSuite Purchase Order ID | Purchase item | Holds a concatenation of the NetSuite internal ID of the vendor bill and the NetSuite line ID. |
| NetSuite Tax | Purchase item | Holds the NetSuite tax amount for this line. |
| NetSuite Product Type | Product | Holds the NetSuite item type. |
| NetSuite Product Is Fulfillable | Product | Check box field to indicate whether an item can be received or not. |

Prior to using this feature, please review the following additional information: [General Guidelines](#), [OpenAir Fulfillment](#), [Custom Mappings](#), and [Other Integrations Required](#).

General Guidelines

- Each NetSuite purchase order line becomes a purchase request with one request item line. The reason is that NetSuite allows purchase orders to reference multiple projects but in OpenAir, each purchase request and request item must be associated with a single project at the purchase request level.
- A single NetSuite purchase order is mapped to a single OpenAir purchase order. The NetSuite PO lines specified to Export to OpenAir import as OpenAir purchase items.
- Only NetSuite purchase orders with the following statuses import: Fully Billed, Partially Received, Pending Bill, Pending Billing/Partially Received, and Pending Receipt.
- You can run billing and create purchase-type charges. However, NetSuite items for purchase cannot be rebilled. Therefore, a NetSuite item created for purchase with a subtype=purchase should not be included in purchases billing rules.
- The NetSuite Purchase Order integration does not use the billable items feature in NetSuite. All purchases display on the items tab of an invoice.
- NetSuite taxes are saved for each OpenAir purchase item. Total tax on the OpenAir purchase order is calculated based on the tax saved for each purchase item.
- You cannot have a negative quantity on the purchase order line item in NetSuite. If the purchase order line item is a negative rate in NetSuite, the integration sets a negative total on the request item and purchase item in OpenAir.

OpenAir Fulfillment

The integration creates OpenAir fulfillments based on whether the item can be received.

- If it can be received, it creates OpenAir fulfillments based on the quantity specified in the Received column on the NetSuite Purchase Order Item line.
- If it cannot be received, it creates OpenAir fulfillments based on the Quantity column on the NetSuite Purchase Order Item line. The quantity fulfilled in OpenAir cannot be greater than the quantity received in NetSuite.

Custom Mappings

- Custom mappings are not available for purchase requests or request items. These are created in OpenAir strictly because they are needed by OpenAir.
- Custom mappings are not available for fulfillments. These are created directly in OpenAir based on the 'Received' field on the purchase order line or created automatically if the item is not receivable in NetSuite. There is no direct integration mapping with item receipts in NetSuite.

Note: You can create custom mappings for purchase orders and purchase requests. NetSuite fields used in a <PURCHASE_ITEM> mapping should also be listed with <PURCHASEORDER_TO_PURCHASEORDER> fields. Therefore, <PURCHASEORDER_TO_PURCHASEORDER> should be used when using a <PURCHASE_ITEM> mapping. This applies to both the new and old integration user interfaces. See [Using Advanced Settings](#).

Other Integrations Required

To use the NetSuite Purchase Order integration, you must also enable the vendor to vendor integration and the item to product integration. Each is included in steps for setting up the integration. See also [Vendors to Vendors Transfer](#) and [Items to Products](#) in [Using the Integration](#).

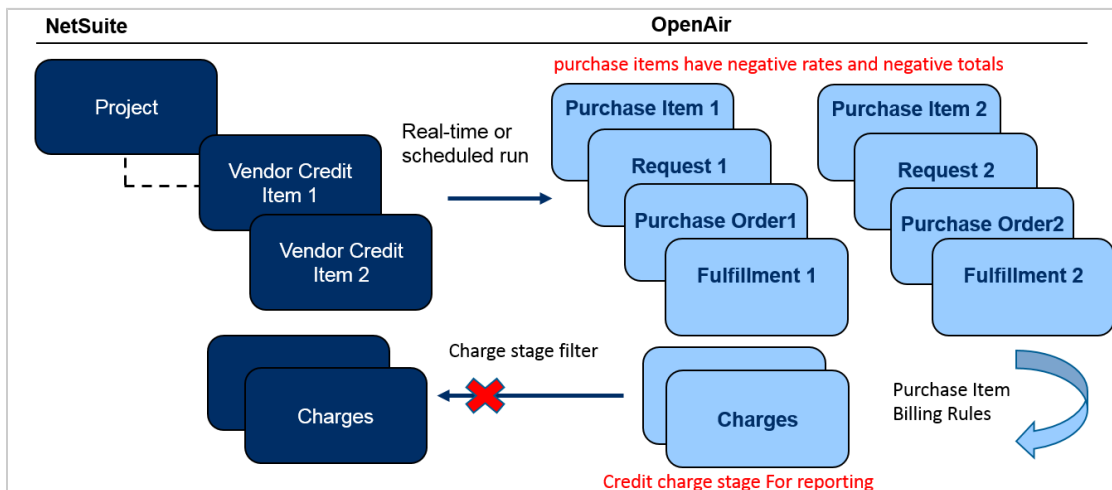
To use the NetSuite Purchase Order integration:

1. In NetSuite, go to Lists > Relationships > Vendors > New and fill in the form information. Ensure you select the check box to Export to OpenAir, and depending on your integration, you may also need to select OpenAir: Vendor from the drop-down list.
2. In NetSuite, go to Lists > Accounting > Items > New and create an item of any type that is either For Purchase or For Resale. Fill in the form information and select the check box to Export to OpenAir Product.
3. In NetSuite, go to Transactions > Purchases/Vendors > Enter Purchase Items > New. Fill in the form information. Select the Items subtab, and enter Item and Vendor Name of records marked for export to OpenAir as described in previous steps. Select the check box to Export to OpenAir.
4. Run the integration. See [Running the Integration](#).

Configuring the Vendor Credit Integration

You can set up a Vendor Credit integration workflow to retrieve NetSuite vendor credit details for OpenAir as negative purchase items.

First, create vendor credit items in NetSuite with the “Export to OpenAir” option selected, and assigned to an OpenAir project. When the integration is run, Connector transfers any vendor credits from NetSuite to OpenAir as negative purchase items. OpenAir creates purchase requests, purchase orders, or fulfillments where appropriate, which link back to NetSuite. You can use a billing rule filter and exclude charge stages from invoices to prevent negative charges which were integrated to OpenAir from being integrated back into NetSuite and possibly accounted for twice.



To set up the NetSuite to OpenAir Vendor Credit integration workflow:


1. Contact OpenAir support and open a case to enable the “Enable NetSuite vendor credits to NS OpenAir POs integration” feature in OpenAir and NetSuite.
2. In NetSuite, go to Setup > Company > General Preferences > Custom Preferences and select the “Vendor Credit to OpenAir PO Integration” option.
3. Go to Administration > Global Settings > Account > Integration: NetSuite
4. Click **New workflow** and click POs (Vendor Credits).
5. Click the **Enable / disable workflow** button to “On” to enable the workflow.

If you do not want negative value purchase request or purchase order invoices to be integrated back into NetSuite, you must create a billing rules filter.

To prevent Vendor Credit invoices from being integrated back into NetSuite

1. Go to Projects > Projects > [select a project associated with vendor credits]
2. Click the **Create** button and click **Purchase item billing rule** under “Billing rule”.
3. In the “Billing rule filters” section, click > **Create** next to “PO’s From NetSuite vendor credit”.
4. In the “From NetSuite vendor credit filter” form, add “No” from the “Available” column and click **OK**.
5. In the “Other” section, select “exclude from invoicing” from the “Charge stage” dropdown list.
6. Click **Save**.

This filter will now prevent negative credit invoices from being sent back to NetSuite and potentially being accounted for twice. To allow negative invoices to be sent back to NetSuite (for discounts or promotions on invoices, for example), add “Yes” from the “Available” column and remove “No” from the “Selected” column.

 **Note:** To properly exclude all unnecessary items from invoicing, this billing rule should be the first billing rule in the list of billing rules.

To integrate a Vendor Credit from NetSuite to OpenAir:

1. In NetSuite, go to Transactions > Purchases/Vendors > Enter Vendor Credits.
2. Create a Vendor Credit.
3. Under the Items sub-tab, enter the items, their rate and quantity, select a project to associate each item with, and select “Export to OpenAir” for each item.
4. Save the Vendor Credit.
5. Run the integration. The Vendor Credits will be integrated to OpenAir.

Vendor Credit Custom Fields

When you enable the NetSuite Vendor Credits to OpenAir Purchase Orders integration and save the NetSuite integration form in OpenAir, the following custom fields are added to OpenAir forms:

| OpenAir Custom Field | OpenAir Association | Description of Use |
|-------------------------------|----------------------|--|
| NetSuite Vendor Credit ID | PO | Holds NetSuite internal ID of the vendor credit. |
| NetSuite Vendor Credit Number | Purchase Request, PO | Holds NetSuite vendor credit number. |

| OpenAir Custom Field | OpenAir Association | Description of Use |
|--|--|--|
| From NetSuite vendor credit | PO | Check box field to indicate imported PO from NetSuite vendor credit. Available on Project billing rule filter. |
| NetSuite Tax | Purchase Item | Holds the NetSuite tax amount for this line. |
| NetSuite vendor credit line billable | Purchase Item | Indicates if the purchase item is marked billable in NetSuite. |
| NetSuite Vendor Bill Integration purchaser | Purchaser | Check box field that indicates which OpenAir purchaser should be used. |
| NetSuite Product Type | Product | Holds the NetSuite item type. |
| NetSuite Product is Fulfillable | Product | Check box field to indicate whether an item can be received or not. |
| NetSuite Vendor Credit ID | Request Item, Purchase Request , Purchase Item | Holds a concatenation of the NetSuite internal ID of the vendor credit and the NetSuite line ID. |

There are also two new entity integration points that you can use for custom mappings. They are:

| Optional Custom Mapping | Action |
|------------------------------------|---|
| VENDORCREDIT_TO_PURCHASEORDER | Maps fields from the corresponding vendor credit to the purchase order. |
| VENDORCREDIT_ITEM_TO_PURCHASE_ITEM | Maps fields from the corresponding vendor credit to the purchase item. |

Note: NetSuite fields used in a <VENDORCREDIT_ITEM_TO_PURCHASE_ITEM> mapping should also be listed with <VENDORCREDIT_TO_PURCHASEORDER> fields. Therefore, if you are using <VENDORCREDIT_ITEM_TO_PURCHASE_ITEM>, you should also have a custom mapping for <VENDORCREDIT_TO_PURCHASEORDER>.

Configuring the Real-Time Integration

The Real-time integration feature allows a NetSuite employee who is working in the NetSuite application to automatically transfer information from the following records in NetSuite to OpenAir using the Save button on the NetSuite form. Real-time updates can also be performed upon approval of certain records in OpenAir. The records in NetSuite which can be sent over in Real-time are:

- Employees
- Customers
- Projects
- NetSuite cases to OpenAir Project Tasks
- Project Tasks
- Items
- Expense categories
- Sales orders
- Credit memos
- Invoice payments

- Vendor bills
- Purchase orders
- Custom records
- Expense report reimbursements

In OpenAir, the records which can be sent to NetSuite upon approval are:

- Invoices
- Expense Reports
- Timesheets
- Purchase requests

Both projects and tasks can be updated on the Save event in OpenAir. These events are not restricted by role permissions, and the user triggering the Save event does not need the “View and run the NetSuite integration” role permission. To integrate projects or tasks on save, you must have the NetSuite 2016.2 endpoint and be using [Token-Based Authentication](#). In OpenAir, the records which can be sent to NetSuite upon saving are:

- Projects
- Tasks

The subsequent action is similar to using the Save & Run button in OpenAir on the **NetSuite integration** form; however, you perform the action from NetSuite and not from an OpenAir account. In fact, once the Real-time integration feature is enabled in your company, any employee with permission to make changes to those entities in NetSuite transfers information to OpenAir upon clicking the Save button, regardless of whether or not the employee has an OpenAir account.

The following Real-time integration features and functions apply:

- Uses all settings and mappings on the OpenAir **NetSuite integration** form as a guide. For example, if projects are not selected to transfer in the Get Data from NetSuite section of the OpenAir **NetSuite integration** form, they will not transfer in the Real-time integration either. So, for Employee, Customer, and Project records to transfer, they must be enabled in the integration and must be marked for Export to OpenAir.
- Uses last modified date filtering. When a record is modified, all records modified since the last time the integration synchronized are pulled from NetSuite. Even though the updates display in OpenAir immediately, when you run the integration, they also are listed in the integration run log.
- Adds a queue as part of this integration. If you have scheduled integration runs, the schedules are adhered to and the Real-time integration takes place after those scheduled events occur. You may receive a message indicating that a request is queued and will run as soon as possible.


Note: If you load data using CSV or another method (or data is modified or loaded via scripting or SuiteFlow), the Real-time Integration does not transfer the new data. This data transfers when you run the integration using a scheduled event or using the Save & Run button from the OpenAir **NetSuite integration** form. You must click Save on the NetSuite form to transfer data to OpenAir using the Real-time integration.

- You must have configured the NetSuite Single Sign-On feature before you can use the Real-time integration. If you have not already done so, see [Configuring NetSuite Single Sign-On](#). You must establish this feature first.
- If you are using the customer integration to capture changes to leads and prospects, only edits to the actual lead or prospect trigger a real-time integration run. The integration runs when a lead or prospect changes to a customer or when a lead is changed to a prospect. However, other processes that automatically change status are not supported such as using the lead conversion CRM feature.

To enable Real-time integration in NetSuite:


1. Contact NetSuite Professional Services and request that OpenAir: Real-time integration bundle 12610 be installed in your account. It should be version 1.2 or higher if you want lead and prospect changes to trigger the real-time integration run.
2. Go to Setup > Company > General Preferences. Select the tab for Custom Preferences. Complete the OpenAir: Real-time integration information. Type the Email address errors should be sent to, select the check box, and type the SuiteSignOn Record. This is the ID of the SuiteSignOn record, not the name. To find the ID, go to Setup > Integration > SuiteSignOn.

To enable additional customer integration features for use with leads and prospects, select the check boxes for Leads with customer integration and Prospects with customer integration.

 **Note:** You must have enabled the following two switches on the **NetSuite integration administration** form prior to being able to enable these features in NetSuite: Import all NetSuite contacts associated with NetSuite customers marked 'Export to OpenAir' and Import all NetSuite contacts associated with NetSuite projects marked 'Export to OpenAir'.

To enable Real-time integration in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request the following: Enable NetSuite real-time integration.

 **Important:** The following switch must also be enabled on the **NetSuite integration administration** form: Enable NetSuite single signon. Remember, you must implement this integration prior to implementing the real-time integration.

2. If you are going to use the customer integration features with leads and prospects and exchange information between NetSuite and OpenAir, contact OpenAir Support and ensure the following are enabled on the **NetSuite integration administration** form: Import all NetSuite contacts associated with NetSuite customers marked 'Export to OpenAir' and Import all NetSuite contacts associated with NetSuite projects marked 'Export to OpenAir'.

Implementing the Real-time Integration

Once you have enabled the Real-time integration in both applications, you create connection points between the two applications. Real-time synchronization is triggered as an afterSubmit User Event. OpenAir: Real-time integration bundle 12610 provides a script you can link to. The User Events in NetSuite are create, edit, or xedit, which is the inline editing available in NetSuite. You may either add connection points to the existing NetSuite SingleSignOn record or create a new one.

Remember that the consumer key and shared secret for this account must be setup on OpenAir on the **NetSuite integration** form. See [Filling in the NetSuite Integration Form in OpenAir](#). There is an optional step for NetSuite single sign-on.

To set up Real-time integration:

1. In NetSuite, go to Setup > Integration > SuiteSignOn and edit an existing record or create a new signon record.
2. Create a new connection point for each entity you will use in the Real-time integration: Employee, Customer, and Project. Type the following URL:

`https://www.openair.com/netsuite.pl`

Note: To set up NetSuite Single Sign-On in either a sandbox or demo account, enter one of the following: <https://sandbox.openair.com/netsuite.pl> or <https://demo.openair.com/netsuite.pl>

3. Type integration variables for: action=synchronize, app=, db_id=, and netsuite record. Separate them with a comma. You can enter multiple connection points on this form for displaying multiple OpenAir applications. Use the following.

| Integration Variable | Information |
|----------------------------------|--|
| action=synchronize | Instructs that the connection point is to synchronize |
| app=(for module display) | OpenAir application code of module to display in the connection point: pm=projects ma=users and customers |
| db_id= | Your OpenAir account number. Request this from Professional Services or go to Administration > Global Settings > Service plan under Account. |
| Additional Integration Variables | netsuite_employee_id={id} (user) netsuite_customer_id={id} (customer) netsuite_project_id={id} (project) |

4. Select the Display Type using the drop-down list: User Event.
5. Select the Display Context using the drop-down list: OpenAir: Send Record to OpenAir.
6. Click the User Identification tab. Select the check boxes for Account and Internal ID and any others you desire. Click Save.

The following shows an example of a connection point for an employee record:

```
URL = https://www.openair.com/netsuite.pl
action=synchronize,app=ma,db_id=359,netsuite_employee_id={id}
Display Type = User Event
Display Context = OpenAir: Send Record to OpenAir
```

To include Leads in the Real-time integration:

1. In NetSuite, go to Setup > Customization > Script Deployments.
2. To filter the view, change Type to User Event.
3. To filter scripts, change the Script to OpenAir: Send Record to OpenAir.
4. Select the check box for Show Undeployed.
5. Select the Deployed check box for customdeploy_oa_send_lead.
6. Click Submit.

To include Prospects in the Real-time integration:

1. In NetSuite, go to Setup > Customization > Script Deployments.
2. To filter the view, change Type to User Event.
3. To filter scripts, change the Script to OpenAir: Send Record to OpenAir.
4. Select the check box for Show Undeployed.
5. Select the Deployed check box for customdeploy_oa_send_prospect.
6. Click Submit.

To Set Up Real-time Integrations on Approval in OpenAir in the April 16, 2016 Connector UI

1. In OpenAir, navigate to Administration > Global Settings > Account > Integration: NetSuite > Real-Time.
2. In the Object dropdown list, select **Invoice**, **Expense report**, or **Timesheet**.
3. In the Event dropdown list, select **Approval**.
4. Click **Save** to save the real-time setup, or **Run** to save and run the integration now.

To Set Up Real-time Integrations on Approval in OpenAir in the old Connector UI

1. In OpenAir, navigate to Administration > Global Settings > Account > Integration: NetSuite > Real-Time.
2. Select the following options in the Real-time integrations section:
 - Enable Invoice integration on Approval
 - Enable Timesheet integration on Approval
 - Enable Envelope integration on Approval

Configuring Multi-Threading Support

The multi-threading support feature allows multiple, simultaneous runs of the integration. For example, if one user is running the integration to import projects, a second user can simultaneously export an invoice. This feature enables updating project WBS to NetSuite Opportunity to run in parallel so you are not limited to a single thread communication with NetSuite webservices.



Important: It's necessary to have an active NetSuite SuiteCloud Plus license which allows up to ten multiple webservices threads.

If all threads are in use the message "All available threads are in use" is returned and you have to update it later. If real-time integration is enabled the record is processed with standard realtime integration logic. See [Configuring the Real-Time Integration](#) for more information.

To enable multi-threading support in NetSuite:

1. Enable the "CONCURRENT WEB SERVICES USER" checkbox for related integration user (List > Employees > Employee > subtab Access).

To enable multi-threading support in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request the following: Enable multi-threading support. To be used with SuiteCloud+.



Note: Make sure that the user specified on the NetSuite exchange tab has the "CONCURRENT WEB SERVICES USER" option enabled in NetSuite.

Setting the Maximum Number of Threads Used by NS Connector

Customers with SuiteCloud Plus can request to change the number of threads they want to dedicate to NetSuite Connector's integrations. The value can be set from 1 to 10 threads concurrently. The number of concurrent threads defaults to 10 threads unless another value is requested.

Customers without SuiteCloud Plus are always limited to 1 thread for the integration.

Please contact OpenAir Support to change the number of threads used by NS Connector.

Configuring Revenue Recognition

When you amortize revenue and set up rules for recognizing it on a project-by-project basis, you can exchange this information between the applications. If you use revenue recognition in OpenAir, you can send revenue recognized from paid invoices to NetSuite. To use the revenue recognition integration, you must enable the feature in both accounts.

OpenAir revenue recognition can also be configured to work with NetSuite's Advanced Revenue Management. Please see [OpenAir Revenue Recognition with NetSuite Advanced Revenue Management](#) for more details.

To enable Revenue Recognition in NetSuite:

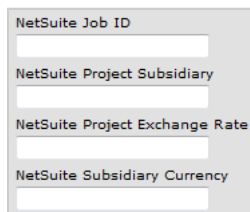
1. Go to Setup > Company > Enable Features > Accounting and select the check box for Revenue Recognition under Advanced Features.
2. Customize your invoice to show the Delay Rev Rec field. Go to Transactions > Sales > Create Invoices. Select Customize > Screen Fields > Columns and select the check box to show the Deferred Revenue field.
3. Identify the Deferred Revenue account on all service items. Go to Lists > Accounting > Items. For each service item, select the Deferred Revenue Account on the Rev Rec/Amort subtab.
4. Contact your NetSuite Professional Services representative to complete any other setup steps required in NetSuite to correctly distribute deferred revenue and unbilled receivables over the life of a project.

To enable Revenue Recognition in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request Enable OpenAir to NetSuite recognition transaction integration.
2. **NetSuite integration** form: Select the Invoices and Recognition Transactions (Revenue Recognition Transactions) check boxes under Send data to NetSuite on the **NetSuite integration** form.

Implementing Revenue Recognition

Once you run the integration, custom fields display on both the Edit project and Edit activities forms in OpenAir. Refer to the following examples.

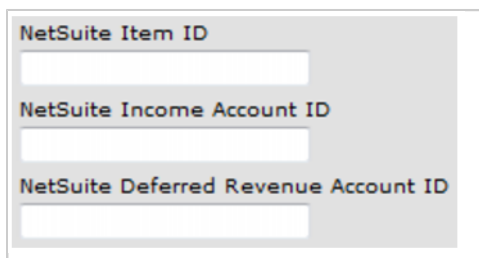


The image shows a screenshot of a form with four input fields, each with a label above it: 'NetSuite Job ID', 'NetSuite Project Subsidiary', 'NetSuite Project Exchange Rate', and 'NetSuite Subsidiary Currency'. Each field is a simple text box with a light gray border.

The following describes custom fields created for different types of NetSuite accounts:

| Custom Field | NetSuite Account Type | Custom Fields Description |
|---------------------|-----------------------|---|
| NetSuite Project ID | All NetSuite accounts | Displays the internal ID from NetSuite. |

| Custom Field | NetSuite Account Type | Custom Fields Description |
|--|--|---|
| NetSuite Project Subsidiary/NetSuite Project Subsidiary ID | One World, Multi-currency, and Revenue Recognition | Displays the name/ID of the subsidiary that contains the project in NetSuite. These fields do not function in the integration, but are present to help you define the NetSuite Project Exchange Rate. (See below.) |
| NetSuite Project Exchange Rate | Multi-currency | Displays a blank NetSuite Project Exchange Rate field, a required field that is NOT related to the exchange rate for a project. When the corresponding NetSuite account is a OneWorld account, this exchange rate converts from the project currency to the subsidiary base currency. If not a OneWorld account, this exchange rate converts from the project currency to the system-wide base currency. It is a user-defined exchange rate for exporting invoices and revenue recognition transactions to NetSuite, and it is used for both the invoices and journal entries that are created in NetSuite when revenue recognition transactions are sent. |
| NetSuite Subsidiary Currency | One World, Multi-currency, and Revenue Recognition | Displays the currency of the subsidiary that contains the project in NetSuite. |



NetSuite Item ID

NetSuite Income Account ID

NetSuite Deferred Revenue Account ID

The NetSuite Item ID displays the item ID of the corresponding NetSuite service item. The other two custom fields display the account IDs of the related service items in NetSuite. The fields must be populated with valid NetSuite IDs. To verify account IDs in NetSuite, go to Lists > Accounting > Items.

To send revenue recognition transaction data from OpenAir to NetSuite:

- Before you begin, if you have been using the integration prior to enabling the revenue recognition feature, rerun the integration to capture all NetSuite information again:
 - Uncheck the selections under Get Data from NetSuite and Save.
 - Then, re-select the entities and click Save & Run. The integration will then get the latest information from NetSuite and populate the new custom fields in the associated projects and activities forms in OpenAir.
- In OpenAir, go to Projects > Projects and select a project. If the project has been pulled into OpenAir from NetSuite, ensure it has been opened and saved in the Edit Project form.
- If the project is multi-currency, click the Edit project link and type the NetSuite Project Exchange Rate and click Save.

Note: The value you enter is the rate you want to use to recognize the revenue. Invoices are transferred to NetSuite in the default foreign currency specified in Administration > Global Settings > Currencies > Multi-currency using the NetSuite Project Exchange Rate specified on the Edit project form.

4. Select Financials > Billing, and click Run billing.

Note: Billing rules must exist. They can be created for each project or copied from another project. For example, if you are using OpenAir for Timesheets, you could run a Time billing rule.

5. Select the desired items and click Create project billing transactions and charges.
6. Select Financials > Recognition and click Run recognition.

Note: Recognition rules must exist. They can be created for each project or copied from another project. For example, if you are using OpenAir for Timesheets, you might run a Time project billing rule.

7. Select the check boxes of the desired items and click Create recognition transactions.
8. To export an individual revenue recognition transaction, use the link in hints to Export to NetSuite. To export all revenue recognition transactions, run the integration.
9. Go to Invoices > New invoice. Select the project and select the charges to invoice. Click Create the invoice.
10. Submit/Approve the invoice and enter payment information. An approved invoice and its payment information can be exported to NetSuite.

Note: You can submit the invoice using the link in hints or run the integration. The transfer of revenue recognition transaction data and invoice information are done separately and can be done independently.

11. Run the integration. See [Running the Integration](#).
A journal entry for the revenue recognition information displays in NetSuite.

Note: You can create custom mappings to map straight from the purchase_item table in revenue recognition to the NetSuite journal entry. See [PUSH Integration Point Tags](#). You use the following:

- REVENUE_PURCHASE_TO_JOURNAL (for header of the journal entry from the purchase item)
- JOURNAL_LINE_CREDIT_PURCHASE (for credit line of the journal entry from the purchase item)
- JOURNAL_LINE_DEBIT_PURCHASE (for debit line of the journal entry from the purchase item)

OpenAir Revenue Recognition with NetSuite Advanced Revenue Management

Introduction

OpenAir can integrate your revenue recognition rules and recognition transactions to NetSuite for use in Advanced Revenue Management.

To learn more about OpenAir Revenue Recognition Rules, see the **Revenue Recognition** section in the **Projects** chapter of the [OpenAir Admin Guide](#).

The following OpenAir Revenue Recognition Rules are currently supported by NetSuite's Advanced Revenue Management:

- As Billed
- Fixed Amount on Date or Milestone
- Percent Complete
- Incurred vs. Forecast

Workflow

The first step in sending OpenAir Revenue Recognition Transactions to NetSuite is to configure the OpenAir Advanced Revenue Management plugin in NetSuite. This process must only be completed once and is valid for all Revenue Recognition Rules supported by Advanced Revenue Management. See [Configuring the Integration for Revenue Recognition Rules with NetSuite Advanced Revenue Management](#)

Next, configure a Revenue Recognition Rule in OpenAir which is supported by Advanced Revenue Management. See the **Revenue Recognition** section in the **Projects** chapter of the [OpenAir Admin Guide](#) for more information.

Set up the mappings for the rule on the Mappings page in NS Connector. Mappings can be configured in either the old or new NS Connector UI.

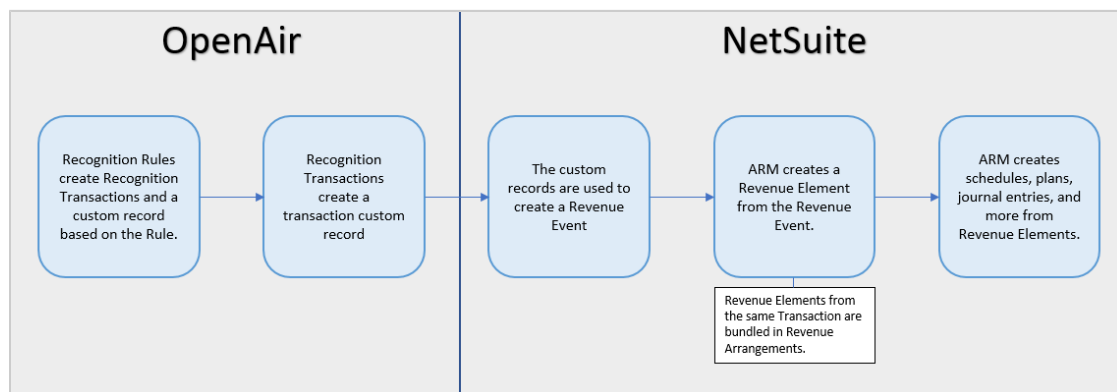
Note: Custom mappings are not supported for Revenue Recognition Rules used with Advanced Revenue Management.

When you run the integration, NS Connector sends instructions for processing your Revenue Recognition Rules to a custom record in NetSuite using the mappings you created.

Note: Creating Revenue Recognition Rules in OpenAir and running the rules are two independent processes. Both must be configured separately.

When OpenAir runs Revenue Recognition Rules, it creates Revenue Recognition Transactions for each line in the rule (As Billed rules work differently, see). When Advanced Revenue Management is triggered in NetSuite, NS Connector creates a Revenue Event and a custom record in NetSuite from the Transaction. The custom record says which rule created the Revenue Transaction, and also tells Advanced Revenue Management how to account for the Revenue Event.

Advanced Revenue Management then uses the Revenue Events to create NetSuite Revenue Elements. A Revenue Element is created for each Revenue Recognition Transaction. These Elements are then used by Advanced Revenue Management.



Relationship Between Revenue Recognition and Billing

Note: Revenue Recognition and Billing are two independent processes. It is possible to link some types of Revenue Recognition Rules to Billing Rules for a particular project when using Advanced Revenue Management. Billing can be integrated either before or after Revenue Recognition Transactions are sent to NetSuite ("As billed" Revenue Recognition Rules and Transactions are integrated only when the relevant invoice has been exported to NetSuite).

When OpenAir integrates Recognition transactions to Advanced Revenue Management, it also creates custom reports within NetSuite which can be used to help reconcile billing and revenue recognition. These reports are:

- OpenAir: Revenue Rules for ARM
- OpenAir: Revenue Transactions for ARM

Configuring the Integration for Revenue Recognition Rules with NetSuite Advanced Revenue Management

OpenAir Date or Milestone Fixed Fee, As Billed, Percent Complete, and Incurred vs. Forecast recognition rules can be integrated to NetSuite and used by the Advanced Revenue Management (ARM) feature. When this feature is configured, NS Connector sends OpenAir Recognition Transactions and Rules to NetSuite as custom records. The NetSuite OpenAir SRP ARM bundle uses these custom records to create Revenue Arrangements with Elements, which Advanced Revenue Management can then use. These values appear in NetSuite reports, and allow you to reconcile your declared revenue against your billing to confirm that your records balance.

To use OpenAir Recognition Rules with Advanced Revenue Management, you first need to configure the OpenAir Advanced Revenue Management plugin in NetSuite. Then, configure your OpenAir Recognition Rules.

To configure the OpenAir Advanced Revenue Management Integration (ARM) plugin in NetSuite:

1. Enable the Advanced Revenue Management feature in NetSuite. See [Advanced Revenue Management](#) for more information.
2. Please contact NetSuite Professional Services and request the **Revenue Management Plug-in** feature.
3. Install the "NetSuite OpenAir SRP ARM" bundle (Bundle ID 217172). NS Connector requires version 0.4 or later ("As Billed" rules require version 0.5 or later) .
4. Go to Customization > Plugins > Manage plugins and select **Enable created ARM plugin implementation**.
5. To begin using this feature, first go to List > Accounting > Revenue Recognition Type and manually create a **Revenue Recognition Event Type** called **OpenAir Event**.

Revenue Recognition Event Type

List Search

Edit Back | Actions ▾

REVENUE RECOGNITION EVENT TYPE

OpenAir Event

☒ CREATE REVENUE PLAN PER EVENT

☐ PERCENT COMPLETE

☐ INACTIVE

Each item which you integrate from NetSuite to OpenAir must have **OpenAir Event** set in the **Create revenue plans on** field.

6. Go to Setup > Accounting > Fair Value Price List and set the Fair Value Price List for this OpenAir Event. You can also select the **Use Sales Price as Fair Value** option in Accounting preferences.

To configure OpenAir Revenue Recognition for use in NetSuite's Advanced Revenue Management:

Note: Steps 1 and 2 only need to be performed once. All other steps must be performed for each revenue recognition rule you use with Advanced Revenue Management

1. Go to Administration > Global Settings > Integration: NetSuite, click the **Tips** button, click **NetSuite integration admin**, and select **Enable workflows for Advanced Revenue Management feature** and click **Save**.

This will allow you to add Advanced Revenue Management-related workflows to your NS Connector integration.

2. Enable the **Recognition rules (Custom Record: OpenAir: Revenue Rules for ARM)** and **Recognition transactions (Custom Record: OpenAir: Revenue Transactions for ARM)** workflows in the **NS Connector Mapping** screen.

These workflows will allow NetSuite to correctly create NetSuite custom records from exported OpenAir revenue recognition rules and transactions.

3. Go to Projects > Projects > [Select a project] > Financials > Recognition > [Create or select a recognition rule supported by Advanced Revenue Management].
4. In the **Revenue Recognition Rule** form, select a NetSuite billing rule to associate the OpenAir Revenue Recognition Rule with from the **Associated billing rule** dropdown list.
5. Select the **Use this rule with Advanced Revenue Management** option.
6. Click **Save**.

Note: Revenue Recognition rules integrated to NetSuite must have a **Service** selected.

Configuring the Sales Order Integration

You can create sales orders in NetSuite and transfer them to OpenAir for projects that have been previously transferred to OpenAir. OpenAir creates a unique Customer PO for each sales order line item you enter in NetSuite along with associated billing rules and recognition rules.

Edit the billing rules and recognition rules in OpenAir and run them for the project. Create invoices in OpenAir and export them to NetSuite. Export revenue recognition transactions back to NetSuite and create journal entries.

Note: Revenue recognition rules are only created when POs are initially created and there is a corresponding billing rule on the sales order line.


Refer to the following additional details about sales orders transfer to OpenAir as POs.

- Discounts or Markups as well as revenue recognition rules on sales order line items transfer to OpenAir along with specific billing rule information.
- A Description on a sales order line item transfers to OpenAir as the Charge Description. Ensure the NetSuite form you are using includes the Description field.

- An Item on a sales order line item transfers to OpenAir as an Activity on a time or fixed fee billing rule. Ensure the NetSuite item is marked for export to OpenAir.
- If you create billing rules, you can also create revenue recognition rules similar to the ones you would create for a project in OpenAir. In addition, use custom mappings that transfer back to NetSuite. See [Customizing Revenue Recognition Rules](#).
- The integration can add invoice details from the OpenAir project and user records to a NetSuite invoice. Create a Description Item in NetSuite and OpenAir and select a check box on the OpenAir Activities form. Set up custom mappings to specify the information you would like transferred and displayed on your NetSuite invoice.
- OpenAir invoices that transfer to NetSuite can have an initialize step during which the integration gathers information from the NetSuite sales order and incorporates it into the exported invoice in a way similar to the Next Bill functionality in NetSuite. Invoice information can then be edited on the NetSuite invoice.

To enable the Sales Order feature in NetSuite:

1. Go to Setup > Company > General Preferences > Custom Preferences and select the check boxes for the following:
 - Export SO Line Default.
 - Enable billing rules for SO discounts. This requires OpenAir Integration Bundle 1.15 or higher and allows you to assign fixed fee billing rules to discount items in NetSuite on a per project basis.
 - Create rev rec rules on sales orders. This requires OpenAir Integration Bundle 1.25 or higher and allows you to create revenue recognition rules in OpenAir when you create NetSuite Sales Orders and corresponding billing rules.
2. Mark all sales order lines that you want to transfer with a valid OpenAir billing type rule: time, fixed fee % complete, or fixed fee on date or milestone.
3. Mark all sales order lines that you want to transfer with a valid OpenAir revenue recognition type rule: % complete, as billed, fixed amount % complete, fixed amount on date or milestone, incurred vs. forecast, or time. You can only have one time revenue recognition rule per project.

 **Note:** Please note the following:

- The Sales Order integration does not use an Export to OpenAir check box on either the sales order header or sales order line, but items have an Export to OpenAir check box. This needs to be selected if you are going to use the item in a sales order you transfer to OpenAir.
- For invoicing, ensure your company has enabled A/R and A/P. Go to Setup > Company > Enable Features > Accounting and verify check boxes for A/R and A/P are selected.

To enable the Sales Order feature in OpenAir:

There are a number of sales order related features you can choose to enable in the integration. Refer to the following:

1. **NetSuite integration administration** form: Contact OpenAir Support and request that some or all of the following features be enabled.
 - Enable NetSuite sales order to OpenAir customer PO integration.
 - Enable recognition rule creation in sales order integration.
 - Adjust quantity based on % invoiced for time charges related to NetSuite sales order lines with quantities that do not reflect hours. Occurs on export of invoices. Requires OpenAir Integration Bundle 1.14 or higher.

- Always respect the NetSuite sales order customer and project when exporting invoices. (Allows the transfer of NetSuite sales order information such as Sales Team when you export invoices back to NetSuite.)
 - Create billing rules for NetSuite discount and markup lines on sales orders.
 - Create time billing rules in sales order integration with an activity filter. Map sales order line description to billing rule charge description.
 - Enable charges to map to NetSuite description items. This is used with the sales order integration.
 - Initialize invoices from corresponding sales orders when exporting invoices to NetSuite. This is used with the sales order integration.
2. **NetSuite integration** form: Select the check box for Customer POs (Sales Orders) under Get data from NetSuite.
 3. **NetSuite integration** form: Select the check box for Invoices (Invoices) under Send data to NetSuite if you are going to export invoices back to NetSuite. Select the check box for Recognition Transactions (Revenue Recognition Transactions) if you are going to export revenue transactions back to NetSuite and create related journal entries.
 4. Enable the company setting that limits one project per invoice. Go to Administration > Application Settings > Invoice Settings > Other settings. Select the check box for One project per invoice and Save.

Implementing the Sales Order Integration

You can send NetSuite sales orders to OpenAir using one of the OpenAir Billing Rules: Time, Fixed fee % complete, or Fixed fee on date or milestone. In addition, you can select one of the following OpenAir Revenue Recognition Rules: % complete, as billed, fixed amount on % complete, fixed amount on date or milestone, incurred vs. forecast, and time. You must select a billing rule in order to transfer a revenue recognition rule.

- Generate charges using the Customer PO either by running billing rules in the Projects application or creating charges in the Invoices application. Use the charges you generate to create invoices. Then, you can export the invoices back to NetSuite.
- Recognize revenue by running the revenue recognition rules. Transfer revenue recognized for a project back to NetSuite through the integration. See [Customizing Revenue Recognition Rules](#).

There are several enhancements that allow greater control of the final NetSuite and OpenAir invoice. They include the following.

- When you use the feature to calculate quantity from % invoiced on the NetSuite sales order with a time billing rule, the invoice shows a percentage of the quantity instead of hours when it exports to NetSuite. See [Calculating Quantity from % Invoice](#).
- When you transfer a sales order to OpenAir, the NetSuite company and project information, such as the Sales Team, exports with the invoice and displays in NetSuite. See [Exporting NetSuite Sales Order Information with OpenAir Invoice](#).
- When you use NetSuite discounts and markups on a NetSuite sales order and assign a fixed fee billing rule, the sales order transfers to OpenAir with those discounts and markups. The integration creates a related billing rule and Customer PO that have a monetary value equal to the total value with the discount or markup. You can edit the billing rule and Customer PO and use them to generate an OpenAir charge. The discount or markup charge is based on the billing rule when billing is run for the project. The generation of that charge is based on the amount of the billing rule, like other fixed-fee billing rules. Therefore, you need to adjust the billing rules so that you generate the correct discount amount. When you export the invoice back to NetSuite, the amount includes the discount or markup. Both the OpenAir and NetSuite invoices match. You can ensure

the invoice created in OpenAir includes the negative charge that corresponds to the discount and the NetSuite sales order discounts and markup lines are not applied after the invoice exports to NetSuite. [Creating OpenAir Billing Rules for NetSuite Discounts and Mark Ups](#).

- When you use the feature to add detailed information from the OpenAir charges to the description item in the NetSuite invoice, additional charge or slip information about the project and users transfers to the NetSuite invoice. See [Exporting OpenAir Charge Detail to NetSuite Description Item](#).
- When you use the feature to initialize the invoice, the integration gathers information from the NetSuite sales order, places it on the OpenAir invoice and then exports that invoice to NetSuite. This functions like the Next Bill button functions in NetSuite. You open the exported invoice in NetSuite, edit it, and save it. It contains more information than your OpenAir invoice displays. See [Initializing an OpenAir Invoice](#).
- When you include a Description on a sales order item, it transfers to OpenAir as a Charge Description. The Item transfers to OpenAir as an Activity.

Once you enable the features you want in the Sales Order integration and transfer sales orders from NetSuite to OpenAir, custom fields display on the Edit Customer PO form in OpenAir. See below.

Importing NetSuite Sales Orders and Creating OpenAir Invoices

Create sales orders in NetSuite and run the integration to import a Customer PO to OpenAir. To view a Customer PO in OpenAir, go to Administration > Application Settings > Invoices Settings > Customer POs. Click on a Customer PO.

You can also ensure a Customer PO is associated with a project by adding it to the available POs in that project. Go to Projects > Project and select the project designated on the sales order. Click Edit project or Properties to display the project properties form. Scroll down to Customer POs, and click the Edit link. A pop-up window displays available Customer POs. Select the PO, click Add selected, and click OK to add the PO to the project.

From the Customer PO, you can generate an associated billing rule or charge to create sales order charges as well as revenue recognition rules. You must generate billing rules in order to generate revenue recognition rules. These billing rules and recognition rules displays under the Financials tab in the project for which the sales order was created.

- Use the charges to create an OpenAir invoice. When you run the integration, you export the invoices back to NetSuite.
- Use the recognition rules to recognize revenue. When you run the integration, you export the recognized revenue back to NetSuite. See [Customizing Revenue Recognition Rules](#).


Refer to the following procedures for importing NetSuite sales orders to OpenAir Customer POs so you can generate invoices and export them to NetSuite. They include creating charges in both the OpenAir Projects and Invoices applications as well as producing OpenAir invoices:

- To import Sales Orders from NetSuite to Customer POs in OpenAir:
- To create charges in the OpenAir Projects application:
- To create charges in the OpenAir Invoices application:
- To generate invoices in OpenAir and export them to NetSuite:


To import Sales Orders from NetSuite to Customer POs in OpenAir:

Use this procedure to transfer Sales Orders from NetSuite to Customer POs in OpenAir.


1. In NetSuite, go to Lists > Accounting > Items and either create a new Item or edit an existing one. Ensure you select a Default OpenAir Billing Rule and the check box to Export to OpenAir. Under the Basic tab, select the Income Account using the drop-down list as well as the Tax Schedule, and Deferred Revenue Account.

 **Note:** You may create a time billing rule and transfer it to use in the OpenAir New other rate charge form in the Invoices application. Time billing rules can be a daily rate charge as well as an hourly charge, such as one you might use in a time billing rule in the Projects application.

2. In NetSuite, go to Transactions > Sales > Enter Sales Orders and enter sales order information. The customer and project must already have been transferred to OpenAir.
3. Select an item, one designated for export to OpenAir, from the drop-down list and fill in the information. Click in the OpenAir Billing Rule column and select an OpenAir billing rule from the drop-down list.

 **Note:** An OpenAir billing rule is not the same as the NetSuite Billing Schedule.

4. If you are using the revenue recognition rule integration, select a OpenAir: Rev Rec Rule from the drop-down list.
5. Ensure the status of the NetSuite Sales Order is pending fulfillment or pending billing.


 **Note:** When you export an invoice back to NetSuite, it only exports if the sales order is an approved sales order and the sales order is still available for billing. If it is not approved or has been fully billed, you receive an error message.

6. Run the integration. Refer to [Running the Integration](#).

To create charges in the OpenAir Projects application:

Use this procedure when you are going to run time billing or fixed fee billing rules available under the Financials tab in the Projects application.

1. In OpenAir, go to Projects and select a project. Go to Financials > Billing. Click on the billing rule for the Customer PO to display the information. Edit the dates on the billing rule.

 **Important:** You must change the default date on the time billing rules. It is intentionally set to 01/01/50.

2. If it is a time billing rule, under Billing rates, select the source to "Get the billing rates from." When the billing rule is a type "O" or other rate, select a rate card or some other non-hourly rate.
3. Click Run billing. Generally, it is not necessary to enter dates in the Date filter form. Click Next to create project billing transactions and charges.
4. Click the button to Create project billing transactions and charges. The charges transfer from the Projects application to the Invoices application in OpenAir. See [To generate invoices in OpenAir](#)

and export them to NetSuite: for instructions on using charges to produce an OpenAir invoice and export it NetSuite.

To create charges in the OpenAir Invoices application:

Use this procedure when you are going to create a one-off charge. You can use the Invoices application to create charges based on a new other rate as well as a new hourly or flat rate charge. Remember to associate it with the correct Customer PO.

1. In OpenAir, go to Invoices > Charges and select New other rate...
2. Select the Customer : Project using the drop-down list. Select the Activity and User.
3. Select the Customer PO, the one that you imported from the NetSuite Sales Order.
4. Enter Date, Quantity, Rate, and additional Currency and time information.
5. Type Description and Notes.
6. Select the charge stage as Invoice Ready and click Save.

The charges transfer from the Charges tab to the Invoices tab. See [To generate invoices in OpenAir and export them to NetSuite](#): for instructions on using charges to produce an OpenAir invoice and export it NetSuite.

To generate invoices in OpenAir and export them to NetSuite:

Use this procedure to generate an invoice in OpenAir from the charges you created with the Customer PO in either the Projects application or the Invoices application.

1. Go to Invoices > Invoices > New invoice. Use the drop-down list to select the Customer : Project : NetSuite Sales Order #. The charges you just generated display in the list view.
2. Select the check boxes of the charges you want to include in the invoice and click the Save button. The invoice is created and displays. It includes the Customer PO and NetSuite Sales Order # as well as other company and customer information. The charges are listed.
3. Click Submit/Approve and ensure the OpenAir invoice is approved.
4. Run the integration or click the Export to NetSuite link. It displays on the invoice form in tips for the approved invoice. Refer to [Running the Integration](#).



Note: If you are exporting invoices to NetSuite through the integration, please note the following:

- If you have enabled the switch for initializing invoices, the export message indicates that the invoice # is initialized from the NetSuite sales order # and that the export succeeded. If you have enabled importing taxes, the taxes applied are also listed.
- Charges are grouped automatically by the NetSuite sales order line and not just a sales order ID. A NetSuite sales order can have multiple lines on it and each of those lines becomes a unique customer PO in OpenAir. Also, if the charges on an invoice reference two unique customer POs in OpenAir, the resulting invoice in NetSuite will also have two lines, and each line corresponds to a line on the NetSuite sales order. However, one invoice can only reference one NetSuite sales order so multiple sales orders are not referenced on a single invoice.
- It is not required that you reference a sales order line on an invoice, but if you do, you can only reference a sales order line once.
- You can send an invoice that has more than one charge that references a single sales order line, but those charges are rolled up into one when the invoice is exported to NetSuite. The OpenAir invoice retains the detail. And if the rates used on the charges that are rolled up are different, rates are calculated based on the quantity and amount after roll up.

- You can close out sales order lines when you send the invoice to NetSuite, indicating the quantity has been billed.
- Debugging is enabled on the OpenAir **NetSuite integration** form. If the export should fail, a message provides guidance for resolving errors so the export can be successful. See [Filling in the NetSuite Integration Form in OpenAir](#).

Calculating Quantity from % Invoice

Use this feature for time billing rules when you want to use hours as a container of time and bill a percentage of the whole amount instead of individual hours.

To calculate quantity from % invoice:

1. In NetSuite, go to Transactions > Sales > Enter Sales Orders. Create a new sales order.
2. Select an item and mark the check box to get the OpenAir Quantity as % Invoiced. Fill in the sales order information.
3. Run the integration. Refer to [Running the Integration](#).
4. Go to Administration > Application Settings > Invoices Settings and select Customer POs. Scroll down and ensure the check box is selected to Calculate Quantity From % Invoiced.
5. Go to Projects > Projects and select the project the sales order is associated with.
6. Go to Financials > Billing. Edit the date of the billing rule to the current time frame.
7. Run billing, generate transactions, and create an invoice for the Customer PO that had the check box selected to Calculate Quantity From % Invoiced. Approve the invoice.
8. Run the integration. The invoice you export back to NetSuite contains the desired information.

Creating OpenAir Billing Rules for NetSuite Discounts and Mark Ups

Use this feature to edit billing rules related to NetSuite service order discounts and markups so that accurate charges are included in invoices generated in OpenAir. This ensures that both the NetSuite invoice and the OpenAir invoice reflect the same discounts or markups. Billing rules and Customer POs transfer with NetSuite service order discount and markup information to OpenAir and then transfer back to NetSuite when you export the invoice. You are able to create negative charge amounts in OpenAir as needed. While the integration automatically handles discounts and markups, this feature allows finer manual control of that process.

To create OpenAir billing rules for NetSuite discounts and mark ups:

1. In NetSuite, go to Transactions > Sales > Enter Sales Orders. Create a new sales order.
2. Select an item that is either a discount or markup. Select either a Fixed fee % complete, Fixed fee on date or milestone, or Do not export billing rule.



Important: Ensure you have selected the NetSuite custom preference to enable billing rules for SO discounts. Otherwise, a discount item is not permitted.

3. Approve the sales order.
4. Run the integration. Refer to [Running the Integration](#).
5. Go to Administration > Application Settings > Invoices Settings and select Customer POs. Scroll down and ensure one or both of the check boxes is selected: NetSuite Sales Order Line Discount Customer PO and/or NetSuite Sales Order Header Discount Customer PO.

6. Go to Projects > Projects and select the project the sales order is associated with.
7. Go to Financials > Billing. Edit the billing rule as necessary to reflect the desired discount or markup information.

Note: If discounts should be applied over several periods or as a percentage of billed time, adjust the billing rule accordingly.

8. Run billing, generate transactions, and create an invoice for the Customer PO that had the discount check box selected. Approve the invoice.
9. Run the integration. The invoice you export back to NetSuite contains the desired information.

Note: If you create a sales order to export to OpenAir and there is a discount/markup line following a sales order line, the discount/markup line also exports to OpenAir as a Customer PO and a billing rule is created even though you may have selected the rule: Do not export. This discount/markup line applies to the line above it and is needed to prevent user errors.

Exporting NetSuite Sales Order Information with OpenAir Invoice

When you transfer a NetSuite sales order to OpenAir and create an invoice from it in OpenAir, the NetSuite customer and project information, such as the sales team, can transfer back to NetSuite when you export the invoice from OpenAir. This is similar to the functionality that exists when creating an invoice from a sales order in NetSuite.

To export sales order information with an OpenAir invoice:

1. In NetSuite, go to Transactions > Sales > Enter Sales Orders. Create a new sales order and identify the Sales Team.
2. Approve the sales order.
3. Run the integration. Refer to [Running the Integration](#).
4. In OpenAir, run billing, generate transactions, and create an invoice for the sales order Customer PO. Approve the invoice.
5. Run the integration. The invoice you export back to NetSuite contains the desired information.

Note: Normally, customer and project information come from the OpenAir invoice. When you use this feature, this information comes from the NetSuite sales order at both the header and line levels. If there is a discrepancy between the two invoices, adjust the OpenAir invoice manually.

Exporting OpenAir Charge Detail to NetSuite Description Item

When exporting invoices from OpenAir that are associated with a NetSuite sales order for time or fixed fee billing, you can specify additional information to transfer from OpenAir to the NetSuite invoice. First you create or identify a Description item in NetSuite. Next, you create or identify an existing activity (service/category/item) in OpenAir and select a check box that indicates it is a NetSuite description item used for charges in the invoice export. Then, you set up custom mapping to identify the fields and values you would like to transfer. See [Using Advanced Settings](#) and [Mapping Description Items When Exporting Invoices](#).

To export OpenAir charge detail to a NetSuite description items:

1. In NetSuite, go to Lists > Accounting > Items. At the bottom of the list form, find Type and select Description from the drop-down list. This displays the Internal IDs of Description items in your account. Either create a new item or identify the one you want to use and make note of the Internal ID. You will manually add this Internal ID number to an Activity in OpenAir.
2. In OpenAir, go to Administration > Application Settings > Invoices Settings > Activities. Create a new Activity with the name of the Description item from NetSuite.
3. Scroll down the form and enter the Internal ID of the Description item from your NetSuite account in the text box on the OpenAir form for NetSuite Item ID.
4. Continue scrolling down the form and select the check box for: NetSuite description item used for charges in invoice export. This custom field is added to the Activity form when the feature is enabled.
5. In NetSuite, go to Transactions > Sales > Enter Sales Orders. Create a new sales order, enter items, approve it, and export it. You do not enter the NetSuite Description item as one of the items on the sales order.
6. Run the integration. Refer to [Running the Integration](#).
7. In OpenAir, edit the billing rule date, run billing, generate transactions, and create an invoice for the sales order Customer PO. Approve the invoice.
8. In OpenAir, go to Administration > Integration: NetSuite. Scroll down to the Advanced Settings section and type the custom mappings for the information you would like to transfer. See [Mapping Description Items When Exporting Invoices](#). Click Save.



Note: This feature requires that additional custom mappings be specified. The integration must receive the specific definitions you would like to have displayed as description items. Examples of such mappings are provided in [Mapping Description Items When Exporting Invoices](#).

9. Run the integration. Refer to [Running the Integration](#).
10. The invoice transfers to NetSuite and displays the Description item along with the additional information you specified in the Advanced Settings section.

Initializing an OpenAir Invoice

You can enable a feature in the integration that ensures the invoice you export from OpenAir contains information from the associated NetSuite sales order. This functionality is similar to creating a sales order in NetSuite and selecting the Next Bill button. The resulting NetSuite invoice contains pertinent sales order information. Now, when you initialize an OpenAir invoice upon export, the integration gathers information from the NetSuite sales order, adds it to the OpenAir data that is being exported, and sends it all to the NetSuite invoice. You can edit this information in NetSuite and save it just as you do with an invoice created by the Next Bill button. Custom mapping are available to map custom field values from the service sales order to the invoice. See [Using Advanced Settings](#) and [Mapping Service Sales Order Custom Fields When Exporting Invoices](#).

Customizing Revenue Recognition Rules

If you are not familiar with [Using Advanced Settings](#), you may want to take a few minutes and review it. This section assumes that you understand the following:

- [Using Entity Integration Point Tags](#)
- [Using Field Declarations](#)
- [Using Field Mapping Tags](#)

The types of revenue recognition rules you can create in NetSuite on the sales order form are similar to the recognition rules you can create for a project in OpenAir. To use this integration, you select one of the types from a custom column on the NetSuite sales order form. Remember, in order to export a revenue recognition rule from a NetSuite sales order to an OpenAir PO, you must select both a billing rule and one of the following types of revenue recognition rules on the sales order line item:

- % Complete - OpenAir type = P
- As Billed - OpenAir type = A
- Fixed Amount for % Complete - OpenAir type = F
- Fixed Amount for Date or Milestone - OpenAir type = F
- Incurred vs. Forecast - OpenAir type = I
- Time - OpenAir type = T

Each revenue recognition rule type has its own mapping syntax. For the most part, you can map most of the fields on the revenue_recognition_rule table. See the data dictionary: https://www.openair.com/database/single_user.html#revenue_recognition_rule. Since some of the options normally available on the web application revenue recognition rule form are not actual fields in the revenue_recognition_rule table, custom mapping allows you to set those options through the integration to either override defaults or set other fields. Refer to the following tables to review available custom mappings for each rule type. Then, take a look at the sample code for the OA_FIELDS section. See [Code Example for OA_FIELDS](#).

As Billed Rule

The following custom mappings are available for as billed revenue recognition rules.

| Fields from revenue_recognition_rule table | Additional form fields | Correlation with form |
|--|------------------------|--|
| All fields from the revenue_recognition_rule table | inc_time | Populate hours in recognition transactions check box |

Fixed Amount Rule

You can use all fields from the revenue_recognition_rule table except the following: project_task_id, category_id, category_1_id, category_2_id, category_3_id, category_4_id, category_5_id, cost_center_id, agreement_id, and customerpo_id.

That is because these values are populated in the repeated rows on the form. To view an example of this form in OpenAir, go to Projects > Financials > Recognition and select New > recognition rule.

The following custom mappings are available for fixed amount for % complete as well as fixed amount for date or milestone revenue recognition rules.

| Fields from revenue_recognition_rule table | Additional form fields | Correlation with form |
|---|------------------------|-----------------------|
| Use the form fields to customize the mapping of the first amount row on the revenue recognition rule. | recognition_type_1 | Rule Type |
| | acct_code_1 | Accounting code |
| | amount_1 | Amount (money) |
| | project_task_id_1 | Project task |

| Fields from revenue_recognition_rule table | Additional form fields | Correlation with form |
|--|------------------------|-----------------------|
| | category_id_1 | Service |
| | category_1_id_1 | Service 1 |
| | category_2_id_1 | Service 2 |
| | category_3_id_1 | Service 3 |
| | category_4_id_1 | Service 4 |
| | category_5_id_1 | Service 5 |
| | cost_center_id_1 | Cost center |
| | agreement_id_1 | Agreement |
| | customerpo_id_1 | Customer PO |

Incurred vs. Forecast Rule

The following custom mappings are available for incurred vs. forecast recognition rules.

| Fields from revenue_recognition_rule table | Additional form fields | Correlation with form |
|--|------------------------------|---|
| All fields from revenue_recognition_rule table | inc_approved_time | Approved hours multiplied by user cost check box |
| | inc_approved_ticket | Approved receipts check box |
| | inc_fulfilled_purchase_items | Fulfilled purchase items check box |
| | fore_estimated_time | Estimated hours multiplied by user cost check box |
| | fore_approvedbooked_time | Approved and booked hours multiplied by user cost check box |
| | fore_expense | Total planned receipts: (money) check box |
| | fore_expense_total | Total planned receipts: (money) textbox, the amount |
| | fore_purchase | Total planned purchase items: (money) check box |
| | fore_purchase_total | Total planned purchase items: (money) textbox, the amount |

Time Rule

All fields from the revenue_recognition_rule table are available for custom mappings in time revenue recognition rules.

Code Example for OA_FIELDS

For custom mappings available for the revenue recognition rule feature, you use an OA_FIELDS section and reference them as you would normally reference true fields. However, since these are not true fields, these form fields are not available in lookups. Refer to the following:

```
<REVREC_RULE_AS_BILLED>
  OA_FIELDS    inc_time, acct_code
  inc_time     '0'
  acct_code    'TESTCODE'
</REVREC_RULE_AS_BILLED>
```

Configuring the Salesforce.com Integration for Customers and Projects

When you use the Salesforce.com integration with OpenAir, you can pass customer and project information captured in Salesforce.com through OpenAir to NetSuite. A Salesforce.com ID is transferred to NetSuite as part of creating the entity in NetSuite. Once the customer and project are in NetSuite, they are assigned a NetSuite ID, which is subsequently added to the OpenAir customer and project record. While information can be updated and transferred between OpenAir and Salesforce.com, those updates cannot be exported back to NetSuite. To make changes to the NetSuite record, either manually update it in NetSuite, or if necessary, un-export it from OpenAir and then manually delete the record in NetSuite. Un-exporting the record in OpenAir allows you to re-export the record to NetSuite from OpenAir. If you un-export the OpenAir record, you must delete the NetSuite ID from the OpenAir custom field and save it. Then, you can make changes to the OpenAir record either manually or from Salesforce.com and export the OpenAir record back to NetSuite. See [Un-Exporting a NetSuite Customer or Project](#).

For this integration, customers and projects must have a Salesforce ID and cannot already have a NetSuite ID. The following custom field for CUSTENTITY_OA_SFA_ID is created on the NetSuite Customers edit window and Projects edit window.

To enable the Salesforce.com Integration feature in NetSuite:

Go to Setup > Company > General Preferences > Custom Preferences and select the check box for Enable SFA Integration.

To enable the Salesforce.com Integration feature in OpenAir:

1. Contact OpenAir Support and make sure that the following OpenAir internal switch is enabled in your account: Enable API integration with Salesforce.com. Work with OpenAir Professional Services to ensure your account information is properly configured on the Salesforce.com Integration form. To review it, go to Administration > Global Settings > Integration : Salesforce under Account.
2. **NetSuite integration administration** form: Contact OpenAir Support and request the following Enable 3-way Salesforce.com, OpenAir and NetSuite integration. This enables both the export and un-export feature.
3. **NetSuite integration** form: Select the appropriate check boxes for Customers and Projects under Send data to NetSuite, depending on whether you want to transfer customers, projects, or both.

Un-Exporting a NetSuite Customer or Project

Once a customer has been transferred from Salesforce.com through OpenAir to NetSuite, there may be a case when you need to delete the customer or project record in NetSuite and transfer the record again from OpenAir. To do this, delete the record in NetSuite, delete the NetSuite ID from the customer or project edit form in OpenAir, go to the OpenAir list view and mark the customer or project for un-export. Run an action in OpenAir and ensure you select the check box to un-export the entity. In the hints of the customer or project edit form in OpenAir, the export link displays again: Export to NetSuite. To transfer the customer or project record again to NetSuite, either click the link or run the integration.



Important: Un-exporting a customer or project should only be done with care. Do not use this as a way of passing regular updates to NetSuite. NetSuite is still the system of record in the integration and changes should be made to the NetSuite record.

To un-export a NetSuite Customer or Project:

1. In OpenAir for customers, go to Administration > Global Settings > Customers and select the customer you want to un-export. For projects, go to Projects > Projects and select the project you want to un-export.
2. Delete the NetSuite ID from the project or customer properties form.



Note: Before you run the integration, ensure the OpenAir project or customer properties forms do not display a NetSuite ID. You must delete it before running the integration.

3. In NetSuite, go to Lists > Relationships and select the customer or project. Click the Edit link for the customer or project.
4. Click Delete and confirm the action.
5. In OpenAir for customers, go to Administration > Global Settings > Customers. For projects, go to Projects > Projects.
6. On the list view, select the check box next to the customer or project you would like to un-export.



Note: If a Run icon does not display on the list view, customize the list view. Click on the arrow at the top left in the title bar. When a List layout pop-up window displays, select Run an action from Available Items and click Add selected items. Click OK.

7. Click the Run icon. When an Actions pop-up window displays, select the check box for Un-export the customers. Click OK. The NetSuite customer record is un-exported.
8. Make changes to the OpenAir record. You can re-export the customer or project back to NetSuite using normal export procedures.



Note: NetSuite assigns a new NetSuite ID number to the customer or project. Future expenses and invoices related to the re-exported customer or project will be associated with this new NetSuite ID number.

Configuring Scheduling Options

The integration allows you to schedule up to 24 integration runs per day. Set a day and hourly time range, and the system selects the exact time the run occurs within that hourly time range. This allows the system to maximize efficiency. Note that while the run begins during the hourly time frame

specified, it may end outside of that hourly range. You can schedule up to 24 integration runs per day, however, those scheduled runs cannot overlap. An error message alerts you to any potential problems. Scheduling options include days of the week, every day, specific days of the month including the 1st - 31st, last day of the month, 1st and 15th of the month, and 15th and last day of the month.

You have the option of temporarily inactivating a scheduled run. To do so, clear the Active check box and click the Save button. To delete a scheduled run, select the delete check box and click the Save button.

To enable the Scheduling feature in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request the following Enable additional scheduling options.
2. **NetSuite integration** form: Select 1 more from the [Add schedule] drop-down list. Complete scheduling information and Save.

Configuring NetSuite Single Sign-On

The NetSuite Single Sign-On feature allows a NetSuite employee who is also an OpenAir user to access applications in OpenAir from the NetSuite application. This includes deploying Suitelet scripts that bring OpenAir applications into NetSuite under a PSA Center Tab, using a Portlet on the Dashboard to perform OpenAir functions, as well as using a Subtab to launch OpenAir applications from within the NetSuite application. Review the following.

- Create a connection point with OpenAir and add any number of Portlets, Suitelets and Subtabs.
- Add a PSA Center Tab to your NetSuite navigation, and access all OpenAir applications as well as OpenAir Help and Support functions as if you were logged in to OpenAir. This requires Bundle 13512 Version 4.0. If you have not updated to this version, contact your Professional Services Consultant.
- Add Subtabs and view OpenAir entities and transactions directly from your NetSuite account. For example, use a Subtab to display OpenAir Project details from a NetSuite Projects form or view OpenAir Resource utilization from a NetSuite Employee form.
- Use custom Subtabs set up in your NetSuite account and associate them with Record Types on the SuiteSignOn form. When you run the integration, the Subtabs are added to the NetSuite form and display the requested OpenAir information.

Note: NetSuite employees with NetSuite Single Sign-On access to OpenAir can also have OpenAir Active Directory Authentication enabled.

To enable NetSuite Single Sign-On in NetSuite:

1. Go to Setup > Company > Enable Features > SuiteFlex and select the check box for SuiteSignOn under Single Sign-on. Read the Terms of Service for the NetSuite SuiteFlex Platform if you have not already done so.
2. Contact NetSuite Support and request that OpenAir: Single sign-on Bundle # 13512 be installed in your account.
3. Go to Setup > Company > Preferences > Custom Preferences.
 - Enter the OpenAir SuiteSignOn record ID.
 - Accept or change the default Suitelet content height and width. These are account-wide adjustments and affect the display of all NetSuite users in your account.

- Enter any terminology overrides to the OpenAir application terminology.

With OpenAir: Single sign-on Bundle # 13512 version 4.0, a PSA Center Tab also displays in the NetSuite UI. You can add or remove OpenAir application links for the desired OpenAir applications. See [Implementing the PSA Center Tab and Suitelet Scripts](#).

To enable NetSuite Single Sign-On in OpenAir:

NetSuite integration administration form: Contact OpenAir Support and request the following: Enable NetSuite single signon.

Implementing NetSuite Single Sign-on

Once you have enabled NetSuite Single Sign-On in both applications, you create a SuiteSignOn record and connection points in NetSuite. Then you enter the related Consumer Key and Shared Secret information in OpenAir on the **NetSuite integration** form, thereby establishing the framework for communicating single sign-on between the two applications. Create at least one portlet, Suitelet or subtab in NetSuite for OpenAir and identify the OpenAir application for display. Designate users in OpenAir to whom you will give single sign-on access.

To set up NetSuite Single Sign-on:

1. In NetSuite, go to Setup > Integration > SuiteSignOn and create a new signon record. When the SuiteSignOn form displays, notice that a Consumer Key is automatically generated. You will use this on the **NetSuite integration** form in OpenAir.
2. Type a Name. For example, `_oa_sso`.
3. Type a Shared Secret and Confirm Shared Secret. For example, a password. You will use this on the **NetSuite integration** form.
4. Leave Partner Account blank and do not select the Inactive check box.
5. Click the Connection Points tab and create a new connection point. You can create many connection points on this SuiteSignOn form, and can add to it as necessary. This record can provide all the connection points needed in your integration.
6. Type the following URL: <https://www.openair.com/netsuite.pl>



Note: To set up NetSuite Single Sign-On in either a sandbox or demo account, enter one of the following: <https://sandbox.openair.com/netsuite.pl> or <https://demo.openair.com/netsuite.pl>

7. Type integration variables for `app=` and `db_id=` and separate them with a comma. You can enter multiple connection points on this form for displaying multiple OpenAir applications.

| Integration Variable | OpenAir Information |
|---|---|
| <code>db_id=</code> | Your OpenAir account number. Request this from Professional Services or go to Administration > Global Settings > Service plan under Account. |
| <code>app=(for module display in portlets and subtabs)</code> | OpenAir application code of module to display in the connection point when creating portlets and subtabs: km=Workspaces ma=Account, Home, or Dashboard pm=Projects |

| Integration Variable | OpenAir Information |
|---|---|
| | po=Purchases rm=Resources ta=Timesheets tb=Charges or Invoices te=Expenses |
| app=(for entity or transaction display when using with Record Type) | OpenAir application code of Record Type to display in the NetSuite subtab: te=expenses tb=charges or invoices ma=users, customers, contacts, or categories/activities/services pm=projects |
| Additional Integration Variables for specific Record Types | netsuite_employee_id={id} (user) netsuite_customer_id={id} (customer) netsuite_project_id={id} (project) netsuite_category_id={id} (category/activity/service) netsuite_company={company} (company), netsuite_contact_id={id} (contact) (See note below.) netsuite_envelope_id={id} (envelope/expense report) netsuite_invoice={id} (invoice) netsuite_revenue_recognition_transaction={id} (revenue recognition transaction) |

Note: Since a contact can be associated with more than one company in NetSuite, you need to specify both the company and contact ids.

Refer to the following examples for Portlets and Subtabs:

Portlet example: `app=ta,db_id=350`

(Connection is for the OpenAir Timesheets application in Account 350)

Subtab example: `app=pm,db_id=350,netsuite_project_id={id}`

(Connection is for the OpenAir Projects application, in Account 350, and a subtab for a NetSuite project)

8. Select the Display Type using the drop-down list: Subtab, Portlet, Suitelet, or User Event. The Display Context text box fills in depending on the Display Type you select.
9. Select Record Type if using Subtab Display Type. Record Type indicates the connection point is for a specific type of entity or transaction. For example, you might add a subtab to access the Skills & Experiences of OpenAir Resources or a subtab to access OpenAir projects.
10. Click the User Identification tab. Select the check boxes for Account and Internal ID and any others you desire. Click Save.
11. To display a portlet in NetSuite on the Dashboard, create a JavaScript in a text editor such as Notepad and upload it to NetSuite. The following is an example of a portlet JavaScript.

```
function buildPortlet(portlet, column)
{
  var title = 'OpenAir Dashboard';
  portlet.setTitle(title);
  var url = nlapiOutboundSSO('customsso_oa_sso');
  var content = '<iframe src="'+url+'" align="center" style="width: 100%; height: 600px; margin:0; border:0; padding:0"></iframe>';
  portlet.setHtml( content );
}
```

```
}

```

Note: The var url = nlapiOutbound SSO name within single quotes is the name you gave to the SuiteSignOn record you created. In this example, customsso is appended to the _oa_sso name used for our SuiteSignOn record.

12. Save the script with a .js extension.
13. In NetSuite, go to Setup > Customization > Scripts > New and select Portlet.
14. Type the Name and select the following Portlet Type from the drop-down list: Inline HTML.
15. Select the Scripts tab and select the Script File from the drop-down list: New. A pop-up window displays. Click the Browse button to locate and open the .js script you created and click Save. Type a Function and click Save.
16. The form refreshes and now displays a Deploy Script button. Click the Deploy Script button to make the portlet available to load onto the NetSuite Dashboard.
17. In OpenAir, go to Administration > Global Settings > Integration : NetSuite. After the NetSuite single signon feature is enabled on the **NetSuite integration administration** form, a new pane displays on the NetSuite integration form for Single sign-on credentials.
18. Type the Consumer Key and Shared secret from the NetSuite SuiteSignOn form. Click Save. After you save these credentials, a custom field is added to the Edit user demographic information form.
19. To give privileges for NetSuite Single Sign-on to an OpenAir user, go to Administration > Global Settings > Users and select the User ID. On the User Demographic form, scroll down and select the check box to Allow NetSuite Single Sign-On.
20. Users with NetSuite Single Sign-On privileges can then log into NetSuite and customize their Dashboard. To do so, log into NetSuite, go to Home > Dashboard and click on Personalize Dashboard under Settings.
21. Click Custom Portlet and select Set Up. It is located on the right menu under Personalize Dashboard. A Custom Content pop-up window displays.
22. Use the Source drop-down list and locate the portlet you created to display an OpenAir application. Click Save.

Note: After you customize the dashboard, when users log in to NetSuite, they are automatically logged in to OpenAir and the OpenAir applications display in portlets, subtabs, or Suitelets on the NetSuite Dashboard. Occasionally an error message displays. If this happens, simply click the refresh button and the page reloads.

Implementing the PSA Center Tab and Suitelet Scripts

Once you have enabled NetSuite Single Sign-On in both applications and have created a signon record and connection points in NetSuite, if you are using version 4.0 or greater, you can add or remove applications to the PSA Center Tab as well as change terminology and display your OpenAir Home window from within the NetSuite Dashboard. See the following:

- Suitelet Scripts for OpenAir Applications
- Add Applications to the PSA Center Tab
- Add Users for the PSA Center Tab
- Remove Applications from the PSA Center Tab
- Change Terminology
- Displaying the Home Module on Your NetSuite Dashboard

Suitelet Scripts for OpenAir Applications

The OpenAir: Single Sign-on bundle loads all twelve suitelet scripts and deploys them automatically. To review them, go to Setup > Customization > Script Deployments. Filter by OpenAir: Name of Module. Each script has _deploy at the end to distinguish it from the script record it references. Refer to the following:

| OpenAir Application | Deployment script |
|--------------------------------|---------------------------------------|
| OpenAir: Administration module | customdeploy_oa_sso_admin_deploy |
| OpenAir: Expenses module | customdeploy_oa_sso_expenses_deploy |
| OpenAir: Help module | customdeploy_oa_sso_help_deploy |
| OpenAir: Home module | customdeploy_oa_sso_home_deploy |
| OpenAir: Invoices module | customdeploy_oa_sso_invoices_deploy |
| OpenAir: Projects module | customdeploy_oa_sso_projects_deploy |
| OpenAir: Purchases module | customdeploy_oa_sso_purchases_deploy |
| OpenAir: Reports module | customdeploy_oa_sso_reports_deploy |
| OpenAir: Resources module | customdeploy_oa_sso_resources_deploy |
| OpenAir: Support module | customdeploy_oa_sso_support_deploy |
| OpenAir: Timesheets module | customdeploy_oa_sso_timesheets_deploy |
| OpenAir: Workspaces module | customdeploy_oa_sso_workspaces_deploy |

Add Applications to the PSA Center Tab

The bundle automatically adds links for all of the OpenAir applications to the PSA center tab as well as links for Help and Support. To enable these links, go into your SuiteSignOn record and add a Suitelet display type for each application you would like to be able to access.

To access these applications from the PSA Center Tab:

1. Go to Setup > Integration > Single Sign-on Tasks > SuiteSignOn.
2. Click the Edit link next to the SuiteSignOn script you entered in Custom Preferences for OpenAir: Single sign-on .
3. Click the Connection Points tab.
4. Enter the URL of the netsuite.pl script. For example, <https://www.openair.com/netsuite.pl>
5. Enter the Integration Variables for your company: db_id= (company ID). For example, db_id=350.
6. Use the drop-down list and select Suitelet as the Display Type.
7. Use the drop-down list and select the OpenAir application to display. For example, OpenAir: Projects module.
8. Click Save.

Add Users for the PSA Center Tab

To add users who can display and access the PSA Center Tab:

1. Go to Setup > Customization > Centers and Tabs.

2. Locate PSA and click the Edit link.
3. Click the Audience tab. Select the check box for Select All under Roles and Employees or select individual names or groups. You can also do this for Vendors and Partners, as well as individual Departments.
4. Click Save.

Remove Applications from the PSA Center Tab

To remove applications from the PSA Center Tab:

1. Go to Setup > Customization > Centers and Tabs.
2. Click on the PSA link. The Custom Center Tab form displays.
3. Click the Content tab and Categories tab.
4. Locate Modules and click Edit to the right. The Custom Center Category form displays and each OpenAir application is listed under Link.
5. Click on the application you would like removed from the PSA Center Tab and click the Remove button.
6. Click Save.

Change Terminology

You can change terminology displayed for the applications under the PSA Center Tab.

To modify the form title of the link in the PSA menu:

1. Go to Setup > Company > General Preferences > Custom Preferences.
2. Under OpenAir: Single sign-on, enter the terminology override in the text box provided for the application's link you would like to have renamed.
3. Click Save.

Displaying the Home Module on Your NetSuite Dashboard

You can personalize your NetSuite Dashboard to display portlet scripts, including the display of your OpenAir Home window. You can have several custom portlets that display.

To display your OpenAir Home window in NetSuite:

1. Go to Setup > Integration > Single Sign-on Tasks > SuiteSignOn and add the OpenAir: Home portlet as a connection point. See [Add Applications to the PSA Center Tab](#).
2. Enter the Integration Variables for your company including the Home application: app=ma,db_id= (company ID). For example, app=ma,db_id=350.
3. Use the drop-down list and select Portlet as the Display Type.
4. Use the drop-down list and select OpenAir: Home module portlet.
5. Click Save.
6. Go to Home > Dashboard and click on Personalize Dashboard under Settings.
7. Click on Custom Portlet.
8. Click Set Up and the Custom Content window displays.
9. Select OpenAir: Home module from the Source drop-down list.
10. Click Save.

Configuring the Tax Export Integration

The tax export integration allows you to transfer specific taxes on receipts for a tax location in your OpenAir expense report and subsequently to NetSuite. Users designate a tax location on an expense report and the receipts in the expense report automatically break out the specific taxes for that location. When an approved expense report is sent to NetSuite, it includes the tax breakout and taxes display on the NetSuite Expense Report form or Vendor Bill form.

To enable Tax Export in NetSuite:

1. Go to Setup > Company > Enable Features > Accounting and select the check box for Advanced Taxes under Advanced Features.
2. If using the Expense Report to Vendor Bill Integration, go to Setup > Company > General Preferences > Custom Preferences and select the check box for: Exp Rep to Vendor Bill Taxes. When selected, the OpenAir User Tax Nexus Type custom field on the NetSuite Vendor form becomes a required field for all vendor records that Export to OpenAir. See [Configuring the Expense Report to Vendor Bill Integration](#).

To enable Tax Export in OpenAir:

1. Contact OpenAir Support and request that the following internal account switches be configured for Tax Options:
 - Select Tax locations as the Tax calculation method.
 - Select one of the following switches: Enable tax locations on receipts or Get the receipt tax location from the expense item, but not both. Also request that the following switch is enabled so the tax location field displays on expense reports and receipts: Enable tax locations on receipts.
2. **NetSuite integration administration** form: Contact OpenAir Support and request the following: Enable tax export on Expense reports.
3. **NetSuite integration** form: Select the check box for Expense Reports (Expense Reports) under Send data to NetSuite.

Implementing the Tax Export Integration

Once you enable the tax export feature and run the integration, tax location information is exchanged. Users receive a NetSuite Tax Nexus Type, and when they create expense reports and receipts, taxes display based on the tax location they select for the expense report. Subsequently, when you export expense reports from OpenAir, they include a breakdown of taxes based on the expense report's default tax location on NetSuite expense reports and vendor bills.

To set up tax locations for exporting expense reports to NetSuite:

1. In NetSuite, go to Setup > Accounting > Nexuses and create nexuses for the countries or locations from which taxes will be paid. Employees are assigned to a nexus based on their shipping address, which exports to OpenAir and becomes part of the user record.
2. In NetSuite, create or identify the Tax Codes or Tax Groups for each nexus. Tax codes and tax groups pay tax as configured in the nexus.
3. In OpenAir, set up Tax locations to correspond to the Tax Codes or Tax Groups you set up in NetSuite. Go to Administration > Global Settings > Tax locations and create or edit tax locations.
4. Run the integration. Refer to [Running the Integration](#). After the integration is run, the OpenAir Tax location form displays a field for NetSuite Tax Code ID.

5. In NetSuite, locate the Internal ID of each Tax Code or Tax Group in NetSuite. Enter it on the OpenAir Tax location form. If Internal IDs do not display in your NetSuite account, go to Home > Set Preferences and select the check box to Show Internal IDs under Defaults.
6. In OpenAir, go to Administration > Global Settings > Tax locations and select a tax location. Manually enter the NetSuite Internal ID in the field for NetSuite Tax Code ID. This ID can be from either a NetSuite Tax Code or a Tax Group.
7. In OpenAir on the Tax locations form, also manually enter and maintain the associated tax rates to ensure tax rates exported are current. Use the tax rates from your NetSuite Tax Codes and Tax Groups.

To set up vendors for tax export:

1. In NetSuite, go to Lists > Relationships > Vendors > New or select a vendor record.
2. Enter form information and specify an OpenAir: User Tax Nexus Type. Selections are United States, Canada, or Other. If your Tax Nexus is not United States or Canada, select Other. The Other selection corresponds to a VAT tax nexus rate.

Note: The tax nexus is of the vendor or parent vendor. It specifies the tax nexus that should be used when creating vendor bills. It can be determined based on the shipping or billing country of the address on the vendor record or the country of the subsidiary. If the vendor record has a shipping or billing country that is different from the subsidiary country, you may need to investigate to determine the appropriate tax nexus. In NetSuite, go to Setup > Accounting > Nexuses to see the available options.

3. Select the check boxes that indicate whether the expense report is mapped to a vendor bill or a parent vendor bill. See [Configuring the Expense Report to Vendor Bill Integration](#).
4. Run the integration. See [Running the Integration](#) and refer to the next section.

To set up users for tax export:

1. In OpenAir, go to Administration > Global Settings > Users and select a user. The user can be a vendor record that was exported to OpenAir as a user.
2. Scroll down and ensure a NetSuite Tax Nexus Type displays on the OpenAir User Demographic form. If a vendor record, you identified the tax nexus on the NetSuite Vendor form. If a user record, this comes from the NetSuite Employee form shipping address.

Note: If the NetSuite Employee form you are using does not have a shipping address, customize the form so it does and add a shipping address to the employee record. This allows the integration to create a nexus type from the shipping address. Since a nexus type is required in OpenAir for users to export taxes on expense reports, if not present, select one from the drop-down list.

To export expense reports with tax information from OpenAir to NetSuite:

1. In OpenAir, create an expense report with receipts and submit it for approval. Users go to Expenses > Expense reports > New and create a new expense report. Select a tax location from the drop-down list. This tax location must be one with a NetSuite Tax Code ID. Add receipts and submit the expense report for approval. Once approved, you can transfer it to NetSuite.
2. In OpenAir, ensure the expense report layout includes the tax information and tax rates you want transferred to NetSuite. Go to Administration > Application Settings > Expense report layout and modify the format as necessary.
3. Run the integration. Refer to [Running the Integration](#).

4. For employees in NetSuite, go to Transactions > Employees > Expense Report and select an expense report. You may need to ensure the expense report form displays the desired information. For example, for Canadian tax locations, you might display GST and PST tax information.
5. For vendors in NetSuite, go to Transactions > Purchases/Vendors > Enter Bills > List and select a vendor bill. Click on the Expenses tab under Expenses & Items.

Note: NetSuite does not support a tax breakout for United States taxes. Therefore, tax amounts should be included in U. S. receipt amounts. In a Canadian tax nexus, NetSuite allows you to edit a tax code, but NetSuite sets the tax rate. In a VAT tax nexus, you can edit a tax code and tax amount, but NetSuite sets the tax rate. When using a VAT tax nexus, the tax location a user selects for receipts must contain an appropriate tax code relative to the user's tax nexus.

Configuring Tax Override for Canadian Expense Reports

This feature applies only to Canadian taxes manually entered on receipts in conjunction with the export of OpenAir expense reports to NetSuite. Before you can use this feature, you must enable the Tax Export integration so that taxes export with OpenAir expense reports. See [Configuring the Tax Export Integration](#), the previous section. Select a Canadian tax location that you have associated with a NetSuite group tax code and manually enter taxes on an OpenAir receipt. The employee creating the receipt must be Canadian and have a Canadian address. When the OpenAir expense report that contains receipts with manually-entered taxes is approved, these taxes export to the NetSuite Expense Report and display in the header information as well as the expense report line level.

The integration sums the GST/HST and PST tax totals and populates the OpenAir: PST Amount and OpenAir GST/HST Amount fields. In NetSuite, expense line taxes for GST/HST and PST display in line-level custom fields. Note that the values in these custom fields are for display purposes only and are not used in calculations.

To enable Tax Override for Canadian Expense Reports in NetSuite:

1. Make sure you are using the latest version of the OpenAir Integration Bundle. It should be 1.23 or higher. Custom fields are added to your account for expense reports.
2. Go to Setup > Company > General Preferences > Custom Preferences and select the check box for Enable Canadian Expense Tax Override. Click Save.

To enable Tax Override for Canadian Expense Reports in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request the following switch be enabled: Allow manual override of Canadian taxes on Expense report export. Remember you must also have the switches and settings involved in [Configuring the Tax Export Integration](#).
2. **NetSuite integration** form: Select the check box for Expense Reports (Expense Reports) under Send data to NetSuite.

Implementing the Tax Override for Canadian Expense Reports

You use the following custom fields for this feature. They include:

■ NetSuite Expense form:

OpenAir: PST Amount

OpenAir: GST/HST Amount

■ OpenAir Receipt form:

Tax calculation method

☐ Use the percentage rates from the tax location to calculate the amount(s)

☒ Use the following entered tax amount(s)

GST PST

OK Cancel

To implement Tax Override for Canadian Expense Reports:

1. In NetSuite, to verify that a user is in a Canadian tax nexus, go to Transactions > Employees > Enter Expense Reports. Select an employee who is Canadian with a Canadian address. The system prompts you: The employee you have selected is based in a nexus for which you are required to charge a different kind of tax. Click OK to change the form to one that is applicable for that Nexus. New required tax fields display under Expenses at the line level.
2. In NetSuite, go to Setup > Accounting > Tax Groups and create or edit a Tax Group that contains the desired Canadian tax codes. Make a note of the internal ID.
3. In OpenAir, go to Administration > Global Settings > Tax Locations and create a new tax location. Scroll down and type the internal ID number the of the NetSuite Canadian Tax Group you created in the NetSuite Tax Code ID text box.



Note: If Internal IDs do not display in your NetSuite account, go to Home > Set Preferences and select the check box to Show Internal IDs under Defaults.

4. In OpenAir, go to Expenses > Expense Reports and create a new expense report. Use the drop-down list to select the Tax Location you created in the previous step. Click the Create Expense report button. A New receipt form displays. (This assumes the user of the expense report is in a Canadian tax nexus.)
5. Enter receipt information, Customer and Project information as well as the task. The Tax location you specified on the expense report displays. Click the blue dot to the right of the field. A Tax calculation method window displays.
6. Select the radio button for: Use the following entered tax amount(s). Type the values for GST and PST tax amounts as required. Click OK. The following message displays: The Expense report properties were saved. Notice the dot on the New receipt form is now green indicating you entered the manual tax calculation amount.
7. Complete required receipt information and click Save. Follow the normal approval process and run the integration to export the expense report to NetSuite. The NetSuite Expense Report form now contains the tax values you entered in OpenAir. Fields on the NetSuite Expense Report form are populated for: OpenAir: PST Amount and/or OpenAir: GST/HST Amount. See the limitations that follow.

Tax Override for Canadian Expense Report Limitations

The following limitations exist:

- Tax amount on each expense line is not displayed. This is a system limitation.

- For tax reporting, the tax on each line of the NetSuite Expense Report may not match the manually entered tax amounts per line in OpenAir, especially when multiple tax codes are involved.
- OpenAir taxes are stored to 4-decimals. NetSuite tax amounts are stored to the currency precision. This can cause minor discrepancies.
- Enter Canadian expenses with the total to be reimbursed and then indicate the tax separately.
 - This means that when receipts are exported to NetSuite, the taxes are subtracted out of the expense total. The tax codes and the tax amounts are sent to NetSuite and then NetSuite will recalculate the overall total including tax.
 - Due to rounding issues and differences in precision, it is possible that subtracting the tax amount from the receipt total and then allowing NetSuite to recalculate the tax amount and add them back to the receipt could cause differences.
 - In these instances, the difference is removed from the GST total. This allows the overall amount to be reimbursed to the employee to be consistent.
 - If the taxes per receipt are manually entered into OpenAir for both GST and PST to the correct decimal precision (2-decimals for Canadian dollars), the issue with discrepancies can be avoided.

Configuring the Time Entries Export Integration

The time entries export integration allows you to transfer time from your OpenAir timesheet to NetSuite. By default, time transfers to NetSuite as non-billable. To transfer it as billable time, you must use a custom field and designate it as billable. An OpenAir custom field captures the NetSuite internal ID of each exported time entry. As with other integration features, you can export all timesheets if you select the check box on the **NetSuite integration** form for Time Entries (Time) or individually using the link that displays in tips on the bottom of the OpenAir timesheet report. This feature does not connect time entries to the NetSuite invoice but to NetSuite time tracking.

Since some companies do not require an activity or service item to be specified on time entries, you also have the option of exporting time entries to NetSuite without an activity or service item. If there is a service item on the OpenAir time entry, it is transferred to NetSuite.

If required, OpenAir support can assist you in distinguishing time as billable or non-billable using a custom field on the Timesheets grid. However, since most time is billed in OpenAir, we recommend that you proceed with caution.

To enable Time Entries Export in NetSuite:

1. Go to Setup > Company > Enable Features > Employees and select the check box for Time Tracking under Time & Expenses.
2. Make sure you are using the latest version of the OpenAir Integration bundle. Custom fields are added to your account for time entry entities. If the following NetSuite custom field does not exist, create a free-form text field for `custcol_oa_time_entry_id`.

To enable Time Entries Export in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request the following: Enable time entries export to NetSuite.
2. **NetSuite integration** form: Select the check box for Time Entries (Time) under Send data to NetSuite. You also have the option to enable the following switch: Do not require an activity on time entry export to NetSuite. This ensures time entries export with or without an activity or service item.
3. Go to Administration > Application Settings > Timesheets Settings > Other settings. Enable the following company switches: Require customer/project on time entries, and if desired,

Require an activity on time entries. If not already enabled, you may also need to enable Show the customer/project drop-down on the main grid and Show the activity drop-down on the main grid.

4. If you require that some time entries export to Netsuite as billable in NetSuite, contact OpenAir Support and request the following on the internal account switch be configured: List of time entry custom fields to appear to the right of the standard popups on timesheet grid (e.g. custom_4, custom_12). This holds the information for the custom fields created when the time entries export is enabled.

Implementing the Time Entries Export Integration

Once you enable the time entries feature and the internal switch specifies the custom fields, two fields display on the Timesheets application in OpenAir: NetSuite Billable Time (with Billable and Non-Billable selections) and NetSuite Time Entry ID. When you export the timesheet, the information for each time entry on the OpenAir timesheet transfers to NetSuite. If for some reason a time entry on an OpenAir timesheet does not export, you can fix the error and re-export it. There is no possibility of duplicating time entries that did export to NetSuite. Only those time entries that failed are allowed to export again. The Export to NetSuite link in tips only displays as long as at least one time entry on a timesheet failed. When all time entries are transferred, the link changes and reads: This timesheet was exported to NetSuite.

To set up exporting time entries to NetSuite:

1. In OpenAir, go to Timesheets > Timesheets > New and create a timesheet.
2. Approve the timesheet through the normal OpenAir approval process.
3. Export the timesheet to NetSuite either by running the integration or using the Export to NetSuite link in tips. See [Exporting OpenAir Data to NetSuite](#).

Configuring Work In Progress Accounting and Intercompany Journal Entries

In OneWorld accounts, you now have the ability to transfer revenue and billing between subsidiaries while work is in progress. Create Projects in NetSuite and transfer them to OpenAir. Establish billing rules in OpenAir, generate charges, create invoices, and export them to NetSuite. When payment occurs, transfer payment information to OpenAir. Recognize revenue in OpenAir and export it to NetSuite. Run a scheduled script to generate intercompany journal entries that show incremental revenue accrual on balance sheets while work is in progress.




Important: You cannot use this feature with the sales order integration. At this time, these features are incompatible.


When this feature is enabled, projects display the NetSuite subsidiary on the OpenAir Project Properties form as well as the billing rules and revenue recognition rules forms. When the switch is enabled for subsidiary import, you specify a category_x field (such as Service_1, Service_2, or Service_3) to which NetSuite subsidiaries should be mapped.

To enable Work In Progress Accounting and Intercompany Journal Entries in NetSuite:

1. Contact NetSuite Support and ensure you are using the latest version of the OpenAir Integration bundle. Then, request that the WIP Bundle #17953 version 1.0 or higher be installed in your OneWorld account.

 **Note:** This feature is only available in OneWorld accounts.

2. Go to Setup > Company > General Preferences > Custom Preferences.
 - Select the check box to: Enable WIP Accounting.
 - Type an email address of the person who should receive the logs from a schedule script run.
 - Select a user. When the logs are emailed, they appear to be sent from this user.
 - Set a value in the WIP Accounting Remaining Usage.

 **Note:** The WIP Accounting Usage Metering general preference is the lower limit threshold under which the scheduled script will rescheduled itself to run. To derive this number, calculate the number of usage units any single intercompany journal consumes. This requires you to understand the scripts that run to create one intercompany journal and the operations these scripts use. Once you figure out what one takes, the value of the WIP Accounting Usage Metering should be slightly higher than that number.

- Click Save.
3. Schedule the script. Go to Setup > Customization > Script Deployments.
 - Change the Type filter on the bottom to Scheduled.
 - Locate the script: customdeploy_oa_automate_icje and click Edit.
 - Enter scheduling information. Or, to run the script now, click the arrow on the Save button and select Save and Execute.
 - Emails are sent to the address of the person indicated. They include a link that displays the Intercompany Journal. Click OpenAir: WIP Accounting to see if the script created the Intercompany Journal from an Invoice or a Journal. Both are explained in following sections.

To enable Work In Progress Accounting and Intercompany Journal Entries in OpenAir:

1. Contact OpenAir Support and request the following switches be enabled:
 - **Internal account switch:** Enable extended category feature.
 - **NetSuite integration administration** form switches:
 - Enable OpenAir to NetSuite recognition transaction integration
 - Enable NetSuite OneWorld integration optimizations
 - Enable NetSuite intercompany journal creation for recognition transaction and invoice export
 - Enable NetSuite subsidiary import. Then, designate the category to which NetSuite subsidiaries should be mapped.
2. **NetSuite integration** form: Select the check boxes for Invoices and Recognition Transactions (Revenue Recognition Transactions) under Send data to NetSuite.
3. Ensure the following custom fields are created before you run the integration. Go to Administration > Global Settings > Custom Fields. When you enabled the NetSuite subsidiary import, you designated the category to which NetSuite subsidiaries should be mapped. Ensure that your selection displays under Association on the custom field form:
 - netsuite_ow_subsidary_id
 - netsuite_ow_subsidary_interco_acct_id
 - netsuite_ow_subsidary_currency_id

Implementing Work in Progress Accounting and Intercompany Journal Entries

A number of intercompany journal entry (ICJE) fields are added to both OpenAir forms and NetSuite forms and hold related information. In addition, an integration script searches journal entries and invoice line items. Based on the specified criteria, it creates intercompany journal entries. Review the sections that follow for information on script criteria.


Using a Journal Entry to Generate an Intercompany Journal Entry

The following three conditions must exist for the integration to use a journal entry to generate an automatic intercompany journal entry. The integration automatically populates these fields based on the OpenAir revenue recognition transaction, so there is no user action. Generally, the fields are blank unless the subsidiary of the project on the OpenAir revenue recognition transaction is different than the subsidiary stamped on the revenue recognition transaction. In that case, the integration populates the fields on this table.

| NetSuite Custom Field/Name on Form | Required Field Status |
|--|-----------------------|
| custbody_oa_create_icje OpenAir: Create ICJE | Must be checked |
| custbody_oa_to_subsidary OpenAir: To Subsidiary | Must have a value |
| custbody_oa_auto_icje_error ICJE Error | Must NOT be checked |

For each journal entry that meets the above criteria, the integration creates an intercompany journal entry and includes the following information:

- Subsidiary — subsidiary of the project
- To Subsidiary — the value is sourced from the OpenAir: To Subsidiary field on the original journal
- Exchange rate — system populated
- Created From Journal ID (custbody_oa_created_from_je_id) — internal ID of originating journal entry
- Created From Journal # (custbody_oa_created_from_je_number) — transaction number of originating journal entry
- Line level of the intercompany journal includes:
 - From subsidiary — debit revenue, credit deferred revenue (WIP) reverses the original journal entry
 - To subsidiary — credit revenue, debit deferred revenue (WIP)

 **Note:** This moves the revenue from the project subsidiary to the subsidiary of the employees who are doing the work captured in the billing and recognition rules.

- Original journal entry includes the following:
 - OpenAir: Create ICJE field — unchecked
 - Created ICJE # (custbody_oa_created_icje_number) — the transaction number of the intercompany journal that was created

- Created ICJE ID (custbody_oa_created_icje_id) — the internal ID of the intercompany journal that was created

Using Invoice Items to Generate an Intercompany Journal Entry

The following three conditions must exist for the integration to use invoice line items to generate an intercompany journal entry.

| NetSuite Custom Field/Name on Form | Required Field Status |
|--|-----------------------|
| custcol_oa_create_icje OpenAir: Create ICJE | Must be checked |
| custcol_oa_icje_to_subsidary OpenAir: To Subsidiary | Must have a value |
| custcol_oa_icje_error ICJE Error | Must NOT be checked |

For each invoice line item that meets the above criteria, the integration creates an intercompany journal entry and includes the following information:

- Subsidiary — subsidiary of the project
- To Subsidiary — the value is sourced from the OpenAir: To Subsidiary field on the original invoice line
- Exchange rate — system populated
- Created From Invoice ID (custbody_oa_created_from_iv_id) — internal ID of the invoice that sourced this intercompany journal
- Created From Invoice Line # (custbody_oa_created_from_line_number) — line ID of the invoice that sourced this intercompany journal
- Line level of the intercompany journal includes:
 - From subsidiary — debit deferred revenue (WIP), credit intercompany clearing account
 - To subsidiary — credit intercompany clearing account, debit deferred revenue (WIP)

Note: This moves the amount billed on that invoice line from the project subsidiary to the subsidiary of the employees who are doing the work captured in the billing and recognition rules.

- Original invoice line item includes the following fields or columns:
 - OpenAir: Create ICJE field — unchecked
 - Created ICJE # (custbody_oa_created_icje_number) — the transaction number of the intercompany journal that was created
 - Created ICJE ID (custbody_oa_created_icje_id) — the internal ID of the intercompany journal that was created

Correcting Errors Logs Generated From Scripts

Scripts run on a NetSuite company schedule. When they run, a log is created and emailed according to the setup specified in Setup > Company > General Preferences > Custom Preferences > OpenAir: WIP Accounting. Monitor these logs for errors, correct the errors, and select the check box for OpenAir: Create ICJE so that the script can attempt to create an intercompany journal entry.

To correct errors:

1. Note the error message and make necessary corrections.
2. Clear the ICJE automation error check box and delete the ICJE automation error message text.
3. Select the check box for OpenAir: Create ICJE.

During the next run of the scheduled script, this journal entry or invoice line will be evaluated against the criteria, and if it passes, the integration creates an intercompany journal entry.



Note: In NetSuite, scheduled scripts are subject to usage metering since their operations consume certain usage units. Scheduled scripts have an upper limit of 10,000 usage units on any single script run. If there are many intercompany journals to create, this upper limit will be reached. When this happens, the script reschedules itself to run at another time. A log is generated every time a script runs, including when the script is rescheduled.

The WIP Accounting Remaining Usage general preference is used to control when the script will be rescheduled on a run. If there are additional scripts that fire when intercompany journals are created, it is important to take these into account when setting the WIP Accounting Remaining Usage general preference. Once the remaining usage on the schedule script run falls below the threshold indicated by WIP Accounting Remaining Usage, the script will be rescheduled.

Please contact your Professional Services Consultant if further customizations for the intercompany journals are desired. These customizations can be done using user event SuiteScript, which have operations that consume usage units. See NetSuite Help for more information on usage metering.

New Fields for Work in Progress Accounting and Intercompany Journal Entry

When you enable this feature, a number of new custom fields display in your NetSuite Account. There is a subtab for OpenAir: WIP Accounting on both the Journal and Intercompany Journal forms.


In addition, the following fields are also added:

| NetSuite Custom Fields | Field Name | NetSuite form and Field Information |
|------------------------------------|--|--|
| custrecord_oa_interco_acct | OpenAir: Intercompany Clearing Account | Subsidiary form - Must specify an Intercompany Clearing Account |
| custbody_oa_to_subsidiary | OpenAir: To Subsidiary | Journal form - List/Record |
| custbody_oa_icje_currency | OpenAir: ICJE Currency | Journal form - List/Record |
| custbody_oa_create_icje | OpenAir: Create ICJE | Journal form - Select check box to create intercompany journal entry |
| custbody_oa_created_from_je_number | Created From Journal # | Journal form - text |
| custbody_oa_created_from_je_id | Created From Journal ID | Journal form - text |
| custbody_oa_created_icje_number | Created ICJE # | Journal form - text |
| custbody_oa_created_icje_id | Created ICJE ID | Journal form - text |
| custbody_oa_auto_icje_error | ICJE automation error | Journal form - Clear check box to create intercompany journal entry in next script run |

| NetSuite Custom Fields | Field Name | NetSuite form and Field Information |
|--------------------------------------|-----------------------------------|--|
| custbody_oa_auto_icje_error_msg | ICJE automation error message | Journal form - Clear error message to create intercompany journal entry in next script run |
| custbody_oa_created_from_iv_id | Created From Invoice ID | Journal form - text |
| custbody_oa_created_from_iv_number | Created From Invoice # | Journal form - text |
| custbody_oa_created_from_line_number | Created From Invoice Line # | Journal form - text |
| custcol_oa_create_icje | OpenAir: Create ICJE invoice | Invoice form - Sales Item - Select check box to create intercompany journal entry |
| custcol_oa_icje_number | OpenAir: Created ICJE # | Invoice form - Sales Item - text |
| custcol_oa_icje_id | OpenAir: Created ICJE ID | Invoice form - Sales Item - text |
| custcol_oa_icje_currency | OpenAir: From Subsidiary Currency | Invoice form - Sales Item - Currency list/record |
| custcol_oa_icje_clearing_account | OpenAir: ICJE Clearing Account | Invoice form - Sales Item - Subsidiary list/record |
| custcol_oa_icje_wip_account | OpenAir: ICJE WIP account | Invoice form - Sales Item - Account list/record |
| custcol_oa_icje_to_subsidary | OpenAir: To Subsidiary invoice | Invoice form - Sales Item - Account list/record |

To set up Work in Progress Accounting and Intercompany Journal Entry:

1. In NetSuite, ensure the Clients, Employees, and Projects have the check box selected to Export to OpenAir. This feature works using the integration. Note the subsidiaries involved because using this feature requires you to edit the Subsidiary form as described in the next step.
2. Go to Setup > Company > Subsidiaries. Edit the form for each of the subsidiaries involved and choose an account for OpenAir: Intercompany Clearing Account. Click Save.
3. Go to Lists > Accounting Items and create a service for sale for the subsidiaries involved. Designate an Income Account and a Deferred Revenue Account for work in progress.
4. In OpenAir, run the integration. See [Running the Integration](#).
Depending on how your account is configured, the integration imports subsidiaries, employees, clients, projects, services, expense items, contacts, and payment, and exports invoices and recognition transactions.
5. In OpenAir, go to Projects > Projects and select one of the projects involved with this feature. Create tasks and assign employees/users. Select the Service item you created for work in progress. As work is performed on the project tasks, you can bill for that work.
6. In OpenAir Projects, go to Financials > Billing and create billing rules to capture the work in progress. These can be fixed fee or time billing rules.

 **Note:** Select the Service line associated with the subsidiary.

7. Run billing and click the button to Create project billing transactions and charges.
8. Go to Invoices > Invoices and create a new invoice using those charges. Click the link to Export to NetSuite.

9. In NetSuite, go to Transactions > Sales > Create Invoices > List and locate the invoice you just exported from OpenAir. Click on edit to review the work in progress fields. Notice work reflects employees from different subsidiaries.
10. In OpenAir, go to Invoices > Invoices > Approved and select the invoice. Click the Payments link. Payments information displays. Click Save.
11. To recognize the revenue and transfer it to NetSuite, go to Projects > Projects and select the project. Go to Financials > Recognition.
12. Click New and select an As Billed rule. Select the Service as well as the Service line. Notice the Currency is already selected. Click Save. You can also create other types of recognition rules as fits your situation.
13. Click Run to run the recognition rule and click Next or enter Start date and End date. Recognition transactions from the previous invoice display.
14. Click the Create recognition transactions button.
The total amount included in the recognition transactions displays.
15. Run the integration. The integration exports the revenue recognition transactions to NetSuite. They display in NetSuite as journal entries.
16. In NetSuite, go to Transactions > Financial > Make Journal Entries > List. The exported journal entries display. When the scheduled integration script runs, the journal entries generate intercompany journal entries.



Note: An email is automatically sent to the account you specified when you set up the feature. It contains a link to the intercompany journal entry. Click on it to display the NetSuite form. Click on the OpenAir: WIP Accounting tab to display information about the transaction such as the related invoice # or journal #.

Configuring the Support Case Integration

This feature allows NetSuite support cases to be imported as OpenAir project tasks. This feature can be used together with the project task import feature. See [Configuring the Projects Integration](#).

Once enabled:

- Any support case that is marked "Export to OpenAir" will be sent to OpenAir as a project task.
- When a support case is closed in NetSuite, the corresponding project task is closed in OpenAir. If the case is re-opened, the project task will also be re-opened.
- If the support case is assigned to an employee who is a valid OpenAir user, a project task assignment will also be created.
- This integration is compatible with the timesheets integration. When time entries from OpenAir are exported to NetSuite, and when the time entry is logged against a project task that corresponds to a NetSuite support case, the time entry in NetSuite will be linked back to the support case. See [Configuring the Time Entries Export Integration](#).
- Custom mappings are available for the project task. Use <SUPPORTCASE_TO_PR_TASK>.
- There are no custom mappings available for project task assignment creation.

To enable Support Case Integration in NetSuite:

1. Update the "OpenAir Integration" bundle, 2851, to the latest version. Requires at least version 1.34.

- Bundle will create and/or expose "Export to OpenAir" custom field on support cases.
 - Bundle will also deploy a new client script on the support case form.
 - When the "Company" picked on a support case is a project that is also marked "Export to OpenAir", the client script will automatically check the "Export to OpenAir" field on the support case.
 - Bundle also deploys a user-event script that will copy the "Subject" on the support case to a hidden custom field. This custom field is used to construct the project task name in OpenAir.
2. Update the "OpenAir: Real-time integration" bundle, 12610, to the latest version. Requires at least version 1.4.
 - Installs user event script that will automatically call the integration to bring the support case over to OpenAir when "save" is clicked on the support case.
 - By default, the script is undeployed after installing it into the account. The script deployment is available under the user event script "OpenAir: Send Record to OpenAir". Look for the deployment for the "Case" record type.
 3. Update the "OpenAir: Single sign-on" bundle, 13512, to the latest version. Requires at least version 4.1.
 - Exposes OpenAir timesheets module to the support case form in a subtab.
 - This subtab needs to be configured properly under "Setup", "Integration", "SuiteSignOn".
 1. Go to the correct SuiteSignOn record.
 2. Look for "OpenAir: Timesheets" for the Case record type.
 3. Ensure URL is pointing to correct place.
 4. Make sure you change the db_id to the correct one for the integration variables. Leave the app=ta.
 4. Go to "Setup", "Company", "General Preferences".
 5. Click the "Custom Preferences" tab.
 6. Under OpenAir Integration, click "Enable Support Case Integration".
 7. Save the Form.

To enable Support Case Integration in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request the following: Enable NetSuite support case import to OpenAir project tasks.
Enabling the switch will automatically create the following vendor bill specific custom fields in the OpenAir account:
 - netsuite_project_task_id - holds NetSuite internal ID of the support case.
 - netsuite_supportcase_record_type - checkbox to determine if the corresponding NetSuite record is a support case.

Configuring Purchaser Integration

This feature allows you to designate NetSuite employees as valid OpenAir purchasers. The correct purchaser is then shown on purchase orders and invoices in both OpenAir and NetSuite.

With this feature enabled:

- Users and purchasers are created in OpenAir for designated NetSuite employees.

- Purchase orders / vendor bills are created with the correct purchaser in NetSuite and integrated to OpenAir.
- Invoices are created in OpenAir with the correct purchaser and integrated back to NetSuite.

To enable Purchaser Integration in NetSuite:

1. Update the "OpenAir Integration" bundle, 2851, to the latest version. Requires at least version 1.34.
2. Check the "OpenAir: Employee is NS purchaser" custom field for NetSuite employees that are to be synchronized as OpenAir purchasers.

To enable Purchaser Integration in OpenAir:

1. **NetSuite integration administration** form: Contact OpenAir Support and request the following: Enable purchaser integration.

Configuring Integration for Percent Complete Rules with NetSuite Advanced Revenue Management

OpenAir percent complete rules can be integrated to NetSuite and then used by the Advanced Revenue Management (ARM) feature for percent-complete revenue recognition in NetSuite.

To enable Percent Complete in Advanced Revenue Management in NetSuite:

1. Enable the Advanced Revenue Management feature.
2. Update the "OpenAir Integration" bundle, 2851, to the latest version. Requires at least version 1.35.

Note: Only projects that have been integrated from NetSuite to OpenAir will be updated. See [Working with Project Records in OpenAir](#).

The bundle installs two new custom fields and a user event script.

The screenshot shows the NetSuite Financial form with the following sections:

- Billing Information:**
 - BILLING TYPE
 - BILLING SCHEDULE
 - PRIMARY CURRENCY: EUR
 - EXCHANGE RATE: 1.10263997
 - REV REC OVERRIDE PERCENT COMPLETE
 - REV REC FORECAST RULE
 - OPENAIR: PERCENT COMPLETE OVERRIDE** (highlighted with a red box)
- Estimates:**
 - ESTIMATED LABOR COST: 0.00
 - ESTIMATED LABOR REVENUE: 0.00
 - ESTIMATED GROSS PROFIT: 0.00
 - ESTIMATED GROSS PROFIT PERCENT
 - OPENAIR: PERCENT COMPLETE OVERRIDE DATE** (highlighted with a red box, with a red arrow pointing to it and the label "Hidden")

Below the form, there is a table titled "Rey Rec Percent Complete Override" with the following data:

| ACCOUNTING PERIOD | CUMULATIVE PERCENT COMPLETE | COMMENTS |
|-------------------|-----------------------------|--------------------------|
| October 2015 | 34.0% | Last updated: 15/10/2015 |
| November 2015 | 40.0% | Last updated: 10/11/2015 |
| December 2015 | 34.0% | Last updated: 1/12/2015 |

The script updates the "Rev Rec Percent Complete Overrides" subtab row with the "Cumulative Percent Complete" for the appropriate "Accounting Period" recognized from today's date. The "Cumulative Percent Complete" value is replaced if the accounting period already exists in the list. The "Comments" column is set to the last updated date. The custom fields are cleared after processing.

To enable Percent Complete in Advanced Revenue Management in OpenAir:

If you are using the [New User Interface](#) then set the mapping as follows:

ON

Update NetSuite projects with NS OpenAir project data

| Active | Netsuite field | Direction | OpenAir field |
|---------------------------------------|--|-------------|---|
| <div>ON</div> <div></div> <div></div> | <div>Job.custentity_oa_pco_value</div> <div></div> | <div></div> | <div>percent_complete</div> <div></div> |

+ Add row

If you are using the old interface then set the mapping as follows:

Project update

You can update project data from OpenAir to NetSuite

Field mapping

Project information

% Complete

NetSuite field

custentity_oa_pco_value

[Add rows]

Project stages filter

New, Sold, Template, Overview

Only projects in these project stages will be updated in NetSuite. Edit the project stage to modify this list.

☒

Update NetSuite projects with NS OpenAir project data

Using the Integration

After the initial data transfer between OpenAir and NetSuite, you view and modify that data in one or both applications and integrate the data back and forth between the two applications.

The following sections describe how data can and should be used in each application:

- [Working with NetSuite Record Data in OpenAir](#)
- [Working with OpenAir Data in NetSuite](#)

In addition, you may wish to review some [Frequently Asked Questions \(FAQs\)](#) about how the integration works between the two applications.

For specific help on using the NetSuite and OpenAir applications, see [Getting Help](#).

For details on data mapping between the two applications, see [Data Mapping in the Integration](#).

For specific details on advanced settings, which can be used to customize the integration and specify what is transferred and how it displays, see [Using Advanced Settings](#).

Working with NetSuite Record Data in OpenAir

After the integration is run, NetSuite record data transfers to OpenAir. Each record's data can then be viewed and modified in OpenAir. Note that the terminology may differ for the record when in OpenAir. See [Terminology Mapping for the Integration](#) for more information.

Review the following topics for details on how to work with each NetSuite record type in OpenAir:

- [Working with Employee Records in OpenAir](#)
- [Working with Customer Records in OpenAir](#)
- [Working with Contact Records in OpenAir](#)
- [Working with Project Records in OpenAir](#)
- [Working with Task Records in OpenAir](#)
- [Working with Item Records in OpenAir](#)
- [Working with Expense Categories in OpenAir](#)
- [Working with Opportunities as Projects in OpenAir](#)
- [Working with Vendors in OpenAir](#)
- [Working with Purchases/Vendor Bills in OpenAir](#)
- [Working with Sales Orders in OpenAir](#)
- [Working with Expense Report Reimbursements in OpenAir](#)
- [Working with Invoice Payments in OpenAir](#)
- [Working with Customer Deposits Applied to Invoices in OpenAir](#)
- [Working with Credit Memos Applied to Invoices in OpenAir](#)

Before you can view these records in OpenAir, you must first export the data. See [Exporting NetSuite Records to OpenAir](#) for more information.

Working with Employee Records in OpenAir

You can transfer employee records to OpenAir as Users.

After NetSuite Employee record data is transferred to OpenAir, each OpenAir employee or user is assigned a NetSuite User ID and some basic user information is transferred. For details, see [NetSuite to OpenAir Data Mapping](#).

If you are using the NetSuite Classifications to OpenAir Hierarchies integration, you can transfer department, class, location, and subsidiary information. See [Configuring the Classifications to Hierarchies Integration](#).

If you would like to limit the subsequent transfer of NetSuite employee data to OpenAir, you can use advanced settings to designate fields as initial-only export. See the instructions for [Using Field Declarations](#).

To make an employee/user inactive, select the check box on the NetSuite Employee form for Employee is Inactive and clear the Active user check box on the OpenAir user demographic information form.

To add information to the User record in OpenAir:

1. Go to Administration > Global Settings > Users.
2. Click the User ID.
Demographic information displays along with a number of links for entering additional user information.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Customer Records in OpenAir

Customer records transfer to OpenAir as Customers. NetSuite Leads and Prospects can also transfer to OpenAir as Customers. To enable the ability to transfer Leads and Prospects, contact OpenAir Support and request the following selections on the **NetSuite integration administration** form: Include NetSuite leads marked 'Export to OpenAir' in the customers import (creates OpenAir customers) and Include NetSuite prospects marked 'Export to OpenAir' in the customers import (creates OpenAir customers).

Once in OpenAir, each OpenAir customer receives a NetSuite Customer ID and some basic customer information transfers. For details, see [NetSuite to OpenAir Data Mapping](#).

If you are using the NetSuite Classifications to OpenAir Hierarchies integration, you can transfer department, class, location, and subsidiary information. See [Configuring the Classifications to Hierarchies Integration](#).

If you would like to limit the subsequent transfer of NetSuite customer data to OpenAir, you can use advanced settings to designate fields as initial-only export. See the instructions for [Using Field Declarations](#).

To make a customer, lead or prospect inactive, select the check box on the appropriate NetSuite form for Client is Inactive and clear the Active check box on the OpenAir Edit demographic information form for customers, leads, and prospects.

To add additional information to the Customer record in OpenAir:

1. Go to Administration > Global Settings > Customers.
2. Click the Nickname.
Demographic information displays along with a number of links for entering additional customer information.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Contact Records in OpenAir

Contact records transfer to OpenAir as Contacts. Once in OpenAir, each OpenAir contact receives a NetSuite Contact ID and some basic contact information transfers. For details, see [NetSuite to OpenAir Data Mapping](#).

You can enable the transfer of all contacts associated with customers and projects you Export to OpenAir. If a project exports to OpenAir, the project's customer has also been exported. The customer associated with the contact is the customer of the project. Attach a contact to a customer and/or project designated for Export to OpenAir and the contacts associated with those customers and/or projects transfer from NetSuite to OpenAir.

To enable this feature, contact OpenAir Support and request the following selections on the **NetSuite integration administration** form: Import all NetSuite contacts associated with NetSuite Customers marked 'Export to OpenAir' and Import all NetSuite contacts associated with NetSuite projects marked 'Export to OpenAir'.

If you would like to limit the subsequent transfer of NetSuite contact data to OpenAir, you can use advanced settings to designate fields as initial-only export. See the instructions for [Using Field Declarations](#).

To make a contact inactive, select the check box on the NetSuite Contact form for Contact is Inactive and clear the Active check box on the OpenAir Edit demographic information form for contacts.

To add additional information to the Contact record in OpenAir:

1. Go to Administration > Global Settings > Contacts.
2. Click the Name.

Demographic information displays including a NetSuite Contact ID.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Project Records in OpenAir

Project records in NetSuite transfer to OpenAir as Projects. Once you establish a project in NetSuite and transfer it to OpenAir, you can update the project in NetSuite with OpenAir project management information. You can also create a project template in OpenAir, apply it to a new project in NetSuite, and when it transfers to OpenAir, it contains the tasks, assignments, billing rules, loaded costs, revenue recognition rules, auto-bill settings, and project approvers available in the template. For more information, see [Configuring the Projects Integration](#).

To enable the project features, contact OpenAir Support and request the following selections on the **NetSuite integration administration** form:

- Map the OpenAir project stage from the NetSuite project
- Export OpenAir project data to existing NetSuite projects
- Create new projects based on the project template specified in NetSuite
- Enable project workspace creation

Once in OpenAir, each project receives a NetSuite Project ID and currency and subsidiary information transfer, depending on the integration. Project receipts can be set to either billable or non-billable on the **Edit project** form in OpenAir. This allows expense receipts to transfer to NetSuite, but it sets all receipts for that project as billable or non-billable in NetSuite. For details, see [NetSuite to OpenAir Data Mapping](#).

If you are using the NetSuite Classifications to OpenAir Hierarchies integration, you can transfer department, class, location, and subsidiary information. See [Configuring the Classifications to Hierarchies Integration](#).

If you would like to limit the subsequent transfer of NetSuite project data to OpenAir, you can use advanced settings to designate fields as initial-only export. See the instructions for [Using Field Declarations](#).

To add additional information to the Project in OpenAir:

1. Go to Projects > Projects and select the project. The Edit project form displays.
2. Review the project information and make any additions.
3. Save the project.
4. Click the project link again. Additional links display, allowing you to use OpenAir to manage the project.

You can assign and track issues, establish and track tasks, assign or book resources, enter a budget and track financial information, establish billing and recognition rules, establish a baseline report, and run overview reports.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Task Records in OpenAir

Project Task records in NetSuite transfer to OpenAir as Tasks. Once you establish a task in NetSuite and transfer it to OpenAir, you can update the task in NetSuite with OpenAir task information. For more information, see [Configuring the Projects Integration](#).

To enable the task features, contact OpenAir Support and request the following selections on the **NetSuite integration administration** form:

- Enable NetSuite task import

Once in OpenAir, each task receives a NetSuite Project Task ID and name. For details, see [NetSuite to OpenAir Data Mapping](#).

If you would like to limit the subsequent transfer of NetSuite task data to OpenAir, you can use advanced settings to designate fields as initial-only export. See the instructions for [Using Field Declarations](#).

To add additional information to the Task in OpenAir:

1. Go to Projects > Tasks and select the task. The Edit task form displays.
2. Review the task information and make any additions.
3. Save the task.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Item Records in OpenAir

In NetSuite, items are the goods and services you sell to customers. Depending upon your integration, you can transfer service items to OpenAir or all items. You can transfer them to be used in OpenAir as activities and services that hold billing information. Items used on NetSuite purchase orders can

transfer to OpenAir as products. There are two different integrations for transferring items from NetSuite to OpenAir: Items to Activities or Services and Items to Products. You can use both of them simultaneously and distinguish between their use by selecting the applicable check boxes for export on the NetSuite Item form. Each is described as follows.

Items to Activities or Services

Once in OpenAir, the activity is assigned a NetSuite Item ID. If revenue recognition is enabled in the integration, a NetSuite Income Account ID and NetSuite Deferred Revenue Account ID also transfer. For details, see [NetSuite to OpenAir Data Mapping](#).

To enable the transfer of all items to OpenAir, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Disable NetSuite service type filtering for activities in NetSuite integration. Otherwise, service items only transfer. To mark an item for transfer to OpenAir as an activity or service, select the check box on the NetSuite Item form for Export to OpenAir.

If you would like to limit the subsequent transfer of NetSuite item-related data to OpenAir, you can use advanced settings to designate fields as initial-only export. See the instructions for [Using Field Declarations](#).

To add additional information to the Activity record in OpenAir:

1. Go to Administration > Application Settings > Invoices Settings > Activities.
2. Select the activity. The Edit activity form displays.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Items to Products

Once in OpenAir, the product is assigned a NetSuite Purchase Item ID and the Product Type and Subtype display. If revenue recognition is enabled in the integration, a NetSuite Income Account ID and NetSuite Deferred Revenue Account ID also transfer. A check box indicates if the NetSuite Product Is Fulfillable. For more information on configuring the Items to Products integration, see [Implementing the NetSuite Purchase Order Integration](#). For details, see [NetSuite to OpenAir Data Mapping](#).

To enable the transfer of Items to OpenAir as Products, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Enable NetSuite product integration. To mark an item for transfer to OpenAir as a product, select the check box on the NetSuite Item form for Export to OpenAir Products. You may use NetSuite Inventory, Kit/Package, Non-inventory, Other charge, and Service items. Custom mappings may also be used when transferring Items to Products. See [Using Advanced Settings](#).

To add additional information to the Product record in OpenAir:

1. Go to Administration > Application Settings > Purchases Settings > Purchases.
2. Select the product. The Edit product form displays.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Opportunities as Projects in OpenAir

A NetSuite opportunity can be associated with a NetSuite project and transfer to OpenAir. When in OpenAir, you can scope the project effort and schedule tasks using OpenAir's project task breakdown

structure. When you click the link to update the NetSuite opportunity line items, the task assignments are added together and items transfer back to the NetSuite opportunity.

To enable the opportunity to project integration, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Enable OpenAir project to NetSuite opportunity integration. See [Configuring the Opportunity to Project Integration](#).

To add additional information to the Opportunity as a Project in OpenAir:

1. Go to Projects > Projects and select the project. The Edit project form displays and includes the NetSuite Opportunity ID field.
2. Add task assignment and scheduling information.
3. Save the project.
4. Click the link in tips to: Update the NetSuite opportunity line items. It displays on the Projects application Phases/Tasks: List and Phases/Tasks: Outline.
5. Opportunity information for the project transfers to NetSuite and displays under items.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Expense Categories in OpenAir

Expense categories in NetSuite are actually an item type rather than a record. NetSuite Expense Category data transfers to OpenAir as an expense item. For details, see [NetSuite to OpenAir Data Mapping](#).

We recommend that you export expense categories to OpenAir to ensure continuity within your projects. However, since an Expense Category is not an entity (record) in NetSuite, there is no check box to Export to OpenAir on Expense Category pages in NetSuite. In order to transfer expense data to OpenAir, you must select the Expense Items (Expense Categories) check box on the **NetSuite integration** form. Otherwise, this data does not transfer. See [Filling in the NetSuite Integration Form in OpenAir](#).

If you would like to limit the subsequent transfer of NetSuite expense category data to OpenAir, you can use advanced settings to designate fields as initial-only export. See the instructions for [Using Field Declarations](#).

To add additional information to the expense item in OpenAir:

1. Go to Administration > Application Settings > Expenses Settings > Expense items.
2. Select the expense item. The Edit expense item form displays.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Vendors in OpenAir

There are two different integrations for transferring vendors from NetSuite to OpenAir: Vendors to Vendors and Vendors to Users. You can use them both simultaneously. For the purchase order integration, you transfer vendor records from NetSuite to vendor records in OpenAir. For the projects integration, you may transfer vendors to OpenAir as users so they can be assigned as resources to projects and their expense reports can export to NetSuite as vendor bills. Each is explained as follows. To enable both integrations, open a support ticket. See [Contacting NetSuite and OpenAir](#).

Vendors to Vendors Transfer

NetSuite Vendor records transfer to OpenAir as Vendor records. If you are using the Expense Report to Vendor Bill integration, you must also identify the vendor as a vendor. For details, see [NetSuite to OpenAir Data Mapping](#).

Vendor name, active status, payment terms, currency, and NetSuite Vendor ID transfer from NetSuite to OpenAir and display on the Edit vendor form. For more information on configuring the Vendors to Vendors transfer, see [Implementing the NetSuite Purchase Order Integration](#) and [Implementing the Expense Report to Vendor Bill Integration](#).

To enable the transfer of NetSuite vendor records to OpenAir vendors, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Enable NetSuite vendor to OpenAir vendor integration. See [Contacting NetSuite and OpenAir](#).

To add additional information to the Vendor record in OpenAir:

1. Go to Administration > Application Settings > Purchases Settings or Expenses Settings.
2. Click Vendors.

Vendor list view displays. Click a vendor to display the Edit vendor form.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Vendors to Users Transfer

Vendor records transfer to OpenAir as User accounts. For details, see [NetSuite to OpenAir Data Mapping](#).

In NetSuite, the Vendor Type must be Individual, or if you are using the Expense Report to Vendor Bill integration, you must identify the vendor as a user. After the integration is run, the vendor is listed as a user in OpenAir and can be assigned to projects and can use time tracking functionality in OpenAir. When vendors submit expense reports, the integration recognizes them as vendors and creates a vendor bill in NetSuite for approved OpenAir expense reports.

To enable the transfer of vendor records to OpenAir, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Enable NetSuite vendor to OpenAir user integration.

To enable the transfer of expense reports to vendor bills, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Enable OpenAir Expense report to NetSuite vendor bill integration. See [Configuring the Expense Report to Vendor Bill Integration](#). In OneWorld accounts, please keep in mind that the vendor and the Customer : Project must be in the same subsidiary.

If you would like to limit the subsequent transfer of NetSuite vendor data to OpenAir, you can use advanced settings to designate fields as initial-only export. See the instructions for [Using Field Declarations](#).

To add additional information to the User/Vendor record in OpenAir:

1. Go to Administration > Global Settings > Users.
2. Click the User ID.

Demographic information displays along with a number of links for entering additional user information.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Purchases/Vendor Bills in OpenAir

There are two mutually exclusive integrations you can use for integrating NetSuite purchases and NetSuite vendor bills with OpenAir purchase orders. They are:

- NetSuite Vendor Bills to OpenAir Purchase Orders
- NetSuite Purchase Order Integration

Each is described in the following sections.

NetSuite Vendor Bills to OpenAir Purchase Orders

Using the NetSuite Vendor Bills to OpenAir Purchase Order integration, you can transfer vendor bills that contain items marked for export to OpenAir into OpenAir as purchase orders. The vendors and items or products used in each line item must also be marked for export to OpenAir and it must be for a customer and project that are already established in OpenAir and have a NetSuite ID. For more information on the necessary configuration, see [NetSuite Vendor Bills to OpenAir Purchase Orders](#).

To enable the transfer of purchase orders to OpenAir, contact OpenAir Support and request the following selections on the **NetSuite integration administration** form: Enable NetSuite vendor to OpenAir vendor integration, Enable NetSuite product integration, and Enable NetSuite vendor bills to OpenAir POs integration. The NetSuite Vendor Bills to OpenAir Purchase Orders integration requires that you enable all three switches.

After you run the integration to transfer a NetSuite vendor bill to OpenAir, you can view it in OpenAir. Vendor bills transfer to OpenAir as request items, purchase requests, purchase items, purchase orders (POs), and fulfillments. Only NetSuite vendor bills with the following statuses transfer: Open or Paid in Full. Therefore, vendor bills that are Not Approved do not import to OpenAir.

You can bill and rebill items in a vendor bill transferred to OpenAir if they were originally marked as billable on the NetSuite vendor bill. You can also rebill vendor bills transferred to OpenAir even though they were not marked as billable, however, the linkage to the original NetSuite vendor bill is not maintained. See [Rebilling Vendor Bills Marked Billable in NetSuite](#) and [Rebilling Vendor Bills NOT Marked Billable in NetSuite](#).

Because OpenAir purchase requests and request items are associated with a single project, each item on the NetSuite vendor bill becomes an OpenAir purchase item and request item. A NetSuite vendor bill maps to one OpenAir purchase order, and each item marked for export to OpenAir maps to an OpenAir purchase item.

To view the Vendor Bill to Purchase Order import in OpenAir:

1. Go to Purchases > POs > All.
2. Select a PO# that is similar to NS-VB-#.
The PO displays with the NetSuite vendor bill purchase items.
3. Click on a Purchase item to view the contents.
4. To view the OpenAir Invoice that was exported to NetSuite, go to Invoices > Approved and click on the related invoice that was exported to NetSuite.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

NetSuite Purchase Order Integration

Using the NetSuite Purchase Order integration, you can transfer Purchase orders that contain items marked for export to OpenAir into OpenAir as purchase orders. The vendors and items or products

used in each line item must also be marked for export to OpenAir and it must be for a customer and project that are already established in OpenAir and have a NetSuite ID. For more information on the necessary configuration, see the [NetSuite Purchase Order Integration](#).

To enable the transfer of purchase orders to OpenAir, contact OpenAir Support and request the following selections on the **NetSuite integration administration** form: Enable NetSuite vendor to OpenAir vendor integration, Enable NetSuite product integration, and Enable NetSuite PO integration. The NetSuite Purchase Order integration requires that you enable all three switches.

After you run the integration to transfer a purchase order to OpenAir, you can view it in OpenAir, but you continue to update it in NetSuite. Purchase orders transfer to OpenAir as purchase requests, request items, purchase orders (POs), purchase items, and fulfillments. Only NetSuite purchase orders with the following statuses transfer: Fully Billed, Partially Received, Pending Bill, Pending Billing / Partially Received, and Pending Receipt. The integration does not transfer a NetSuite purchase order with any other status.

Because OpenAir purchase requests and request items are associated with a single project, each item on the NetSuite purchase order becomes an OpenAir purchase request and request item. A NetSuite purchase order maps to one OpenAir purchase order. Relevant lines on the NetSuite purchase order become purchase items on the OpenAir purchase order. Vendor bills do not transfer.

To view the purchase order in OpenAir:

1. Go to Purchases > Application Settings > Purchases Settings.
2. Select one of the following links to display the list view for a state: Purchase requests, POs, or the Fulfillment.
3. Click the transferred purchase order to view it. Each displays with a NetSuite PO #.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Sales Orders in OpenAir

Sales Order records transfer to OpenAir as sales order line items. During the data transfer, associated line item discount information for project data also transfers. For details, see [NetSuite to OpenAir Data Mapping](#) and [Configuring the Sales Order Integration](#).

OpenAir creates a unique Customer PO for each sales order line item you enter. In addition, any specified related billing rule information also transfers to OpenAir and is used in subsequent invoices. Sales orders with discounts and mark ups also transfer. You can select one of the following OpenAir Billing Rules:

- Time
- Fixed fee % complete
- Fixed fee on date or milestone

If enabled, you can also create revenue recognition rules along with billing rules in the NetSuite sales order that transfer to OpenAir. You can select one of the following OpenAir billing rules:

- % Complete - OpenAir type = P
- As Billed - OpenAir type = A
- Fixed Amount for % Complete - OpenAir type = F
- Fixed Amount for Date or Milestone - OpenAir type = F
- Incurred vs. Forecast - OpenAir type = I

- Time - OpenAir type = T

To enable the transfer of sales orders to OpenAir, contact OpenAir Support and request some or all of the following selections on the **NetSuite integration administration** form:

- Enable NetSuite sales order to OpenAir customer PO integration. See [Importing NetSuite Sales Orders and Creating OpenAir Invoices](#).
- Enable recognition rule creation in sales order integration.
- Adjust quantity based on % invoiced for time charges related to NetSuite sales order lines with quantities that do not reflect hours. Occurs on export of invoices. Requires OpenAir Integration Bundle 1.14 or higher. See [Calculating Quantity from % Invoice](#).
- Always respect the NetSuite sales order customer and project when exporting invoices. (Allows the transfer of NetSuite sales order information such as Sales Team when you export invoices back to NetSuite.) See [Exporting NetSuite Sales Order Information with OpenAir Invoice](#).
- Create billing rules for NetSuite discount and markup lines on sales orders. See [Creating OpenAir Billing Rules for NetSuite Discounts and Mark Ups](#).
- Create time billing rules in sales order integration with an activity filter. Map sales order line description to billing rule charge description. See [Importing NetSuite Sales Orders and Creating OpenAir Invoices](#).
- Enable charges to map to NetSuite description items. This is used with the sales order integration. See [Exporting OpenAir Charge Detail to NetSuite Description Item](#). For custom mapping, also see [Mapping Description Items When Exporting Invoices](#).
- Initialize invoices from corresponding sales orders when exporting invoices to NetSuite. This is used with the sales order integration. See [Initializing an OpenAir Invoice](#). For custom mappings, also see [Mapping Service Sales Order Custom Fields When Exporting Invoices](#).

If you would like to limit the subsequent transfer of NetSuite sales order data to OpenAir, you can use advanced settings to designate fields as initial-only export. See the instructions for [Using Field Declarations](#).

Custom mappings are also available in [Using Advanced Settings for Mapping Description Items When Exporting Invoices](#).

To use Sales Order records in OpenAir:

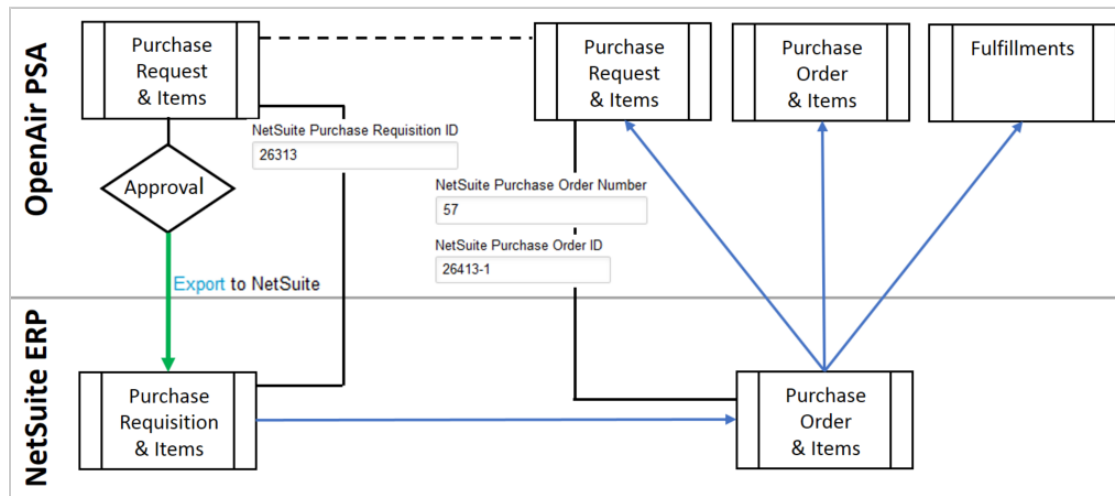
1. Generate charges to use on invoices.
 - If you are using a time or fixed fee OpenAir Billing Rule, go to Projects > Project > Financials > Billing. Click on the billing rule to display and edit the information transferred from NetSuite. Edit the dates on the billing rule. If it is a time billing rule, select either an hourly rate or if it is an other type rate, select a rate card or another non-hourly rate. Click Run billing and create project billing transactions and charges.
 - If you are creating a one-off charge, go to Invoices > Charges and select a new hourly, flat rate, or new other rate charge. Associate the charge with the correct Customer PO. Complete the information and click Save.
2. Go to Invoices > Invoices > New invoice and create an Invoice. Select the customer and sales order item and create the invoice.
3. Generate recognition records and transfer them to NetSuite. Go to Projects > Project > Financials > Recognition. Click on the recognition rule to display and edit the information transferred from NetSuite. Edit the dates on the recognition rule. Click Auto-run, complete requested information, and Click Save. When the rule is run, it creates recognition transactions. Run the integration to send these as journal entries to NetSuite.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Purchase Requisitions in OpenAir

Purchase requisitions can be created in OpenAir and then sent to NetSuite for fulfillment. Purchase requisitions can be created in OpenAir even if the user does not know the exact price or vendor name. This information can later be entered in NetSuite by the requisitions team.

When an OpenAir purchase requisition is integrated with and processed in NetSuite, associated NetSuite purchase orders, purchase items, request items, and fulfillments can be integrated back to the project in OpenAir.



This workflow allows buyers to select or change the vendor or price, and to split or combine requisitions. In addition, buyers can set up automatic purchasing using preferred vendors and pricing.

Users can mark multiple requests as exported or un-exported using bulk actions. Access to these bulk actions is controlled by assigning the following user settings to an employee:

- The employee can un-export purchase requests
- The employee can mark purchase requests exported

Note: To enable this feature, contact OpenAir Support and request the Enable NetSuite Purchase requisition integration for purchase requests switch.

You can also allow non-administrators to export their own purchase requests to NetSuite based on their role. Go to Administration > Global Settings > Users > Roles and select a role which you would like to be able to export purchase requests. In the "Integration" section, select "Allow employee to export purchase requests to NetSuite".

Once these features are enabled, you can add the Purchase request (Purchase requisition) chapter to your integration mappings.

Working with Expense Report Reimbursements in OpenAir

When an OpenAir user's expense report transfers to NetSuite and is reimbursed in NetSuite, that information transfers back to OpenAir and displays under reimbursements associated with the user's expense report. The date the payment is made, the amount, and the NetSuite Payment ID # all transfer

and display in OpenAir. Reimbursements are only applied to expense reports that have a balance that is greater than 0.

In addition, the NetSuite internal ID is stored in a custom field that is available in detail reports. If multiple reimbursements are made for one expense report, they import as multiple transactions.

To enable the transfer of expense report reimbursements to OpenAir, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Enable NetSuite expense report reimbursement integration.

To add additional information to Expense Report Reimbursement records in OpenAir:

1. Go to Expenses > Expense reports and select the expense report that was reimbursed.
2. Click on the Reimbursements link.
The Reimbursements form displays and lists the date, amount, and NetSuite Payment ID # of the NetSuite reimbursement.
3. To run a detail report, go to Reports > Detail > Reimbursements under Expenses. Under Report layout, select NetSuite Expense Report Reimbursement ID and click OK. Run the report.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Invoice Payments in OpenAir

When you record a customer payment in NetSuite for an invoice generated in OpenAir, a corresponding payment transaction displays in the OpenAir invoice when the integration is run. The date, amount, currency, and NetSuite payment ID transfer. Remember that an invoice must be approved and it must be for a project that has a NetSuite ID. Payments are only applied to OpenAir invoices that have a balance due that is greater than 0. The NetSuite Payment # displays in the OpenAir Notes field.

In addition, the NetSuite internal ID is stored in a custom field that is available in detail reports. If multiple payments are made for an invoice, they import as separate payment transactions.

To use the invoices integration, it must be enabled in both NetSuite and OpenAir. For more information, see [Configuring the Invoices Integration](#).

To add additional information to Invoice Payment records in OpenAir:

1. Go to Invoices > Invoices > Approved and select the invoice for which payment was made.
2. Click the Payments link.
The Payments form displays and lists the date, amount, currency, and NetSuite payment ID # of the NetSuite customer payment.
3. To run a detail report, go to Reports > Detail > Payments under Invoices. Under Report layout, select NetSuite Invoice Payment ID and click OK. Run the report.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Customer Deposits Applied to Invoices in OpenAir

When you record a customer deposit in NetSuite and apply it to an invoice generated in OpenAir, the amount transfers to OpenAir when the integration is run and creates a retainer for the deposit amount. Then, OpenAir draws payment for the OpenAir invoice against that retainer. Customer

deposits are only applied to approved OpenAir invoices with NetSuite IDs that have outstanding balances greater than 0. The NetSuite Customer Deposit # displays in the OpenAir Notes field. In addition, the NetSuite internal ID is stored in a custom field that is available in detail reports.

If multiple customer deposits are applied to the NetSuite invoice, they import to OpenAir as separate retainer transactions.

To use the invoices integration, it must be enabled in both NetSuite and OpenAir. For more information, see [Configuring the Invoices Integration](#).

To add additional information to Invoice Retainer records in OpenAir:

1. Go to Invoices > Invoices and select the invoice that is associated with a retainer.
2. Click the Retainer link.
The Retainer form displays and lists the date, amount, and NetSuite Payment ID # of the NetSuite customer deposit.
3. To run a detail report, go to Reports > Detail > Payments under Invoices. Under Report layout, select NetSuite Deposit Applied To ID and click OK. Run the report.

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Credit Memos Applied to Invoices in OpenAir

When you create a credit memo in NetSuite that applies to an invoice transferred from OpenAir, the credit memo transfers back to OpenAir when the integration is run. OpenAir creates a negative invoice that contains charges for each line on the credit memo. In addition, OpenAir displays the total credit amount on the original OpenAir invoice. The integration only imports credit memos applied to approved OpenAir invoices with NetSuite IDs that have outstanding balances greater than 0. The Applied NetSuite credit memo # and amounts display on the OpenAir negative invoice and the NetSuite internal ID is stored in a custom field.

To use the invoices integration, it must be enabled in both NetSuite and OpenAir. For more information, see [Configuring the Invoices Integration](#) as well as the [Credit Memo Integration for Invoices](#).

If you would like charge types to display on NetSuite credit memos, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Map the charge type from the NetSuite credit memo.

To add additional information to credit memo invoices in OpenAir:

1. Go to Invoices > Invoices > Approved and select the negative invoice that is associated with a credit memo.
The Applied NetSuite credit memo # displays on the invoice and the amount of the credit is subtracted.
2. Click the Change charges link.
The form displays and lists invoice charges.
3. Click the edit link next to the invoice charge.
The Edit form for the charge displays.
4. Make your changes and click Save.
5. To run a detail report, go to Reports > Detail > Charges under Invoices. Under Report layout, select NetSuite Applied Credit Memo ID and click OK. Run the report.

Working with OpenAir Data in NetSuite

After the integration is run, OpenAir data transfers to NetSuite. Each record's data can then be viewed and modified in NetSuite. Note that the terminology may differ for the record when in NetSuite. See [Terminology Mapping for the Integration](#) for more information.

Review the following topics for details of how to work with each OpenAir record type in NetSuite:

- [Working with Expense Reports in NetSuite](#)
- [Working with Vendor Bills in NetSuite](#)
- [Working with Timesheets in NetSuite](#)
- [Working with Invoices in NetSuite](#)
- [Working with Revenue Recognition Data in NetSuite](#)
- [Working with Customers from Salesforce.com in NetSuite](#)
- [Working with Projects from Salesforce.com in NetSuite](#)

Before you can view these records in NetSuite, you must first export the data. See [Exporting OpenAir Data to NetSuite](#) for more information.

Working with Expense Reports in NetSuite

You can transfer OpenAir expense reports that have been approved to NetSuite as Expense Reports. They can include receipts that are both billable and non-billable, reimbursable and non-reimbursable, as well as receipts in foreign currencies. If receipts are non-reimbursable, they display as negative expense report lines on the NetSuite Expense Report. The associated Customer : Project can also display. The extra negative lines display for corresponding positive lines when an expense is billed to a customer but not reimbursable to an employee. The negative lines do not display on the OpenAir expense report. To enable these features, contact OpenAir Support and request the following selections on the **NetSuite integration administration** form: Automatically create negative Expense report lines in NetSuite for non-reimbursable expenses and Keep customer reference on negative Expense report lines in NetSuite for non-reimbursable expenses.



Important: Currently the "non-reimbursable" expense checkbox on expense lines in NetSuite is NOT supported. Do not try to use advanced mappings for this.

When the OpenAir expense report is transferred to NetSuite, it includes the user, date of the report and the report number, cash advance information as well as notes, currency and approvals. Two multi-select lists of OpenAir expense report approvers are also exported to NetSuite. One is for the supervisor and the other for the project approver. For details, see [OpenAir to NetSuite Data Mapping](#).

You can also use advanced settings and transfer the expense report line tax. All of the fields in the OpenAir tax_location table are available for custom mapping. Refer to [Using Advanced Settings](#) and review the OpenAir tax_location table at:

https://www.openair.com/database/single_user.html#tax_location

User currency is set for an employee when the record is transferred as a user account to OpenAir. That becomes the expense report currency that is transferred back to NetSuite on the expense report. OpenAir users can include receipts in an expense report that are in a foreign currency. To suppress setting foreign currency in NetSuite when transferring an expense report, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Do not set the foreign currency in NetSuite for foreign currency receipts when exporting expense reports. This ensures that expense reports that transfer to NetSuite display all receipts in the user's base currency.

If it is helpful to transfer NetSuite transactional data back to OpenAir, you can use advanced settings to do so. See the instructions for [Mapping a Transaction Number from NetSuite to an OpenAir Custom Field](#).

When you have the feature to export tax on expense reports enabled on the **NetSuite integration administration** form, the specific taxes, tax codes, rates and amounts transfer based on the nexus the user is assigned to and the tax location of the receipts in the expense report. You must have OpenAir tax option internal switches for tax location enabled as well as the NetSuite Advanced Taxes feature. See [Configuring the Tax Export Integration](#).

If you are using the tax export feature, you can also request that an internal switch be enabled to: Allow manual override of Canadian taxes on Expense report export. This feature applies only to Canadian taxes manually entered on receipts in OpenAir that export to NetSuite. When this feature is enabled, you can enter Canadian taxes in a pop-up window that launches from the OpenAir receipt form. See [Configuring Tax Override for Canadian Expense Reports](#).

To add information to the Expense Report record in NetSuite:

1. Go to Transactions > Employees > Enter Expense Reports > List.
2. Click the Expense Report.

The expense report number displays in the OpenAir Expense Report Number field and the NetSuite Expense Report Number is set to the same number if you enable expense report numbering to Allow Override. To do so, see [Configuring OpenAir for the Integration](#).

If you receive an error, refer to [Troubleshooting the Integration](#) for suggestions on error resolution.

Working with Vendor Bills in NetSuite

You can transfer OpenAir expense reports that have been approved to NetSuite as Vendor Bills for NetSuite vendors or parent vendors/subcontracting companies. OpenAir expense reports can include receipts that are both billable and non-billable as well as receipts in foreign currencies. However, in OneWorld accounts, the vendor and the Customer : Project must be in the same subsidiary.

When the OpenAir expense report is transferred to NetSuite, it includes the vendor, date of the report, currency, exchange rate, due date, amount, expense report number, and OpenAir expense report creator. Two multi-select lists of OpenAir expense report approvers are also exported to NetSuite. One is for the supervisor and the other for the project approver. For details, see [OpenAir to NetSuite Data Mapping](#).

Vendor currency is set for a vendor when the record is transferred to OpenAir as a user account. That becomes the expense report currency that is transferred back to NetSuite on the expense report. OpenAir users can include receipts in an expense report that are in a foreign currency. To suppress setting foreign currency in NetSuite when transferring an expense report, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Do not set the foreign currency in NetSuite for foreign currency receipts when exporting expense reports. This ensures that expense reports that transfer to NetSuite display all receipts in the user's base currency.

If it is helpful to transfer NetSuite transactional data back to OpenAir, you can use advanced settings to do so. See the instructions for [Mapping a Transaction Number from NetSuite to an OpenAir Custom Field](#).

When you have the feature to export tax on expense reports enabled on the **NetSuite integration administration** form, the specific taxes, tax codes, rates and amounts transfer to the vendor bill based on the nexus the user is assigned to and the tax location of the receipts in the expense report. You must have OpenAir tax option internal switches for tax location enabled as well as the NetSuite Advanced Taxes feature. See [Configuring the Tax Export Integration](#).

To add information to the Vendor Bill record in NetSuite:

1. Go to Transactions > Purchases/Vendors > Enter Bills > List.
2. Click Edit for the Vendor Bill.

The vendor bill displays. Expenses are listed under the Expenses & Items tab.

If you receive an error, refer to [Troubleshooting the Integration](#) for suggestions on error resolution.

Working with Timesheets in NetSuite

You can transfer OpenAir timesheets that have been approved to NetSuite. They display as time entries in the Time Tracking form and Weekly Time Sheet form. You can include hours that are both billable and non-billable and distinguish between them. If you do not designate a time entry as billable, it defaults to non-billable. Optionally, you can also send the NetSuite Time Entry ID. When the OpenAir timesheet transfers to NetSuite, in addition to time entries, the Employee, Customer : Project, and Service Item also transfer.

To enable the feature to export time entries to NetSuite, contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Enable time entries export to NetSuite.

To add information to the Time Tracking record in NetSuite:

1. Go to Transactions > Employees > Time Tracking or Weekly Time Sheet.
2. Enter employee and date information.
3. In the Weekly Time Sheet, click the View Time tab.

OpenAir approved time entry information displays.

If you receive an error, refer to [Troubleshooting the Integration](#) for suggestions on error resolution.

Working with Invoices in NetSuite

You can transfer invoices to NetSuite if they are approved and are linked to a customer record and project that contain a NetSuite ID. Information sent includes customer and project ID, invoice date, invoice number, service, rate, and amount information. You can also send project-specific information to the NetSuite invoice header. NetSuite calculates all totals and taxes, and if enabled, can transfer the total tax amount on the invoice back to OpenAir, including GST and PST taxes. In addition, you can initialize the invoice so that the integration gathers additional information from the NetSuite sales order, adds it to the OpenAir invoice information, and transfers it to NetSuite. You can also add charge details from OpenAir to the NetSuite invoice description items.

When an expense charge is manually created in OpenAir, it can be sent to NetSuite if there is a service assigned to it, however, it displays in NetSuite as a service charge instead of a billable expense.

If it is helpful to transfer NetSuite transactional data back to OpenAir, you can use advanced settings to do so. See the instructions for [Mapping a Transaction Number from NetSuite to an OpenAir Custom Field](#).

Custom mappings are also available for [Mapping Service Sales Order Custom Fields When Exporting Invoices](#).

If the Multiple Prices feature is enabled in NetSuite, the NetSuite price level is set to custom. If not, the NetSuite price level is not set.

If the import invoice tax feature is enabled on the **NetSuite integration administration** form, the total tax amount imports back to OpenAir with the invoice. Contact OpenAir Support and request the following selection on the **NetSuite integration administration** form: Import taxes applied to exported invoices. See the instructions for [Configuring the Invoices Integration](#) and [Importing Invoice Taxes](#) as well as for [Configuring the Sales Order Integration](#) if you are going to initialize invoices and add charge descriptions.

If the OpenAir invoice URL mapping is selected on the **NetSuite integration administration** form, a custom field captures the OpenAir hypertext link on the NetSuite invoice form. See [Specifying Integrations, Filtering, and Features in OpenAir](#) in OpenAir.

If you enable the feature to combine non-expense charges by category, service, or activity on invoices on the **NetSuite integration administration** form, non-expense charges roll up and display as one line item under the Items subtab on the NetSuite invoice. First, the integration combines the charges by project, and then it rolls them up by category, service, or activity. There was a previous limitation that involved using this feature in conjunction with the Sales Order integration. That limitation no longer exists. You can use the features in the Invoices integration in conjunction with the features in the Sales Order integration. See [Configuring the Invoices Integration](#) and [Configuring the Sales Order Integration](#).

To add information to the invoice in NetSuite:

1. Go to Transactions > Sales > Create Invoices > List.
2. Click on the Invoice.

The invoice number displays in the OpenAir Invoice Number field and the NetSuite Invoice # is set to the same number if you enable invoice numbering to Allow Override. For more information on setting, refer to [Configuring Additional Settings, Preferences, and Customizations in NetSuite](#).

If you receive an error message, refer to [Troubleshooting the Integration](#) for suggestions on resolution.

Working with Revenue Recognition Data in NetSuite

Send OpenAir project information about revenue recognized from paid invoices to NetSuite. When you generate project billing transactions and charges and then run recognition for a project, the information can be transferred to NetSuite.

If it is helpful to transfer NetSuite transactional data back to OpenAir, you can use advanced settings to do so. See the instructions for [Mapping a Transaction Number from NetSuite to an OpenAir Custom Field](#).

To use the revenue recognition integration, it must be enabled in both NetSuite and OpenAir. For more information, see [Configuring Revenue Recognition](#).

If you are using the revenue recognition integration and would like to transfer revenue recognition transactions incrementally throughout the life of a project to create intercompany journal entries, contact OpenAir Support and request the following selections be enabled on the **NetSuite integration administration** form:

- Enable NetSuite intercompany journal creation for recognition transaction and invoice export
- Enable NetSuite subsidiary import

To add information to the Journal Entry in NetSuite:

1. Go to Transactions > Financial > Make Journal Entries > List.
2. Click on the Journal Entry.

An invoice is created. All lines are marked as Delayed Rev Rec to indicate a deferred revenue account.

Note: If the Delayed Rev Rec does not display on the Invoice form, customize the default Invoice form before running the integration. Click on the Customize tab, select Screen Fields and then select Columns. Scroll down and select the Delay Rev. Rec. field.

Working with Customers from Salesforce.com in NetSuite

You can transfer customers that have been pulled into OpenAir from Salesforce.com to NetSuite. Once the customer record is in NetSuite, it is assigned a NetSuite ID, which is subsequently added to the OpenAir customer record. While information can be updated in OpenAir and Salesforce.com, those updates are not exported back to NetSuite through the integration. For details about data that transfers, see [OpenAir to NetSuite Data Mapping](#).

For users with the Salesforce.com Integration in OpenAir, this feature adds the ability to send customers through OpenAir to NetSuite. For information on this feature and available options, refer to [Configuring the Salesforce.com Integration for Customers and Projects](#).

To add information to a Customer in NetSuite:

1. Go to Lists > Relationships > Customers.
2. Click on the Customer.

Working with Projects from Salesforce.com in NetSuite

You can transfer projects that have been pulled into OpenAir from Salesforce.com to NetSuite. Once the project is transferred to NetSuite, it becomes a NetSuite record and is assigned a NetSuite ID, which is subsequently added to the OpenAir project record. While information can be updated in OpenAir and Salesforce.com, those updates are not exported back to NetSuite through the integration. For details about data that transfers, see [OpenAir to NetSuite Data Mapping](#).

For users with the Salesforce.com Integration in OpenAir, this feature adds the ability to send projects through OpenAir to NetSuite. For information on this feature and available options, refer to [Configuring the Salesforce.com Integration for Customers and Projects](#).

To add information to a Project in NetSuite:

1. Go to Lists > Relationships > Projects.
2. Click on the Project.

Frequently Asked Questions (FAQs)

The following information provides more detail about how the integration works between the two applications.

Regarding the name and rate of an item sent to OpenAir, what happens if there is no base price in NetSuite?

If there isn't a NetSuite base price, no price is set on the item. However, there could be user-specific additional logic added to the advanced settings in OpenAir for this situation. For example, you might specify that the pricing available in advanced search in web services should be used.

What happens in multi-currency situations when prices on the base currency tab are blank? If base currency is blank and base price is identified on several tabs, how do you find the price? If price is picked up from a foreign currency, does price get converted to base currency?

Currently what happens is that no currency is set for the item. Therefore, the currency is assumed to be the base currency of the OpenAir account. We are addressing this situation in future releases.

When I look at the Mapping table for NetSuite Items, it looks like a custom field is created in OpenAir for `netsuite_category_id`. What is this?

The `netsuite_category_id` is for the NetSuite ID of NetSuite items. In OpenAir, items are stored in something called a category. They are also called activities and services. In other words, in OpenAir, a category = service = activity. The actual database table happens to be called `category` and so the field name created is `netsuite_category_id`.

In the Entity and Field Mapping table for NetSuite Expense Categories, why isn't there a `netsuite_category_id` for NetSuite expense categories?

In the OpenAir database, they are called expense items, so the field name is `netsuite_item_id`. It holds the ID of the NetSuite expense category ID.

Data Mapping in the Integration

Introduction

NetSuite and OpenAir exchange records and transactional information. The integration eliminates the need for re-entering data in each application, thereby ensuring accuracy and streamlining workflow.

The following tables show the default entity and field mapping between NetSuite and OpenAir. Although terminology is somewhat different, the specific NetSuite record is identified and the location and fields transferred are listed along with the location of the NetSuite records and transactions in OpenAir and vice-versa.

Note: You can set up user-defined field mapping and filtering on the **NetSuite integration** form. For more information, see [Using Advanced Settings](#).

Terminology Mapping for the Integration

NetSuite and OpenAir use slightly different terminology. The table below shows the differences between NetSuite and OpenAir terms. For terminology consistency, you may wish to change the default terms in one application or the other. For more information, see [Changing Default Terminology](#).

| NetSuite Term | OpenAir Term |
|---------------------------------|--|
| Employee | User |
| Customer | Customer |
| Contact | Contact |
| Vendor | Depending on implementation: Vendor User |
| Project | Project |
| Project Task | Task |
| Item | Depending on implementation: Product Activity or Service |
| Purchase Order | Purchase Order |
| Billing Schedule | Billing Rule |
| Invoice | Invoice |
| Revenue Recognition Transaction | Revenue Transaction |
| Expense Category | Expense Item |
| Expense Report | Expense Report |
| Purchase requisition | Purchase request |

Note: Billing schedules in NetSuite do not map to billing rules in OpenAir and are not used in the integration. All invoices created in OpenAir use OpenAir billing rules to determine when and how to bill a customer.

Changing Default Terminology

In both OpenAir and NetSuite, you can replace the default terms with terms of your choice in order to have consistent terms across the applications.

To change default terminology:

1. In OpenAir, go to Administration > Global Settings > Interface: Terminology and replace default terms.
2. In NetSuite, go to Setup > Company > Rename Records/Transactions and make the desired changes.

NetSuite to OpenAir Data Mapping

OpenAir pulls records from NetSuite for employees, customers including leads and prospects if enabled, contacts if enabled, projects, service items or all items if enabled, expense categories, vendors if enabled, sales orders if enabled, expense report reimbursements if enabled, invoice payments if enabled, and applied customer deposits if enabled. The following are the default data mappings.

| NetSuite Record | Data Transferred | OpenAir Application |
|---------------------------------|---|--|
| Employees | OpenAir User: custom field for netsuite_user_id, indication of active status, nickname, email, and first and last name. If this is a new user, the password is established using a random string and the role assigned is the default new user role. When active status changes to inactive status, the change does not transfer from NetSuite to OpenAir, but must be performed manually in each application. | Administration > Global Settings > Users |
| Customers Leads Prospects | OpenAir Customer: custom field for netsuite_customer_id, type, active status, name, company email, and address including street address, city, state, and zip code. If multiple addresses exist, the first address listed in NetSuite is used. If the OpenAir account is multi-currency, the customer currency will be set to the NetSuite customer currency. When active status changes to inactive status, the change does not transfer from NetSuite to OpenAir, but must be performed manually in each application. | Administration > Global Settings > Customers |
| Contacts | OpenAir Contact: custom field for netsuite customer (must exist before contact is created), custom field for netsuite_contact_id, active status, nickname, email, first and last name, phone, fax, mobile, and job_title. Contact addresses are stored in an address table, not the contacts table, and | Administration > Global Settings > Contacts |

| NetSuite Record | Data Transferred | OpenAir Application |
|--|---|---|
| | include address1, address2, address3, city, state, zip, and country. When active status changes to inactive status, the change does not transfer from NetSuite to OpenAir, but must be performed manually in each application. | |
| Projects | OpenAir Project: custom field for netsuite_project_id, name, customer ID, and start date. If the OpenAir account is multi-currency, the project currency will be set to the project's NetSuite customer currency. This respects the requirement in NetSuite that the project currency should be the same as the customer currency. If setting the OpenAir project stage in NetSuite is enabled, project stage transfers from NetSuite. Also, if revenue recognition is enabled and the NetSuite account is a OneWorld account, the project subsidiary and the subsidiary currency will also be set for the OpenAir project in custom fields. If you are using multi-currency customers in NetSuite, please see the project section in NetSuite Records Available for Export to OpenAir . | Projects > Projects > All |
| Project Tasks | OpenAir Project: custom field for netsuite_project_task_id, name, customer_id, project_id, start_date, currency, and planned_hours. When the NetSuite project task has a constraint type "Fixed Start" the start date will be populated on the OpenAir project task. Otherwise, it is NOT imported into OpenAir. The OpenAir task planned hours are only populated when the task is not a milestone and the hours are not set at the task assignment level. | Projects > Tasks > All |
| Service Items/Items (all types) (switch enabled) | OpenAir Activities: custom field for netsuite_category_id, indication of active or inactive status, name and rate, which is the first item from the price list in NetSuite. See Frequently Asked Questions (FAQs) for more information. | Administration > Application Settings > Invoices Settings > Activities |
| Items for purchase orders (switch enabled for product) | OpenAir Product: custom field for netsuite_product_id, name, and the following custom fields when revenue recognition is enabled: netsuite_product_inc_acct_id, netsuite_product_def_rev_acct_id, netsuite_product_expense_acct_id, netsuite_product_def_expense_acct_id, and netsuite_product_subtype | Administration > Application Settings > Purchases Settings > Products |
| Expense Categories | OpenAir Expense Type: custom field for netsuite_item_id, indication of active or inactive status, name of the category, and type. If the NetSuite expense category has mileage in the name, it translates to a type=M, OpenAir mileage expense item. Otherwise, it becomes type=R. Either can be edited. | Administration > Application Settings > Expenses Settings > Expense items |

| NetSuite Record | Data Transferred | OpenAir Application |
|---|--|---|
| Vendors (switch enabled for users) | OpenAir User: custom field for netsuite_vendor_id or netsuite_vendor2_id, indication of active or inactive status, nickname, email, first and last name, netsuite_export_envelope_to_vendorbill, netsuite_vendor_parent_id, and netsuite_user_tax_nexus (if tax export enabled). | Administration > Global Settings > Users |
| Vendors (switch enabled for vendors) | OpenAir Vendor: custom field for netsuite_vendor_id, indication of active or inactive status, name, email, fax, phone, address1, address2, address3, city, state, zip, URL, and currency. | Administration > Application Settings > Purchases Settings > Vendors. Can also access Vendors from Expenses Settings. |
| Purchase Orders for Purchase Requests (switch enabled) | OpenAir Purchase Request: customer_id and project_id for customer and project specified, date, date_required, date_submitted, date_approved, currency, prefix for NS, number, approval_status, notes, and name, which is NS + tranID + line ID | Purchases > Purchase requests > Approved |
| Purchase Orders for Request Items (switch enabled) | OpenAir Request Item: name, vendor_id, product_id, customer_id, project_id, purchaserequest_id, currency, cost, um (each), quantity, date, notes, user_id, and total | Purchases > Purchase requests > Request items |
| Purchase Orders for POs (switch enabled) | OpenAir POs: date, vendor_id, terms, currency, user_id (OA purchaser), prefix for NS, number (tranID), name (NS + tranID), auto_track_payable_with_fulfilled (yes), carrier_id, accounts_payable_id, receiving_id, and ship_complete_only | Purchases > POs > Approved |
| Purchase Orders for Purchase Items (switch enabled) | OpenAir Purchase Item: name, vendor_id, request_item_id, product_id, customer_id, project_id, purchaserequest_id, purchaseorder_id, currency, cost, approved_cost, um (each), quantity, date, notes, user_id (OA purchaser), total, and purchaser_id | Purchases > POs > Purchase items |
| Purchase Orders for Fulfillment (switch enabled) | OpenAir Fulfillment: quantity, purchaseorder_id, purchaserequest_id, request_item_id, purchase_item_id, and date | Purchases > Fulfillment > Outstanding POs |
| Expense Report Reimbursements (switch enabled) | OpenAir Expense report Reimbursement: netsuite_reimbursement_id, date transaction is created in NetSuite, total, and currency. By default, notes displays the NetSuite Payment # followed by the NetSuite transaction number. This transaction number is established when created, but is never updated. | Expenses > Expense reports > Reimbursed |
| Invoice Payments (switch enabled) | OpenAir Invoice Payment: netsuite_payment_id, date transaction is created in NetSuite, total, and currency. By default, notes displays the NetSuite Payment ID # followed by the NetSuite internal ID of the transaction. This transaction number is established when created, but is never updated. | Invoices > Invoices > Approved invoice > Payment |

| NetSuite Record | Data Transferred | OpenAir Application |
|--|---|--|
| Applied Customer Deposits (switch enabled) | OpenAir Invoice Retainer: netsuite_retainer_id, netsuite_deposit_applied_to_id, customer_id, date transaction is created in NetSuite, total, and currency. By default, notes displays the NetSuite customer deposit ID # followed by the NetSuite internal ID of the transaction. This transaction number is established when created, but is never updated. | Invoices > Retainers |
| <p>Sales Orders (switch enabled) See more Sales Order Info in following:</p> <ul style="list-style-type: none"> ■ Billing Rules for Newly Created POs ■ Revenue Recog. Rules for Newly Created POs | <p>OpenAir Customer Purchase Order - the following custom fields are created: netsuite_sales_order_id for entire sales order, netsuite_sales_order_line_id for a specific line on the sales order, netsuite_sales_order_net_amount for net amount of sales order after discounts or markups, netsuite_sales_order_project_id for the NetSuite internal ID of the associated project for the sales order line, netsuite_sales_order_item_id for the NetSuite internal ID of the item on the sales order line, netsuite_sales_order_line_quantity for the quantity of the sales order line, and netsuite_discount_po for the OpenAir internal ID of a customer PO that is created from an applicable NetSuite line or subtotal discount.</p> <p>Check box fields include: netsuite_sales_order_quantity_is_not_hours for calculate quantity from % invoiced, netsuite_sales_order_line_discount_po for the NetSuite sales order line discount customer PO, and netsuite_sales_order_header_discount_po for the NetSuite sales order header discount customer PO.</p> <p>Also transferred are item name (default name is NetSuite sales order number. If it appears more than once, name is appended with a number 2, 3, 4, etc.), customer_id, and number, total (grossAmount), currency, an indication of active or inactive status, and date (tranDate).</p> <p>Transfer Charge description and activity to Fixed fee billing rules (switch enabled) and set a Billing rule filter for Activity on Time billing rules (switch enabled).</p> | <p>Projects > Projects > Edit project and scroll down to Customer POs > Edit Administration > Application Settings > Invoices Settings > Customer POs</p> <p>Invoices > Invoices > New invoice</p> |
| Sales Orders (switch enabled) Billing Rules for Newly Created POs | OpenAir Project Billing Rule: name (default is same as customer PO name), customer_id, project_id, category_id, customerpo_id, an indication of active or inactive status, currency, notes, start_date, end_date, type (NetSuite custom field custcol_openair_billing_rule_type), cap (grossAmount for time rules), amount (grossAmount for fixed fee rules), percent_how (set to A for fixed fee % complete rules), and percent (set to 100 for fixed fee % complete rules). Date | Projects > Projects > select the project > Financials > Billing > select a billing rule from the sales order line item |


| NetSuite Record | Data Transferred | OpenAir Application |
|--|---|--|
| | on billing rule is automatically set to 1/1/2050 to ensure it is edited before running the rule. | |
| Sales Orders (switch enabled) Revenue Recog. Rules for Newly Created POs | <p>OpenAir Project Revenue Recognition Rules: name (default is same as customer PO name), customer_id, project_id, category_id, customerpo_id, an indication of active or inactive status, currency, notes, start_date, end_date, type (NetSuite custom field custcol_oa_rev_rec_rule_type), project_billing_rule_filter if time project billing rule corresponds to OpenAir internal ID, percent_how set to A for % complete rules, percent_trigger set to A for fixed fee % complete rules, percent set to 100 for fixed fee % rules, lc_level set to 0 for incurred vs. forecast rules, and extra_data:</p> <ul style="list-style-type: none"> For as billed rules, populate hours in recognition transactions is selected by default. For incurred vs. forecast rules, approved hours multiplied by user cost is selected by default under Incurred and approved and booked hours multiplied by user cost is selected by default under Forecast. <p>Date on recognition rule is automatically set to 1/1/2050 to ensure it is edited before running the rule.</p> | Projects > Projects > select the project > Financials > Recognition > select a recognition rule from the sales order line item |

OpenAir to NetSuite Data Mapping

OpenAir pushes transactional data from OpenAir to NetSuite for invoices, including line items for non-expense charges and line items for expense charges, expense reports, expense items, time entries on timesheets, revenue recognition transactions, and opportunities. Customer and project information generated in Salesforce.com and transferred to OpenAir can also be pushed to NetSuite. The following are the default data mappings.

| OpenAir Record | Data Transferred | NetSuite Application |
|--|--|---|
| Invoices | NetSuite Invoices: custom field for customer_id or project_id, date of invoice, number, project_id, and if specified, a custom field for OpenAir Invoice number. | Transactions > Sales > Create Invoices > List |
| Invoice Line Items (non-expense charges) | NetSuite Invoices: quantity, rate, and project_id. | Transactions > Sales > Create Invoices > List |
| Invoice Line Items (expense charges) | NetSuite Invoices: custom field for netsuite_envelope_id and total. | Transactions > Sales > Create Invoices > List |
| Expense Reports | NetSuite Expense Reports: OpenAir custom field for NetSuite user ID, date of expense report, expense report number, OpenAir custom fields for expense report number and expense report approver, advance, notes, | Transactions > Employees > Enter Expense Reports > List |

| OpenAir Record | Data Transferred | NetSuite Application |
|---|--|---|
| | indication of multi-currency, and accounting approval and supervisor approval by default. | |
| Expense Receipts | NetSuite Transaction Lines in Expense Reports: OpenAir custom field for NetSuite ID from expense item, date of expense item, notes, customer ID, total from receipt, whether receipt is missing, indication of multi-currency, and indication of whether billable or non-billable based on selected item on OpenAir project form. Integration switch may also be set to disable expense report references on invoices. | Transactions > Employees > Enter Expense Reports > List |
| Expense Reports to Vendor Bills (switch enabled) | NetSuite Bills under Expenses & Items: OpenAir custom field for NetSuite ID or NetSuite Parent ID, expense report date, expense report number, expense report approver, OpenAir expense report creator, vendor currency, and notes. | Transactions > Purchases/Vendors > Enter Bills > List |
| Time Entries on Timesheets | NetSuite Time Entries: OpenAir custom field for NetSuite project ID from project for project and customer, NetSuite employee ID from user, NetSuite service item ID from category/activity/service, date of time entry, and hour and minute from time entry converted to decimal hour. Notes associated with a timesheet transfer, but only approved timesheets export. | Transactions > Employees > Track Time or Weekly Time Sheet and select View Time tab |
| Revenue Recognition Transaction | NetSuite Revenue Recognition Transactions: OpenAir custom fields for NetSuite Rev Rec journal entries from either the NetSuite Income Account ID or the NetSuite Deferred Revenue Account ID depending upon whether it is a debit or credit line on the journal entry, revenue recognition transaction amount for credit or debit, NetSuite project ID, and any revenue transaction notes. In addition, if the account is multi-currency, NetSuite project exchange rate is transferred. If the account is both OneWorld and multi-currency, NetSuite project subsidiary and NetSuite subsidiary currency are also transferred. | Transactions > Financial > Make Journal Entries > List |
| Project associated with NetSuite Opportunity | NetSuite Opportunity: OpenAir fields for default_category and planned_hours (the total planned hours in the work breakdown structure by default_category). | Transactions > Sales > Create Opportunities > List |
| Customers from Salesforce.com and OpenAir integration | NetSuite Customers: OpenAir company name, address1 and address2, city, state, zip, country (switch enabled mapping), and currency as well as an OpenAir custom field: customer_sf_id. A custom field for CUSTENTITY_OA_SFA_ID is created in NetSuite and the customer is automatically marked for Export to OpenAir. | Lists > Relationships > Customers |

| OpenAir Record | Data Transferred | NetSuite Application |
|--|--|---|
| | In addition, if the NetSuite account is multi-currency, the OpenAir currency transfers to become the NetSuite currency. | |
| Projects from Salesforce.com and OpenAir integration | NetSuite Projects: OpenAir company name, Netsuite customer ID, the start date as well as an OpenAir custom field: customer_sf_id. A custom field for CUSTENTITY_OA_SFA_ID is created in NetSuite and the project is automatically marked for Export to OpenAir. The Limit Time to Assignees check box on the Edit project window is not selected automatically. | Lists > Relationships > Projects |
| Purchase requisitions | <p>OpenAir Purchase Requests including request items, once approved through the common approval system, are exported to NetSuite as purchase requisitions and purchase requisition items associated with a NetSuite Purchase Requisition ID, which is linked to the associated Purchase Request in OpenAir.</p> <div>  Note: NetSuite Purchase Requisitions can be linked to NetSuite Purchase Orders and Items. Purchase Orders and Items can be pulled to OpenAir using the NetSuite Purchase Order & Items to Purchase Requests and Items, Purchase Order and Items, and Fulfillments workflows. </div> | Transactions > Purchases > Enter Requisitions > List |
| Revenue Recognition Rule | Data about rule is transferred to a NetSuite Custom Record called customrecord_oa_arm_rules | Customization > List, Records & Fields > Record Types |
| Revenue Recognition Transaction | Data about recognition transaction, including which rule created it, is transferred to a NetSuite Custom Record called customrecord_oa_arm_rrts | Customization > List, Records & Fields > Record Types |

Using Advanced Settings

Introduction

The **NetSuite integration** form in OpenAir allows you to enter information in an Advanced Settings text area. In this area, you have the capability to customize the integration to specify what is transferred and how it displays. When the Advanced Settings text area is blank, the integration runs using default mappings. By using the Advanced Settings text area, you can enter additional mappings and make any of the following changes.

- Select custom and non-custom fields in NetSuite and map them to OpenAir fields, strings, and combinations of fields and strings using concatenation.
- Select custom and non-custom fields in OpenAir and map them to NetSuite fields. The integration supports all types of NetSuite custom fields.
- Use IF/THEN/ELSE transformations for the custom and non-custom field mappings described above.
- Use filters to limit the amount and type of data transferred.
- Specify mappings and filters for all or some of the entities selected on the OpenAir **NetSuite integration** form under Get data from NetSuite and Send data to NetSuite. Keep in mind that Advanced Settings applies only to those entities for which you select check boxes.



Important: In the new user interface, Advanced Settings have been replaced with a link to Settings on each workflow. When you click the Settings link, a dialog appears with settings which are relevant to the workflow where it was opened.

Working with Advanced Settings

The following topics describe adding advanced settings code and general syntax concepts as well as the commands/tags available in the Advanced Settings text area:

- [Adding Advanced Settings Code](#)
- [Using General Syntax Concepts](#)
- [Using PULL and PUSH Tags](#)
- [Using Entity Integration Point Tags](#)
- [Using Field Declarations](#)
- [Using Field Mapping Tags](#)

Adding Advanced Settings Code

When you add code to the Advanced Settings text area, we recommend you review the following steps and build code in this prescribed order:

1. Identify whether you want to push or pull data, or both, and add those tags. See [Using PULL and PUSH Tags](#).
2. Define the integration points from which you will push or pull data. See [Using Entity Integration Point Tags](#).

3. Map the fields and field values you want to update, change, or exchange between the two applications and add that code. Specify the fields as initial-only if you want them to transfer only on the first export of the record. See [Using Field Declarations](#).
4. Determine field mapping tags and specify how field data should be mapped between the two applications. See [Using Field Mapping Tags](#).

Using General Syntax Concepts

To specify user-defined field mappings and filters in the Advanced Settings text area you must use specific syntaxes:

- An HTML-like syntax defines hierarchy
- An SQL-like syntax defines conditions

All syntax that defines data flow, conditions, and filters is specified in uppercase. Case for each NetSuite and OpenAir field name depends on how the field name is defined in the application; field names may be lowercase or use a combination of uppercase and lowercase. Both syntax and field names are case sensitive.

Using PULL and PUSH Tags

Specify data flow using PULL and PUSH commands.

- You PULL information when you transfer it from NetSuite to OpenAir. This corresponds to the entities you select under Get data from NetSuite. Refer to [NetSuite to OpenAir Data Mapping](#).
- You PUSH information when you transfer it from OpenAir to NetSuite and this corresponds to the entities you select under Send data to NetSuite. Refer to [OpenAir to NetSuite Data Mapping](#).

PULL and PUSH commands function similarly to XML tags: all tags used require both an open and a close tag (a begin and end tag). For example, each <PULL> tag must have a corresponding </PULL> tag and each <PUSH> tag a corresponding </PUSH> tag. There can be only one <PULL> </PULL> tag and one <PUSH> </PUSH> tag in the Advanced Settings text area. For example:

```
<PULL>
</PULL>
<PUSH>
</PUSH>
```

Using Entity Integration Point Tags

Entity integration points are second level tags used within PULL and PUSH tags to specify the entities between which you are transferring data. Integration point tags, like the PUSH and PULL tags, need to be closed: for example, the <EMPLOYEE_TO_USER> integration point, requires </EMPLOYEE_TO_USER>. Refer to [PULL Integration Point Tags](#) and [PUSH Integration Point Tags](#).

PULL Integration Point Tags

Use these integration point tags to pull data from NetSuite to OpenAir. Remember to select the check boxes of the entities under Get data from NetSuite.

Note: For Revenue Recognition Integration Point Tags, the check box for Customer POs (Sales Orders) must be selected on the **NetSuite integration** form. No filter support is available since these are created automatically via the integration. Only use valid values specified in the data dictionary and use extreme caution when customizing billing rule creation. This is only relevant with the sales order integration. See **Customizing Revenue Recognition Rules** for more information.

| PULL Integration Point Tag | Mappings | Workflow | Mapping Group |
|--------------------------------|---|------------------------------------|---------------------------|
| EMPLOYEE_TO_USER | NetSuite employee to OpenAir user. Supports mappings and filters. | Employees (Users) | Employee |
| CUSTOMER_TO_CUSTOMER | NetSuite customer to OpenAir customer. Supports mappings and filters. | Clients (Customers) | Client |
| JOB_TO_PROJECT | NetSuite project to OpenAir project. Supports mappings and filters. | Projects (Projects) | Project |
| ITEM_TO_CATEGORY | NetSuite item to OpenAir activity or service. Supports mappings and filters. | Services (Service Items) | Service |
| EXPENSE_CATEGORY_TO_ITEM | NetSuite expense category to OpenAir expense item. Supports mappings and filters. | Expense Items (Expense Categories) | Expense Item |
| CONTACT_TO_CONTACT | NetSuite contact to OpenAir contact. Supports mappings and filters. | Contacts (Contacts) | Contact |
| VENDOR_TO_USER | NetSuite vendor to OpenAir user. Supports mappings and filters. | Employees (Vendors) | Vendor |
| SO_TO_CUSTOMERPO | NetSuite sales order to OpenAir customer PO. Supports mappings and filters. | Customer POs (Sales Orders) | Customer PO |
| PROJECT_BILLING_RULE_TIME | Mappings for the NetSuite sales order go here, and are used to customize project time billing rule creation. | Customer POs (Sales Orders) | Time Project Billing |
| PROJECT_BILLING_RULE_FIXED_FEE | The mappings for the NetSuite sales order go here, and are used to customize project fixed fee billing rule creation. | Customer POs (Sales Orders) | Project Fixed Fee Billing |

| PULL Integration Point Tag | Mappings | Workflow | Mapping Group |
|---------------------------------|--|--|----------------------------|
| REVREC_RULE_PERCENT_COMPLETE | The mappings for the NetSuite sales order go here, and are used to customize % complete revenue recognition rule creation. | Customer POs (Sales Orders) | Percent Complete |
| REVREC_RULE_AS_BILLED | The mappings for the NetSuite sales order go here, and are used to customize as billed revenue recognition rule creation. | Customer POs (Sales Orders) | As Billed |
| REVREC_RULE_FF_PERCENT_COMPLETE | The mappings for the NetSuite sales order go here, and are used to customize fixed fee % complete revenue recognition rule creation. | Customer POs (Sales Orders) | Fixed Fee Percent Complete |
| REVREC_RULE_FF_DATE | The mappings for the NetSuite sales order go here, and are used to customize fixed fee on date or milestone revenue recognition rule creation. | Customer POs (Sales Orders) | Date/Milestone Fixed Fee |
| REVREC_RULE_INC_FORECAST | The mappings for the NetSuite sales order go here, and are used to customize incurred vs. forecast revenue recognition rule creation. | Customer POs (Sales Orders) | Incurred vs. Forecast |
| REVREC_RULE_TIME | The mappings for the NetSuite sales order go here, and are used to customize time project revenue recognition rule creation. | Customer POs (Sales Orders) | Time Project |
| BILLPAYMENT_TO_REIMBURSEMENT | NetSuite expense report reimbursement to OpenAir expense reimbursement. Supports mappings and filters. | Reimbursements (Expense Report Reimbursements) | Expense Reimbursement |
| PAYMENT_TO_PAYMENT | NetSuite invoice payment to OpenAir invoice payment. Supports mappings and filters. | Payments (Invoice Payments) | Invoice Payment |
| DEPOSIT_TO_RETAINER | NetSuite applied customer deposit | Retainers (Applied Customer Deposits) | Retainer |


| PULL Integration Point Tag | Mappings | Workflow | Mapping Group |
|----------------------------------|--|---|-------------------------|
| | to OpenAir retainer integration. Supports mappings and filters. | | |
| CREDIT_MEMO_TO_CREDIT | NetSuite applied credit memo to OpenAir negative charge integration. Supports mappings and filters. | Credits (Applied Credit Memos) | Credit Memo |
| NS_INVOICE_TO_OA_INVOICE | For importing additional NetSuite invoice data after an invoice is exported (pullback). For example, use this to import NetSuite transaction numbers to an OpenAir custom field. Supports mappings. | Invoices (Invoices) | Invoice |
| NS_EXPENSE_REP_TO_OA_EXPENSE_REP | For importing additional NetSuite expense report data after an expense report is exported (pullback). For example, use this to import NetSuite transaction numbers to an OpenAir custom field. Supports mappings. | Expense Reports (Expense Reports) | Expense report |
| JOURNAL_TO_REVENUE | For importing additional NetSuite journal entry data after a revenue recognition transaction is exported (pullback). For example, use this to import NetSuite transaction numbers to an OpenAir custom field. Supports mappings. | Recognition Transactions (Revenue Recognition Transactions) | Recognition transaction |
| VENDOR_TO_VENDOR | NetSuite vendor to OpenAir vendor. Supports mappings and filters. | Vendors (Vendors) | Vendor |
| ITEM_TO_PRODUCT | NetSuite item to OpenAir product. Supports mappings and filters. | Products (Purchase Items) | Product |
| PURCHASEORDER_TO_PURCHASEORDER | NetSuite purchase order integration. Supports mappings and filters. | POs (Purchase Orders) | PO |
| PURCHASE_ITEM | NetSuite purchase order line to OpenAir purchase | POs (Purchase Orders) | Purchase item |

| PULL Integration Point Tag | Mappings | Workflow | Mapping Group |
|-----------------------------|---|-----------------------|---------------|
| | item. Supports mappings and filters. | | |
| VENDORBILL_TO_PURCHASEORDER | NetSuite vendor bills to purchase order integration. Supports mappings and filters. | POs (Purchase Orders) | PO |
| VENDORBILL_TO_PURCHASE_ITEM | NetSuite vendor bill to purchase item integration. Supports mappings and filters. | POs (Purchase Orders) | Purchase Item |
| NS_PR_TASK_TO_OA_PR_TASK | NetSuite project task integration. Supports mappings and filters. | Tasks (Project Tasks) | Task |

PUSH Integration Point Tags

Use these integration point tags to push data from OpenAir to NetSuite. Remember to select the check boxes of the entities under Send data to NetSuite.

| PUSH Integration Point Tag | Mappings | Workflow | Mapping Group |
|----------------------------|--|-----------------------------------|----------------|
| OA_CUSTOMER_TO_NS_CUSTOMER | OpenAir customer from Salesforce.com to a NetSuite customer. Supports mappings and filters. | Clients (Customers) | Client |
| PROJECT_TO_JOB | OpenAir project from Salesforce.com to a NetSuite project. Supports mappings and filters. | Projects (Projects) | Project |
| EXPENSE_REP_TO_EXPENSE_REP | <div> <p>OpenAir expense report to a NetSuite expense report. Supports mappings and filters.</p> <p>Note: Filters for this Integration Point Tag can be used to define filters for the EXPENSE_REP_TO_VENDORBILL Integration Point Tag.</p> </div> | Expense Reports (Expense Reports) | Expense Report |
| EXPENSE_REP_LINE | OpenAir expense lines (expenses/tickets) to NetSuite expense lines. Filters are not supported here to prevent inconsistent expense reports in the two systems. DO NOT map the nonreimbursable expenses checkbox in the integration, because there is significant impact downstream on rebilling to invoices. | Expense Reports (Expense Reports) | Expense Line |

| PUSH Integration Point Tag | Mappings | Workflow | Mapping Group |
|-------------------------------------|--|-----------------------------------|------------------|
| EXPENSE_REP_LINE_TAX | OpenAir expense lines (expenses/tickets) to NetSuite expense lines related to the tax_location table. Supports mappings. | Expense Reports (Expense Reports) | Tax Line |
| EXPENSE_REP_TO_VENDORBILL | OpenAir expense report to NetSuite as vendor bill header. Supports mappings but not filters.  Note: Filters for this Integration Point Tag can be defined in the EXPENSE_REP_TO_EXPENSE_REP Integration Point Tag. | Expense Reports (Expense Reports) | Vendor Bill |
| EXPENSE_REP_LINE_TO_VENDORBILL_LINE | OpenAir expense lines (expenses and tickets) to NetSuite as vendor bill lines. Supports mappings and filters. | Expense Reports (Expense Reports) | Vendor Bill Line |
| TIMEENTRY_TO_TIMEBILL | OpenAir time entry to NetSuite time entry. Supports mappings and filters. | Time Entries (Time) | Time Entry |
| TIMESHEET | OpenAir timesheet to NetSuite time entry. Supports filters. | Time Entries (Time) | Timesheet |
| INVOICE_TO_INVOICE | OpenAir invoice to NetSuite invoice. Supports mappings and filters. | Invoices (Invoices) | Invoice |
| INVOICE_LINE | OpenAir invoice line such as charges and slips to NetSuite invoice line. Supports mappings. | Invoices (Invoices) | Invoice Line |
| INVOICE_EXPENSE_LINE | OpenAir invoice line such as charges and slips to a NetSuite billable expense line (Billable Expense tab in NetSuite). Supports mappings. | Invoices (Invoices) | Expense Line |
| INVOICE_PURCHASE_LINE | OpenAir invoice lines (charges/slips) to NetSuite item lines when the OpenAir invoice line is a product type slip. Allows for mappings from the purchase item back to the slip. Helpful when data from the original purchase order line must appear on the NetSuite invoice line (e.g., department, class, location). Supports mappings. | Invoices (Invoices) | Purchase Line |
| INVOICE_PURCHASE_VB_LINE | OpenAir invoice lines (charges/slips) to NetSuite billable item lines (Billable Items tab on the NetSuite invoice) when the OpenAir slip is created from a | Invoices (Invoices) | Vendor Bill Line |

| PUSH Integration Point Tag | Mappings | Workflow | Mapping Group |
|----------------------------------|--|---------------------|----------------|
| | purchase item which was imported from a NetSuite vendor bill. This allows for mappings from the purchase_item record to be put back to the slip and is helpful when data from the original vendor bill line needs to appear on the NetSuite billable item line. Supports mappings. | | |
| INVOICE_BILLABLE_ITEM_LINE | OpenAir invoice lines (charges/slips) to NetSuite billable item lines (Billable Items tab on the NetSuite invoice) when the OpenAir slip is created from a purchase item that was imported from a NetSuite vendor bill. This allows for mappings from the slip record and is helpful when data from the original vendor bill line must appear on the NetSuite billable item line. Supports mappings. | Invoices (Invoices) | Bill Line |
| INVOICE_PROJECT | OpenAir project data to NetSuite invoice header. Note that this requires the One project per invoice Invoices Settings switch be enabled. Navigate to Administration > Application Settings > Invoices Settings > Other settings. Supports mappings. | Invoices (Invoices) | Project |
| INVOICE_LINE_TIME_GROUP_BY | OpenAir invoice line time slips/charges that are type "T" (such as hourly charges) to description items in a NetSuite invoice. Used only with the Sales Order integration when the Enable charges to map to NetSuite description items switch is also enabled. This is used with the sales order integration. Supports mappings. | Invoices (Invoices) | Group by Time |
| INVOICE_LINE_OTHER_TIME_GROUP_BY | OpenAir invoice line other time slips/charges that are type "O" (such as other rate charges, i.e, daily) to description items in a NetSuite invoice. This is only used with the Sales Order integration when the Enable charges to map to NetSuite description items switch is also enabled. This is used with the sales order integration. Supports mappings. | Invoices (Invoices) | Group by Other |

| PUSH Integration Point Tag | Mappings | Workflow | Mapping Group |
|---------------------------------|---|---|-------------------------------|
| INVOICE_LINE_FIXED_FEE_GROUP_BY | OpenAir invoice line fixed fee details to description items in a NetSuite invoice. This is only used with the Sales Order integration when the Enable charges to map to NetSuite description items switch is also enabled. This is used with the sales order integration. Supports mappings. | Invoices (Invoices) | Group by Fee |
| REVENUE_TO_JOURNAL | OpenAir revenue recognition transaction to NetSuite journal entry. Supports mappings and filters. | Recognition Transactions (Revenue Recognition Transactions) | Recognition Transaction |
| REVENUE_PURCHASE_TO_JOURNAL | OpenAir revenue recognition transactions that were generated from purchases revenue recognition rules to NetSuite journal entry exports (Ensure you have enabled the Recognition transactions (Revenue Recognition Transactions) checkbox). Used when there is data on the purchase item that should be used on the NetSuite journal entry (for when the revenue transaction fulfillment_id field has a value). These mappings are for the journal entry header. If you do not need to map anything from the purchase item, this mapping is not needed. Supports mappings and filters. | Recognition Transactions (Revenue Recognition Transactions) | Purchases Revenue Recognition |
| JOURNAL_LINE | OpenAir revenue recognition transaction to NetSuite journal entry. These mappings are for journal entry lines, whereas REVENUE_TO_JOURNAL are mappings for journal entry headers. Supports mappings. | Recognition Transactions (Revenue Recognition Transactions) | Journal Entry Line |
| JOURNAL_LINE_CREDIT | OpenAir revenue recognition transaction to a NetSuite journal entry export. This tag allows mappings specifically related to the credit line on the journal. By default, this is the revenue or income account line. Supports mappings. | Recognition Transactions (Revenue Recognition Transactions) | Credit Journal Entry Line |
| JOURNAL_LINE_DEBIT | OpenAir revenue recognition transaction to NetSuite journal entry export. Allows mappings specifically related to the debit | Recognition Transactions (Revenue | Debit Journal Entry Line |

| PUSH Integration Point Tag | Mappings | Workflow | Mapping Group |
|------------------------------|--|---|------------------------------------|
| | line on the journal. By default, this is deferred revenue. Supports mappings. | Recognition Transactions) | |
| JOURNAL_LINE_CREDIT_PURCHASE | OpenAir revenue recognition transactions which were generated from purchases revenue recognition rules to NetSuite journal entry exports. Used when there is data on the purchase item that should be used on the journal entry credit line (the revenue transaction fulfillment_id field has a value). If you do not need to map anything from the purchase item, this mapping is not needed. (Ensure you have enabled the Recognition transactions (Revenue Recognition Transactions) checkbox). Supports mappings. | Recognition Transactions (Revenue Recognition Transactions) | Credit Purchase Journal Entry Line |
| JOURNAL_LINE_DEBIT_PURCHASE | OpenAir revenue recognition transactions that were generated from purchases revenue recognition rules to NetSuite journal entry exports. Used when there is data on the purchase item that should be used on the journal entry debit line (the revenue transaction fulfillment_id field has a value). If you do not need to map anything from the purchase item, this mapping is not needed. (Ensure you have enabled the Recognition transactions (Revenue Recognition Transactions) checkbox). Supports mappings. | Recognition Transactions (Revenue Recognition Transactions) | Debit Purchase Journal Entry Line |
| PTA_JOB_CODE_TO_OPP_ITEM | OpenAir project task assignments with calculated billings and costs based on job code to NetSuite opportunity lines. Requires the Enable OpenAir project work breakdown structure to NetSuite opportunity integration feature. Supports mappings. | WBS (Opportunity) | Task assignment |
| PR_TASK_TO_OPP_ITEM | OpenAir project tasks with manually entered billings and costs to NetSuite opportunity lines. Requires the Enable OpenAir project work breakdown structure to NetSuite opportunity | WBS (Opportunity) | Task |

| PUSH Integration Point Tag | Mappings | Workflow | Mapping Group |
|--|---|---|------------------------------|
| | integration feature. Supports mappings. | | |
| CREDIT_TO_CREDIT_MEMO | OpenAir Credit (negative invoice) to NetSuite Credit Memo. Supports mappings. | Send OA Credit (negative invoice) as NS credit memo | OA Credit (negative invoice) |
| PURCHASE_REQUEST_TO_PURCHASE_REQUISITION | OpenAir Purchase Request to NetSuite Purchase Requisition. Supports mappings and filters. | Purchase request (Purchase requisition) | Purchase request |
| PURCHASE_REQUEST_ITEM_TO_PURCHASE_REQUISITION_ITEM | OpenAir Purchase Request Item to NetSuite Purchase Requisition Item. Supports mapping. | Purchase request (Purchase requisition) | Request item |

Using Field Declarations

For each entity, you can declare the specific fields from NetSuite and OpenAir for which data will be pushed or pulled during the data transfer. You can also specify those fields you want to push from NetSuite to OpenAir only during the initial transfer when you first add the record to OpenAir. You can declare the following types of fields:

- NetSuite Fields
- NetSuite Custom Fields
- OpenAir Fields
- OpenAir Custom Fields
- OpenAir Fields Initial-Only
- OpenAir Custom Fields Initial-Only

Note: Although the following examples use line breaks within lists of field names for formatting purposes, when using these fields, do not use line breaks after each field name. Only commas and spaces should separate field names.

NetSuite Fields

Type `NS_FIELDS` (all caps), followed by one or more spaces or blank lines, then type the list of all NetSuite fields (default fields and custom fields), separated by commas.

Use the NetSuite field names from the NetSuite Advanced Search feature, rather than the field names that show on the Employee record. To find the Advanced Search field names in NetSuite, go to Lists > Employees > Employees > Search. Enable the Use Advanced Search check box. Click the Standard tab. The Filter drop-down provides the list of fields available for `NS_FIELDS`.

NetSuite Custom Fields

Type `NS_CUSTOM_FIELDS` (all caps), followed by one or more spaces or blank lines, then type the list of NetSuite custom fields, separated by commas. They are in this list as well as the NetSuite fields list.

Use the NetSuite field names from the NetSuite Advanced Search feature, rather than the field names that show on the Employee record. To find the Advanced Search field names in NetSuite, go to Lists >

Employees > Employees > Search. Enable the Use Advanced Search check box. Click the Standard tab. The Filter drop-down provides available `NS_FIELDS`.

OpenAir Fields

Type `OA_FIELDS` (all caps), followed by one or more spaces or blank lines, then type the list of all OA fields (default fields *and* custom fields), separated by commas.

OpenAir Custom Fields

Type `OA_CUSTOM_FIELDS` (all caps), followed by one or more spaces or blank lines, then type the list of OA custom fields, separated by commas. They are in this list as well as the OpenAir fields list.

OpenAir Fields Initial-Only

Type `OA_FIELDS_INITIAL_ONLY` (all caps), followed by one or more spaces or blank lines, then type the list of OA fields that you want set with a value only when a record is first added to OpenAir. Separate the initial-only fields with commas. They are in this list along with the OpenAir fields list and the OpenAir custom field list. Refer to the following example of the OpenAir project stage transferred on initial only.

```
<PULL>
  <JOB_TO_PROJECT>
    OA_FIELDS project_stage_id
    OA_FIELDS_INITIAL_ONLY project_stage_id
  </JOB_TO_PROJECT>
</PULL>
```

OpenAir Custom Fields Initial-Only

Type `OA_CUSTOM_FIELDS_INITIAL_ONLY` (all caps), followed by one or more spaces or blank lines, then type the list of OA initial-only custom fields that you want set with a value only when a record is first transferred to OpenAir. Separate the initial-only custom fields with commas. They are in this list along with the OpenAir fields list, the OpenAir custom field list, and the OpenAir initial-only field list.

Field Declarations Example

The following example declares NetSuite Employee fields to pull into OpenAir User fields.

```
<PULL>
  <EMPLOYEE_TO_USER>

    NS_FIELDS      phoneticName, gender, address1,
                   address2, address3, city, state,
                   zip, custentity19_customer_facing

    NS_CUSTOM_FIELDS custentity19_customer_facing

    OA_FIELDS      address1, address2, address3, city,
                   state, zip, territory_id,
                   pm_filter_set, custom_date_field,
                   netsuite_user_custom_field
```



```

    OA_CUSTOM_FIELDS    netsuite_user_custom_field,
                        custom_date_field

</EMPLOYEE_TO_USER>
</PULL>

```



Important: Notice that NetSuite and OpenAir custom fields are listed twice in the above example. Custom fields must be specified in both the application's field list and in the custom field list.

Initial-Only Field Declarations Example

The following example shows an initial-only export of a user's email address from the NetSuite Employee field to the OpenAir User field. Once the integration is run, information in fields designated as initial-only does not transfer in subsequent exports. Notice that you still define OA_FIELDS and OA_CUSTOM_FIELDS and the NS_FIELDS and NS_CUSTOM_FIELDS. In addition, you define the OA_FIELDS_INITIAL_ONLY and OA_CUSTOM_FIELDS_INITIAL_ONLY.

```

<PULL>
  <EMPLOYEE_TO_USER>
    NS_FIELDS                middleName, lastName, firstName,
                            custentitycustom_field

    OA_FIELDS                netsuite_middle_name,
                            netsuite_custom_field,
                            custom_date_field

    OA_CUSTOM_FIELDS         netsuite_middle_name,
                            netsuite_custom_field,
                            custom_date_field

    NS_CUSTOM_FIELDS         custentitycustom_field

    OA_FIELDS_INITIAL_ONLY   email

    OA_CUSTOM_FIELDS_INITIAL_ONLY custom_date_field,
                            custom_date_field_TODAY

  </EMPLOYEE_TO_USER>
</PULL>

```



Note: You can use initial-only field designations with the following <PULL> entity integration points: Users (Employees), Customers (Customers), Projects (Projects), Activities/Services (Service Items), Expense Items (Expense Categories), Contacts (Contacts), Vendors (Vendors), and Customer POs (Sales Orders).

Using Field Mapping Tags

Use field mapping tags to specify how field data should be mapped between the two applications. Field mapping tags allow you to:

- Map one field to another or to a value. See [Simple Field Mapping](#).
- Concatenate several fields from one application to a field in the other. See [Field Data Concatenation](#).
- Map custom fields and tables. See [Mapping Fields and Field Values between Applications](#).
- Conditionally transform and filter data. See [Using Conditional Transformations](#).

The integration executes mappings in a controlled order. When multiple mapping types are defined, the following describes the [Order of Execution of Field Mappings](#).

Simple Field Mapping

Create one-to-one field mappings between OpenAir and NetSuite (or vice versa) or specify a field value in one application for a field that has no equivalent in the other application. Refer to the following examples.

Creating One-To-One Field Mappings

Create one-to-one field mappings by listing the field name from the first application followed by the field name for the second application. If you are doing a PUSH, the first application will be OpenAir. If you are doing a PULL, the first application will be NetSuite. There must be at least one space between field names.

The following example shows how to map User address fields from OpenAir to Employee address fields in NetSuite.

```
address1    address1
address2    address2
address3    address3
city        city
state       state
zip         zip
```

Specifying a Value for a Field

You can pull or push a field from one application that has no equivalent field in the other application and automatically assign a static value to that field.

The following example shows how to assign the value of 1 to the OpenAir territory_ID field for all Employee records imported from NetSuite.

```
territory_id    '1'
```

Field Data Concatenation

In some cases, you may want one field in an application to combine multiple fields' data from the other application. To do this, you specify the name of the single field from the first application, followed by one or more spaces, then specify the field names, in order, separated by commas, from the second application. Within the concatenation of the fields' data, you can add characters such as commas, hyphens, numbers, letters, etc. to create the data you require.

The following example sets the value of an OpenAir custom field named `netsuite_user_custom_field` to the concatenation of the NetSuite fields' values `phoneticName` and `gender`, separated by a hyphen. Notice the comma between multiple field names. In this example,

if the `phoneticName` is Hello and the `gender` is M, the value of the `netsuite_user_custom_field` will be set to Hello-M.

```
netsuite_user_custom_field    phoneticName, '-', gender
```

Mapping Fields and Field Values between Applications

There are several ways of mapping fields and field values between NetSuite and OpenAir:

- You can map a custom field in NetSuite to a custom field in OpenAir and vice versa.
- You can specify a constant value for a custom field in either application.
- You can map a transaction number from an export to NetSuite back to OpenAir.
- You can map a series of values from a field in NetSuite to a field in OpenAir and vice versa.
- You can lookup data and then use it in mappings between applications

Direct Mapping of Fields between Applications

To set an OpenAir field to the value of a NetSuite custom field just list the field name for OpenAir field, followed by one or more spaces, then list the NetSuite field name. In this example, we set the OpenAir `pm_filter_set` field for to the value of the NetSuite `custentity19_customer_facing` field.

```
pm_filter_set    custentity19_customer_facing
```

Setting a Custom Field to Today's Date

This example shows how to set an OpenAir custom field to today's date.

```
custom_date_field    _TODAY
```

Note that there is an underscore and TODAY is in all capital letters.

Excluding a Field from the Integration

In this example, you exclude only the first field in OpenAir from the integration.

```
first    _REMOVE
```

Note that there is an underscore and REMOVE is in all capital letters.

Mapping a Transaction Number from NetSuite to an OpenAir Custom Field

After you export transactional data such as invoices, expense reports, and revenue recognition transactions to NetSuite, you can map additional data from the transaction back to an OpenAir custom field. This is a one-time pull of data, immediately after the export, and the OpenAir field must be a custom field. Refer to the following example.

```
<PULL>
  <JOURNAL_TO_REVENUE>
    OA_FIELDS    netsuite_journal_entry_transaction_number
    OA_CUSTOM_FIELDS netsuite_journal_entry_transaction_number
```

```

      NS_FIELDS      tranID
                     netsuite_journal_entry_transaction_number
                     tranID
    </JOURNAL_TO_REVENUE>
</PULL>

```

These other conditions apply.

- NS_EXPENSE_REP_TO_OA_EXPENSE_REP and JOURNAL_TO_REVENUE can only map to OpenAir custom fields.
- NS_INVOICE_TO_OA_INVOICE - NetSuite data can map to standard invoice header fields. To do so, ensure the following internal switch is enabled: Allow changes to the Edit invoice form of an approved invoice. In addition, ensure the following internal switch is NOT enabled: Disable editing of exported invoices.

Mapping a Series of Field Values between Applications

In this example, you will map values from a NetSuite custom field to a custom field in OpenAir. The opening tag contains two field names, the OpenAir field and the NetSuite field, and is in the same case as indicated in the data dictionaries or technical documentation. The order is the same as with other field mappings, but the columns are reversed. Refer to the following example to see how NetSuite values A, B, C are under `OpenAir_Field` the OpenAir values 1,2,3 are under `NetSuite_Field`.

```

<OpenAir_field      NetSuite_field>
  NetSuite_Value_A   OpenAir_Value_1
  NetSuite_Value_B   OpenAir_Value_2
  NetSuite_Value_C   OpenAir_Value_3
</OpenAir_field>

```

Mapping Values Using Internal IDs

You can map values using internal IDs rather than the actual name. Currently, values mapped cannot contain spaces. So, if you want to map department names that contain a space in the title, such as Human Resources (internal ID = 10) and Information Technology (internal ID = 12), you could use the values instead.

```

<custentity_ns_dropdown departmentName>
10                                     1
12                                     2
</custentity_ns_dropdown>

```

Looking Up Data and then Using It in Mapping

Look up data and then use it in related data mapping while either pulling or pushing between the applications. For example, you may import a NetSuite employee into OpenAir as a user, and at the same time, set a job code ID for that user based on a value you looked up in an OpenAir job_code table. Refer to the following example of pulling data from OpenAir to set the job code on a user.

```

<PULL>
  <EMPLOYEE_TO_USER>
    job_code_id lookup=custentityuser_free_text:
                lookup_table=job_code:lookup_by=name:
                lookup_return=id

```

```
</EMPLOYEE_TO_USER>
</PULL>
```

In the previous example, the job code value is set as the NetSuite custom field named `custentityuser_free_text`. (The NetSuite custom field is a text field.) The lookup takes the value in the custom field, looks up that value in the OpenAir `job_code` table by the `name` field, and then returns the `id` if it finds a match. So, if `custentityuser_free_text` were `Admin`, the lookup tries to find a job code for `Admin` and then determine its internal ID. If found, the job code `id` field is set to that internal ID.

Required parameters

The lookup syntax has four required parameters that are in *parameter=value* format. Each *parameter=value* must be separated by colons, although spaces may also be used to help with readability. The four required parameters are:

- **lookup** - the field that contains the value to be looked up.
- **lookup_table** - the OpenAir table used in the lookup that contains the related data.
- **lookup_by** - the field in the OpenAir table that contains values related to the field in the lookup parameter.
- **lookup_return** - the field in the OpenAir table that contains the value to be mapped when the lookup is successful. If a matching value is not found, `none` is returned.

Here is another example of how you might use lookup. Push the name of a user associated with a charge on an invoice when you export the invoice to NetSuite. It displays in the Description field on the NetSuite charge. Using the `user_id` field on the slip table in OpenAir, you can find the name of the user and then push that name to NetSuite. Refer to the following example.

```
<PUSH>
  <INVOICE_LINE>
    description lookup=user_id:lookup_table=user:lookup_by=id:
                lookup_return=last, ' ', ' ',
                lookup=user_id:lookup_table=user:lookup_by=id:
                lookup_return=first
  </INVOICE_LINE>
</PUSH>
```

In the previous example, you use the `user_id` from the OpenAir invoice or slip table to locate the user name. You look up the last name and the first name, concatenate the values, and map them to the Description field on the NetSuite charge. Remember that when you use concatenation syntax, commas separate the elements in the concatenation.

You can also use lookups in conditional mappings. Refer to the example that follows in which you set the NetSuite description field on a charge to the name of the OpenAir user and the charge description. For more information on conditional mappings, see [Using Conditional Transformations](#).

```
<PUSH>
  <JOURNAL_LINE_DEBIT>
    IF <<END
      IF (lookup=user_id:lookup_table=user:
        lookup_by=id:lookup_return=ns_employee_type) =
        'Contractor' THEN account lookup=user_id:
        lookup_table=user:lookup_by=id:
        lookup_return=ns_account_id
    END
  </JOURNAL_LINE_DEBIT>
```

```
</PUSH>
```

In this example, the account for the debit line on the journal is sourced from the custom field `ns_account_id` on the user if the user associated with the revenue recognition transaction is a Contractor. The Contractor value comes from the custom field `ns_employee_type` on the OpenAir user record.

Mapping Description Items When Exporting Invoices

When you are using the Sales Order integration to export time or fixed fee invoices to NetSuite, you can specify additional custom mappings to create additional line-level detail on the NetSuite invoice. This allows the transfer of detailed information from OpenAir to display as a description item on the NetSuite invoice. To use these custom mappings, you must enable Customer POs (Sales Orders) on the **NetSuite Integration** form as well as the following switch on the **NetSuite integration administration** form for "Enable charges to map to NetSuite description items. This is used with the sales order integration." Then you can define mappings that will create description items in NetSuite.

In addition to using tags like other fields mapping, two additional syntax are available: `OA_FIELDS_GROUP_BY` and `OA_FIELDS_SORT_BY`. To insert a line break, use `\n` as shown in the example that follows. You can group slips or charges together so that summarized descriptions display. You can also calculate hours and \$totals by project task if those fields are mapped. While conditional IF syntax mappings are not available, you can use lookup syntax, plain strings, and field names in mappings.

Review the following examples and clarifications:

- [Slips of Type = T](#)
- [Slips of Type = O](#)
- [Slips of Type = F](#)
- [Field Definitions for Previous Examples](#)
- [Using Combine Charges by Service on Invoices with Sales Order Integration](#)

Slips of Type = T

In the example that follows, we map slips of type = T or time bills to description lines on the NetSuite invoice. Each slip or charge may be mapped to one description line. When OpenAir charges are rolled up so that multiple charges become one invoice line item in NetSuite, then the group creates one description line. The name of the user, date, hours, rate, and notes from the slip or charge that is generated by the time billing rule displays as a description item on the NetSuite invoice. Refer to the following example.

```
<PUSH>
  <INVOICE_LINE_TIME_GROUP_BY>
    OA_FIELDS      user_id, notes, hour, date, total,
                   rate, id

    NS_FIELDS      description

    OA_FIELDS_GROUP_BY  id

    OA_FIELDS_SORT_BY  user.name

    description
      'Name:', lookup=user_id:lookup_table=user:
      lookup_by=id:lookup_return=name,
```

```

        '\nDate:', date, '\nHours:',
        hour, '\nRate:', rate,
        '\nNotes:', notes, '\nAmount:',
        total, '\n\n\n'
    </INVOICE_LINE_TIME_GROUP_BY>
</PUSH>

```

Slips of Type = O

In the next example, we map slips of type = O or other time to description item lines in the NetSuite invoice. Each slip or charge is mapped to one description line. The item name, quantity, rate, summed amount, and project task name display on the NetSuite invoice. Slips are grouped by project task, and you can also map to the NetSuite custom field, setting the value to the OpenAir user name of the charge created from the user time entry. Refer to the following example.

```

<PUSH>
  <INVOICE_LINE_OTHER_TIME_GROUP_BY>
    OA_FIELDS      notes, user_id, cost, id, total,
                   quantity, project_task_id
    NS_FIELDS      description,
                   custcol_oa_invoice_line_custom_field
    NS_CUSTOM_FIELDS custcol_oa_invoice_line_custom_field
    OA_FIELDS_GROUP_BY project_task_id
    OA_FIELDS_SORT_BY project_task.name
                   custcol_oa_invoice_line_custom_field
                   lookup_table=user:lookup=user_id:
                   lookup_return=name:lookup_by=id
                   description 'Item: ',
                   lookup=category_id:lookup_table
                   =category:lookup_by=id:lookup_return=
                   name, '\nQty: ', quantity, '\nRate: ',
                   cost, '\nAmount: ', total,
                   '\nProject Task Name: ',
                   lookup=project_task_id:lookup_table=
                   project_task:lookup_by=id:lookup_
                   return=name, '\n\n\n'
  </INVOICE_LINE_OTHER_TIME_GROUP_BY>
</PUSH>

```

Slips of Type = F

In the final example, we map slips of type = F or fixed fee information to description lines on the NetSuite invoice. It includes the name of the project task (milestone), the user name, and the total of that milestone.

```

<PUSH>
  <INVOICE_LINE_FIXED_FEE_GROUP_BY>
    OA_FIELDS      project_task_id, total, user_id
    NS_FIELDS      description
    OA_FIELDS_GROUP_BY project_task_id
    OA_FIELDS_SORT_BY user.name
    description    Milestone: ',
                   lookup=project_task_id:lookup_table=
                   project_task:lookup_by=

```

```

        id:lookup_return=name, 'Name:',
        lookup=user_id:lookup_table=
        user:lookup_by=id:lookup_return=
        name, '\\nAmount:', total, '\\n\\n\\n'
    </INVOICE_LINE_FIXED_FEE_GROUP_BY>
</PUSH>

```

Field Definitions for Previous Examples

In the previous examples, the following field definitions apply:

- **OA_FIELDS** — all the OpenAir slip fields used in this mapping. Only slip fields are valid. See the [OpenAir Data Dictionary](#) for a listing of fields in the slip table.
- **NS_FIELDS** — all the NetSuite invoice line-level fields to be used in this mapping. For description items, you can only transfer information to the description field and custom columns.
- **OA_FIELDS_GROUP_BY** — the fields we are summarizing the slips by. Only slip fields are available. In the first example, we are "summarizing" by slip internal ID, which means that it is not really doing any summarizing at all. However, if you need to summarize by project task on these slips, you would use the following:

```
OA_FIELDS_GROUP_BY    project_task_id
```

- **OA_FIELDS_SORT_BY** — the fields used to sort the summarized slips for the description items. Sorting can be done on slip fields or related fields from the slip table. Since `user_id` is available on the slip record, you can sort by the user name like in the first example. For fields on the slip record, list the field.
- For related fields, the syntax is `table.field` — where the table is the name of the related table, and field is the name of the field on that table. Look at the following comparison:

| | | |
|--------------------|-----------|--|
| OA_FIELDS_GROUP_BY | user_id | sorts by user_id, not too helpful |
| OA_FIELDS_GROUP_BY | user.name | sorts by name of user who created the time entry, more helpful |

Note: The mappings in the examples are by slip type, either time (hourly), time (other) or fixed fee. These are the only slip or charge types that are supported. If you are mapping detailed information to NetSuite invoices for all of these types, you need to set up mappings for each slip type.

Important: When you use this feature, ensure that you enter additional custom mappings in the Advanced Settings section of the **NetSuite integration** form. The integration must receive the specific definitions you would like to have displayed as description items. In OpenAir, go to Administration > Integration: NetSuite and scroll down to Advanced Settings.

Using Combine Charges by Service on Invoices with Sales Order Integration

With the January 2012 release, the combine charges by service on invoices feature can be used with the sales order integration. A previous limitation no longer exists. Slips on an invoice that are linked to a customer PO/sales order line are grouped by customer PO. If the invoice also contains slips that are not linked to a sales order line, those slips are grouped by activity/category/service on the NetSuite invoice when the feature is enabled. When using the description item feature, these slips that are not linked to a sales order are also included in the grouping logic of the description item mappings above based on the slip type.

Review the following summary of how this feature works.

- Invoice is linked to a sales order and only contains slips that are linked to sales order lines (have customer POs)

Note: The description item mappings above apply to all the slips based on the slip type.

- Invoice is linked to a sales order and contains both slips that are linked to sales order lines (have customer POs) and slips that do not have linkage to a sales order line (no customer PO)

Note: The description item mappings above apply to all the slips based on the slip type, regardless of whether the slip has a customer PO or not.

- Invoice is not linked to a sales order (i.e. no slips have customer POs)

Note: The description item mappings above do not apply.

Note: There are some important things to note:

- A default filter on "Export to OpenAir" is already present in the integration. This can be disabled via integration switch on the **NetSuite integration administration** form. Custom filters will "add" to the "Export to OpenAir" filter in NetSuite if it has not been disabled.
- Activities/categories/services are filtered on "Service". Only items in NetSuite with a type of "Service" are imported into OpenAir. This can be disabled via an integration switch on the **NetSuite integration administration** form. Do take note, however, about the number of items that are in the NetSuite account. Remember, the sales order integration does use subtotal, discount and markup items, but these are not synched in the integration.
- NetSuite fields of type recordRef (see data dictionary) should use internalIDs as values for conditions, filters and mappings.

Mapping Service Sales Order Custom Fields When Exporting Invoices

When you are using the feature to initialize invoices from corresponding sales orders when exporting invoices to NetSuite, you can specify custom fields that are set on the sales order line level and header level and ensure that they export to NetSuite on the invoice. To use these custom mappings, you must enable Customer POs (Sales Orders) under Get data from NetSuite and Invoices (Invoices) under Send data to NetSuite on the **NetSuite Integration** form. In addition, enable the switch on the **NetSuite integration administration** form for "Initialize invoices from corresponding sales orders when exporting invoices to NetSuite. This is used with the sales order integration."

By default when invoices are linked to sales orders, the only custom fields that are set in the web services request to NetSuite are those that have been explicitly specified in the integration mappings. For those custom fields that have not been specified, NetSuite sources *default* values from the sales order. This is often enough to handle the setting of custom fields and it also helps avoid issues with custom field values that are made inactive and are no longer available to be explicitly set.

Note: There is a known issue that explicitly setting a field to an inactive value through web services results in an error. Ironically, by not setting that field/value in the web service request, NetSuite properly handles it and the resulting invoice does have the field set to the inactive value, just like clicking "Next Bill" on a sales order.

There are some cases, though, where the custom field value needs to be set in the web service request to create the invoice. For example, if there is a custom column of type currency on the sales order that sources its default value from the pricing of an item, but can also be overridden to another value,

clicking "Next Bill" in the UI will respect the overridden value. The web service request must also explicitly set the field or else NetSuite sets the value to the default, not the overridden value. You can use the following mappings for such cases. See:

- [Syntax](#)
- [Line Item Level Example](#)
- [Header Level Example](#)

Syntax

The syntax is as follows. Declare the fields in either:

```
NS_CUSTOM_FIELDS_FROM_SO_INVOICE_HEADER    invoice header custom fields
NS_CUSTOM_FIELDS_FROM_SO_INVOICE_LINE_ITEM invoice line item custom fields
```

Mappings are as follows:

- Use the <INVOICE_LINE> section for NS_CUSTOM_FIELDS_FROM_SO_INVOICE_LINE_ITEM
- Use the <INVOICE_TO_INVOICE> section for NS_CUSTOM_FIELDS_FROM_SO_INVOICE_HEADER

Like other field declarations, the fields should also appear in NS_FIELDS and NS_CUSTOM_FIELDS sections. By listing the custom fields here, the integration web service request will set them.



Note: These field declarations are not supported in any other mappings.



Important: There are some subtleties to keep mind. If the custom field is also used in another mapping, the value set by OpenAir will be used and the value from the sales order will not be respected.

Line Item Level Example

Review the following example that shows how the custcol_list_price custom field can be set so it is respected on the line item level.

```
<PUSH>
  <INVOICE_LINE>

    NS_FIELDS      custcol_list_price

    NS_CUSTOM_FIELDS  custcol_list_price

    NS_CUSTOM_FIELDS  custcol_list_price
    FROM_SO_INVOICE_
    LINE_ITEM

  </INVOICE_LINE>
</PUSH>
```

Header Level Example

Review the following example that shows how the custbody_total_margin custom field can be set so it is respected on the header level.

```

<PUSH>
  <INVOICE_TO_INVOICE>

    NS_FIELDS      custbody_total_margin

    NS_CUSTOM_FIELDS custbody_total_margin

    NS_CUSTOM_FIELDS_ custbody_total_margin
    FROM_SO_INVOICE_
    HEADER

  </INVOICE_TO_INVOICE>
</PUSH>

```



Note: If you are mapping multiple invoice object, keep in mind the order of execution. See [Order of Execution of Field Mappings](#).

Using Conditional Transformations

Use conditional transformations such as IF, THEN, ELSE, AND, and OR and operators such as =, <=, >=, <, >, or <> (not equal). Put one condition on each line, and use as many conditions as you need. There is no limit on the number of conditions. However, after the word THEN, there can only be one mapping. Use the IF <<END END syntax, make sure they are uppercase, have one space between IF and << and no spaces before END, and put IF <<END and END on a line by itself. Refer to the following example.

```

IF <<END
  IF (email = 'jadams@foster.com') OR (email = 'eng@openair.com') THEN
    email lastName
  IF (firstName = 'John') THEN email entityID ELSE email 'nothing'
END

```

Compare Fields and Conditionally Set a Value

Use a comparison of fields in conditions, and then use the results of that comparison to conditionally set a value. Change an OpenAir invoice's transaction date when you export it to NetSuite based on a comparison of both the acct_date and date values.

The following example sets the NetSuite invoice transaction date to the acct_date if it is greater than the date of the OpenAir invoice. If the OpenAir invoice acct_date is not greater than the OpenAir invoice date, the date remains the invoice date.

```

IF <<END
  IF (acct_date > date) THEN tranDate acct_date
END

```

Adding User-Defined Filtering

Use user-defined filters for custom and default fields as well as on related data. You can create a custom field, declare the OpenAir and custom fields, and then use them to filter records that are exchanged in the integration.

Here are some guidelines.

- Make keywords AND and OR uppercase and use operators such as =, <=, >=, <, >, or <> (not equal).
- Use the FILTER <<END END syntax, make sure they are uppercase, have one space between FILTER and << and no spaces before END.
- Put FILTER <<END and END on a line by itself. If a related table is used, designate *related_table.field_name*.
- If using related data, in the OA_FIELDS section, declare the foreign key of the table used in the filter.

There is no limit on the number of AND/OR statements as well as opening and closing parentheses, but the parentheses must balance. Fields of type recordRef in NetSuite should use NetSuite internal_IDs as values in filters. To review NetSuite recordRefs, go to Setup > Customization > Lists, Records, & Fields and make a selection.

Refer to the examples that follow for [Simple User-Defined Filtering](#) and [Filtering on Related Data](#).

Simple User-Defined Filtering

The following are examples of simple user-defined filtering. The first example shows how to filter the employees that are included in an import to OpenAir. Only employees with a department of 1 or 3 or those with a firstName of John are imported.

```
<PULL>
  <EMPLOYEE_TO_USER>
    FILTER <<END
      (department = '1,3') OR firstName='John'
    END
  </EMPLOYEE_TO_USER>
</PULL>
```

The following example shows how you can create a custom field and use it to filter invoices exported to NetSuite. If you create a custom field for do_not_export_invoice and associate it with Invoice, when you select the check box, the invoice does not export to NetSuite.

```
<PUSH>
  <INVOICE_TO_INVOICE>

    OA_FIELDS      do_not_export_invoice
    OA_CUSTOM_FIELDS do_not_export_invoice

    FILTER <<END
      do_not_export_invoice <> '1'
    END

  </INVOICE_TO_INVOICE>
</PUSH>
```

Filtering on Related Data

The following are examples of filtering on related data when exporting entities and transactions to NetSuite. You can create a check box custom field and associate it with a related record. Then, you can use it to exclude transactions from an export.

In the previous example, you could exclude an invoice from exporting to NetSuite based on a custom field associated with Invoices. In the following example, you can create a custom field

and associate it with related data, such as a customer record. If you create a custom field for `do_not_export_customer_invoice` and associate it with the customer record, when you select the check box on the Customer Demographic form, the invoice for that customer does not export to NetSuite.

```
<PUSH>
  <INVOICE_TO_INVOICE>

    OA_FIELDS    customer_id

    FILTER <<END
                (customer.do_not_export_customer_invoice <> '1')
    END

  </INVOICE_TO_INVOICE>
</PUSH>
```

In the following example, you can create a custom field for `do_not_export_envelope` and associate it with User. Select the check box on the User Demographic form to indicate a user's expense report should not be exported to NetSuite. The expense reports do not export to NetSuite for a user when the check box is selected.

```
<PUSH>
  <EXPENSE_REP_TO_EXPENSE_REP>

    OA_FIELDS    user_id

    FILTER <<END
                (user.do_not_export_envelope <> '1')
    END

  </EXPENSE_REP_TO_EXPENSE_REP>
</PUSH>
```

Order of Execution of Field Mappings

While not all objects have mappings defined for them, some do. When there are multiple mappings, they follow a prescribed order.

For example, the mapping of slip to invoice line item has multiple mappings types like `<INVOICE_LINE>` and `<INVOICE_PURCHASE_LINE>`. These are executed in a specific order and it is important to keep that order in mind when defining these mappings.

The following is the order in which mappings are executed.

Invoices

- Invoice header

```
<INVOICE_TO_INVOICE>
<INVOICE_PROJECT>
```

- Invoice line items

```
<INVOICE_LINE>
```

<INVOICE_PURCHASE_LINE>

Revenue Recognition Transactions

- Journal entry header

<REVENUE_TO_JOURNAL>

<REVENUE_PURCHASE_TO_JOURNAL>

- Journal entry line

<JOURNAL_LINE>

<JOURNAL_LINE_CREDIT>

<JOURNAL_LINE_DEBIT>

<JOURNAL_LINE_CREDIT_PURCHASE>

<JOURNAL_LINE_DEBIT_PURCHASE>

Using IF/THEN Logic

If you need to map fields that depend on using a specific mapping type, consider using IF/THEN logic in your mappings to isolate mappings to specific conditions. These user-defined field mappings are always applied after standard mappings occur. Generally, custom fields that are mapped by the default integration cannot be overridden with these custom mappings. See [Using Conditional Transformations](#) for more information on IF/THEN logic.

Using Custom Fields

Both NetSuite and OpenAir provide you with the ability to create custom fields and exchange this custom information. At this time, however, there is a slight limitation. When pushing OpenAir data to Netsuite custom fields, those NetSuite custom fields need to be free form text fields. This may be changed in the future versions, but the limitation exists at this time.

NetSuite Custom Fields - NetSuite entity custom fields are located in Setup > Customization > Entity Fields. They are named as follows: custXXXXYYYY. Where XXXX = the type of record such as entity and YYYY = the name of the custom field. For example, if an employee custom field is created for my_netsuite_custom_field, the actual field name you would use is custentitymy_netsuite_custom_field.

OpenAir Custom Fields - OpenAir custom fields are located in Administration > Global Settings > Custom Fields. Names are user-defined with an underscore required between words, custom field types are user-defined, and each custom field is associated with an entity.

Field Names Reference Documentation

NetSuite and OpenAir provide extensive technical documentation for identifying field names associated with entities.

NetSuite Schema Browser

NetSuite provides technical documentation to help you determine NetSuite field names for each entity selected in the integration. It is located at the following URL: <http://www.netsuite.com/portal/developers/resources/suitetalk-documentation.shtml> In addition, the NetSuite **SuiteTalk Schema**

Browser provides detailed information you can use to identify field names you want to use in the Advanced Settings text area. Refer to the following list for entities that can be pulled or imported from NetSuite.

- NetSuite Employees: lists employees.xsd -EmployeeSearchAdvanced ->(basic) platformCommon: EmployeeSearchRowBasic
- NetSuite Customers: lists relationships.xsd -> CustomerSearchAdvanced -> (basic) platformCommon: CustomerSearchRowBasic
- NetSuite Projects: lists relationships.xsd -> JobSearchAdvanced -> (basic) platformCommon: JobSearchRowBasic
- NetSuite Items/Service Items: lists accounting.xsd -> ItemSearchAdvanced -> (basic) platformCommon: ItemSearchRowBasic
- NetSuite Expense Categories (Expense Items): lists accounting.xsd -> Expense Category
- NetSuite Vendors: lists relationships.xsd -> VendorSearchAdvanced -> (basic) platformCommon: VendorSearchRowBasic
- NetSuite Sales Orders: transactions sales.xsd -> TransactionSearchAdvanced -> (basic) platformCommon: TransactionSearchRowBasic

Refer to the following list for entities that can be pushed or sent to NetSuite.

- NetSuite Customers (for 3-way Salesforce, OpenAir, NetSuite integration): lists relationships.xsd -> Customer
- NetSuite Projects (for 3-way Salesforce, OpenAir, NetSuite integration): lists relationships.xsd -> Job
- NetSuite Invoices: transactions sales.xsd -> Invoice
- NetSuite Invoices - line items (Items tab in NetSuite): transactions sales.xsd -> Invoice. Find itemList field and click 'tranSales:InvoiceItemList'.
- NetSuite Invoices - billable expenses (Billable expenses tab in NetSuite): transactions sales.xsd -> Invoice. Find expCostList field and click 'tranSales:InvoiceExpCostList'.
- NetSuite Expense Reports: transactions employees.xsd -> ExpenseReport
- NetSuite Expense Reports - expense line items: transactions employees.xsd -> ExpenseReport. Find expenseList field and click 'tranEmp:ExpenseReportExpenseList'.
- NetSuite Journal Entry (for revenue recognition transaction export): transactions general.xsd -> JournalEntry

OpenAir Data Dictionary

OpenAir provides a data dictionary to help you determine OpenAir field names that can be transferred in the integration using the Advanced Settings text area. It is located at the following URL: https://www.openair.com/database/single_user.html.

Remember that the check boxes of the entities must be selected on the OpenAir **NetSuite integration** form under Get data from NetSuite and Send data to NetSuite before additional fields listed in the database tables can be transferred.

Refer to the following list for entities that can be pulled or imported from NetSuite.

- Users - user table in OpenAir data dictionary
- Customers - customer table in OpenAir data dictionary
- Projects - project table in OpenAir data dictionary
- Activities or Services - category table in OpenAir data dictionary

- Expense Items - item table in OpenAir data dictionary
- Contacts - contact table in OpenAir data dictionary
- Vendors - user table in OpenAir data dictionary (Remember that NetSuite Vendors (Type: individual) transfer to OpenAir as users.)
- Customer POs - customerpo table in OpenAir data dictionary
- Reimbursements - reimbursement table in OpenAir data dictionary
- Payments - payment table in OpenAir data dictionary
- Retainers - payment table in OpenAir data dictionary
- Credit - invoice table in OpenAir data dictionary

Refer to the following list for entities that can be pushed or sent to NetSuite.

- Customers - customer table in OpenAir data dictionary (3-way Salesforce.com, OpenAir, NetSuite integration only)
- Projects - project table in OpenAir data dictionary (3-way Salesforce.com, OpenAir, NetSuite integration only)
- Expense Reports - envelope table in OpenAir data dictionary
- Expense Report Lines - ticket table in OpenAir data dictionary
- Invoices - invoice table in OpenAir data dictionary
- Invoice line items (items tab in NetSuite invoice form) - slip table in OpenAir data dictionary
- Invoice billable expenses (billable items tab in NetSuite invoice form) - slip table in OpenAir data dictionary
- Time Entries - timesheet and task tables in OpenAir data dictionary
- Recognition Transactions - revenue recognition transaction table in OpenAir data dictionary

Frequently Asked Questions (FAQs)

The following information provides more detail about how the integration works between the two applications.

Can I integrate payment terms on invoices exported from OpenAir to NetSuite?

You set payment terms for invoices in NetSuite even though you are exporting invoices from OpenAir to NetSuite.

In NetSuite, go to Setup > Accounting > Accounting Lists and select Terms from the type filter. There is a Yes to the right of the term you select as preferred. If this is not the desired term, Edit the term and designate the one you want to be preferred. Click the Edit link and select the check box for Preferred.

In OpenAir, go to Administration > Global Settings and select Integration: NetSuite. Create a custom field in OpenAir that you associate with payment terms. Then, set up custom mappings using the Advanced Settings box on the OpenAir **NetSuite integration** form.

1. Go to Administration > Global Settings > Custom fields and create a custom field in OpenAir that you associate with payment terms. It holds the NetSuite internal ID of the payment term, i.e., netsuite_payment_term_id
2. Go to Administration > Global Settings > Integration: NetSuite and set up advanced settings for an invoice-level, lookup mapping for the payment term.

<PUSH>


```

<INVOICE_TO_INVOICE>
  NS_FIELDS      terms
  OA_FIELDS      terms
                  terms lookup=terms:
                      lookup_table=payment_terms:
                      lookup_by=name:
                      lookup_return=netsuite_payment_term_id
</INVOICE_TO_INVOICE>
</PUSH>

```

Where: netsuite_payment_term_id is the OpenAir payment term custom field you created with the NetSuite internal ID of the associated payment term. If you add new payment terms, you need to manually keep these in synch.

Can I update the date of a bill on expense reports with the date of export?

In OpenAir, set up advanced settings on the OpenAir **NetSuite integration** form for the tranDate to be set as today, where today is the day you export.

Refer to the following example.

Go to Administration > Global Settings > Integration: NetSuite and set up advanced settings for expense report fields.

```

<PUSH>
  <EXPENSE_REP_TO_EXPENSE_REP>
    NS_FIELDS      tranDate

    tranDate      _TODAY
  </EXPENSE_REP_TO_EXPENSE_REP>
</PUSH>

```

Support and Troubleshooting

Support for the Integration


Contacting NetSuite and OpenAir

In order to use the integration, you must have login access to NetSuite and OpenAir.


If you are experiencing difficulties or would like additional information, please create a support case and submit it through your OpenAir account. Create a support case to request access.

To create a support case:

1. Log in to your OpenAir account and select **Support** from the User Center
2. Click on the **Go to SuiteAnswers** button.
3. From the **SuiteAnswers** site home page, click **Contact Support Online**.
4. Enter your question keywords and click **Search**.

 **Note:** If you do not have a question, i.e. you need a switch enabled, just click Search.

5. Very often the answer to your question will be displayed. If you still want to create a support case click **Continue to Create Case**.
6. Fill out the **Create Case** form and then click the **Submit**. You will receive an email confirmation with **Your OpenAir Customer Care #**.

 **Note:** An asterisk * displays after required fields.

Our support staff and engineers will work with you to find a solution to your problem.

Getting Help

All OpenAir users have searchable access to a rich repository of answers with SuiteAnswers. SuiteAnswers is your one-stop destination for support, training, and documentation inquiries. In direct response to customer demand for more self-service, SuiteAnswers provides searchable access to support solutions, best practices, training videos and technical documentation.

The SuiteAnswers support and learning site is available from the NetSuite and the OpenAir support pages.

Troubleshooting the Integration

With user accounts in NetSuite and OpenAir, you should be able to exchange information between the two applications. Review the following integration guidelines for reading error messages and diagnosing integration errors, as well as the error messages, possible causes, and steps to correct. If you are still having problems, please contact OpenAir Support. The support staff and engineers will work with you to find a solution to your problem.

Reading Error Messages

When an error occurs, the integration returns an error message that contains information to help you determine the cause of the error. Refer to the following error message and table that explains its contents.

Error Message: NetSuite web service error: Export failed for "1251". Error occurred while trying to add record #0: Invalid doc, line reference key 6050,1.

| This code... | refers to... |
|------------------------|--|
| Export failed for 1251 | 1251 is the OpenAir invoice number. When you tried to export the OpenAir invoice to NetSuite, the export failed. |
| Invalid doc, (6050) | 6050 is the NetSuite ID for the expense report. The reason the invoice export failed is that it includes charges from the NetSuite expense report 6050. There is an error in the NetSuite expense report 6050. |
| line reference key 1 | 1 is the tracking number of the receipt within the NetSuite expense report that is causing the problem. Go to NetSuite expense report 6050 and look at receipt 1. When you correct the problem there, you can try to export the invoice through the integration and it should be successful. |

Note: By default, additional debugging information is enabled. The integration attempts to debug export errors and returns a message to help you fix an issue. The integration processes each error and makes additional calls to NetSuite web services. While this adds to total processing time when you run the integration if there are errors, it does not impact processing time when there are no errors.

To disable this feature, go to the OpenAir **NetSuite administration integration** form, scroll to the bottom, and select the check box to: Do not include additional details for NetSuite integration errors. See [Filling in the NetSuite Integration Form in OpenAir](#).

Diagnosing Integration Errors

The integration uses NetSuite web services, which is a form-based system. This means that, in general, the behavior you see in the NetSuite user interface (UI) is the same behavior as is available in NetSuite web services. If the integration gives you an error, you are usually not able to perform the same action in the NetSuite UI.

A simple way to diagnose an integration error is to attempt to perform the same action manually in the NetSuite UI. Refer to the following example.

Example: If an expense report fails to export, try to recreate that expense manually in NetSuite as the integration user. This can often lead to the root cause of the error such as an expense category is inactive or an employee no longer exists.

Note: It is important that you attempt do this as the integration user or as a user with a role and permissions that are the same as the integration user. See [Filling in the NetSuite Integration Form in OpenAir](#) for integration user information.

Error Messages

The following are error messages you might encounter as you use the integration. Suggestions are provided for resolving them. In the OpenAir application, they display in red. For ease of reading, they are in regular type with the main focus of the error in bold.

We urge you to search for a portion of the message you receive. That way, you can quickly find a possible cause and solution.


| Error Message | Possible Causes | Steps to Correct |
|---|---|---|
| Default NetSuite forms - You do not have permissions to set a value for element <i>field1</i> , etc... due to one of the following reasons: 1) The field is read-only 2) An associated feature is disabled 3) The field is available either when a record is created or updated, but not in both cases. | Default NetSuite forms are respected when the integration is run, including all permissions on the form. Generally, if a user gets this error, it is because the form does not have a <i>field1</i> available or the fields are read-only. | Verify that the fields in questions are available and not read-only on the user's default form. The standard field mappings in the integration use fields that are all exposed on the standard NetSuite form. A user-defined field mapping (advanced settings) can also be used to remove those fields from the export. |
| Invoice export error - You do not have permissions to set a value for element <i>doc,line</i> due to one of the following reasons: 1) The field is read-only 2) An associated feature is disabled 3) The field is available either when a record is created or updated, but not in both cases. | 1) This error is specific to the invoice export. All non-manually created billable expenses on an OpenAir invoice should come from an expense report that was exported to NetSuite. 2) The integration references expense reports and requires corresponding expenses on the NetSuite expense report be marked billable. 3) Expense lines might not be marked billable or may have already been billed on another invoice. Also, the customer needs to be the same on the expense report and invoice. | 1) Find the OpenAir expense reports that have the associated charges on the invoice. 2) Find the corresponding expense reports in NetSuite and ensure that the corresponding expenses have been marked billable. 3) Ensure the expenses have not already been billed on another invoice. 4) Ensure the customers on the invoice is the same customer as on the expense report. |
| Invoice billing rule error - Please enter a value for OpenAir Billing Rule. | When the integration was run, the bundle installed a transaction column custom field: OpenAir Billing Rule. It may display on the default invoice form used in the integration. | Check the NetSuite default invoice form. If the OpenAir Billing Rule field is a column on the Items subtab, customize the form so that it does not display that field. |
| Invoice service error - Export failed for "XXXX". The service "ABC" does not have a NetSuite ID. | In OpenAir, the activity, category, or service on an invoice charge does not have a NetSuite ID. | In OpenAir, add a NetSuite ID to the activity/category/service. |
| Invoice service error - Export failed for "XXXX". The service "service" does not have a NetSuite ID | 1) In OpenAir, one or more charges on an invoice do not have an activity, category, or service associated with them. 2) To export, all charges on an invoice must reference a NetSuite activity, category, or service and have a NetSuite ID. 3) This error can occur when an expense charge is manually | 1) Assign a service (with a NetSuite ID) to the manually created expense charge and export the invoice again. While the invoice exports, the expense charge does not display on the NetSuite invoice as a billable expense. It displays as a service charge in the Items subtab. |

| Error Message | Possible Causes | Steps to Correct |
|--|---|---|
| | created in OpenAir via Invoices > Charges instead of from an expense billing rule in the Projects application. | 2) Delete the charge in OpenAir, create an expense report with the expense, export the expense report to NetSuite, and re-run the expense billing rule on the project. This re-creates the expense charge associated with an expense report and the charge can be added back to the invoice XXXX so you can export the invoice. |
| Invoices export error - Export failed for "1042". Error occurred while trying to add record #0: Invalid job reference key 28972 for entity 26897 | There is a mismatch between customer and projects on Invoices exported from OpenAir. This may happen when a customer is deleted in NetSuite and it is not reflected in OpenAir. | In OpenAir, look for the project with NetSuite ID 28972. Find the correct customer for this project in NetSuite. Take the NetSuite internal ID of the customer and overwrite the NetSuite ID of that customer in OpenAir. |
| Invoices export error for billable expense report reference - NetSuite web service error: Export failed for "1040". Error occurred while trying to add record #0: No line items match the entered id(s) 68737, 1. Non-manually created billable expenses must reference an expense report and the line of that expense report in NetSuite. | <p>1) In the example, OpenAir invoice 1040 has billable expenses on an OpenAir expense report that has a NetSuite ID 68737. The first (1) expense is causing an issue, i.e., 68737,1.</p> <p>2) When expense reports are exported, each line on the expense report has an internal ID in NetSuite. Those internal IDs are just ordinals; the first expense line ID = 1, the second line ID = 2, etc...</p> <p>3) However, in this case, the expense report lines in NetSuite no longer correspond directly to the expense lines in OpenAir.</p> <p>Possible causes:</p> <p>1) "Combine Detail Items on Expense Reports" is enabled in NetSuite (Setup --> Accounting --> Accounting Preferences --> Time and Expenses (subtab) --> Expenses section. It must be disabled.</p> <p>2) Or, lines were added/deleted on the expense report in NetSuite.</p> | <p>1) If possible, delete the expense report in NetSuite and then re-export it from OpenAir.</p> <p>2) If not possible, manually remove the expense charges from the OpenAir invoice and export the invoice to NetSuite, and then re-enter the expense charges manually in NetSuite.</p> |
| Invoice export error - Export failed for "XXXXX". Error occurred while trying to add record #0: Invalid price reference key - 1 for item 68. | 1) The price level with internal ID -1 is not present on the NetSuite default invoice form on the items tab. The price level with internal ID -1 is the "Custom" price level, which is | <p>1) Check that the price level column is present on the NetSuite default invoice form.</p> <p>2) Then, check that the "Custom" value is available. If it is not available, make sure that rate</p> |

| Error Message | Possible Causes | Steps to Correct |
|---|--|---|
| | <p>set for all service items when the multiple prices preference is enabled in NetSuite.</p> <p>2) The price level column is either not present on the default invoice form or the rate field is hidden on the invoice form, which causes the "Custom" price level from appearing on the price level drop-down field.</p> | <p>column is present on the default invoice form. Once it is on the form, the price level should have the "Custom" value.</p> |
| Invoice export error - The total cannot be negative. | This error occurs when exporting invoices that have a total < 0. NetSuite does not support negative invoices. | Create the invoice manually in NetSuite and mark it as exported. Contact OpenAir Support and request engineering assistance with this task. See Getting Help . |
| Invoice export error - Export failed for "3261". Error occurred while trying to add record #0: Please enter a value for Tax Code | <p>This error occurs when taxes are not set up properly in NetSuite. Taxes are required for the customer, but the tax code is not automatically set in NetSuite.</p> <p>1) Tax nexus of customer with associated tax codes and/or groups may not be properly set up.</p> <p>2) Customer is not properly set up in NetSuite for the taxes although taxes are required for that customer.</p> | <p>1) Properly setup the tax nexus of the customer in NetSuite.</p> <p>2) Also, make sure that the customer is set up to use the correct tax code.</p> <p>Contact NetSuite Support for assistance. See Getting Help.</p> |
| Invoice export error - NetSuite web service error: Export failed for "499". You cannot initialize invoice: invalid reference 2322 | <p>The sales order with internal ID 2322 is unable to be billed for some reason. You can see this in the NetSuite UI by navigating to the sales order. The "Next Bill" button is not available.</p> <p>Causes:</p> <p>1) The sales order has already been fully billed.</p> <p>2) The sales order is potentially pending approval.</p> <p>3) The maximum quantity on the sales order for a line has already been billed even though the dollar amount has not been fully billed.</p> | <p>Once you determine the cause of the error, you can take steps to resolve it.</p> <p>1) If the sales order is pending approval, see if it can be approved.</p> <p>2) Verify the maximum quantity has not already been fully billed.</p> |
| Invoice export error - NetSuite web service error: Export failed for "PS1036". Error occurred while trying to add record #0: Please specify an email address to send to | This could occur with the invoice export when the customer record in NetSuite has a preference enabled to send invoices to that customer via email but no email address is available for that customer. | <p>Check the customer record in NetSuite.</p> <p>1) Navigate to the "Info" tab and check the "Send Transactions Via" preference on that tab.</p> <p>2) If transactions are to be sent by email, check that an email</p> |

| Error Message | Possible Causes | Steps to Correct |
|--|---|--|
| | | address has been provided for that customer. |
| Invoice fax number error - Export failed for "INOA1050". Error occurred while trying to add record #0: Please specify an fax number to send to. | The NetSuite customer associated with this invoice requests that their invoices are faxed, but the invoice does not set the fax number. | The NetSuite customer should either: 1) be modified NOT to have invoices faxed to them. 2) specify a fax number using a user-defined field mapping. See Using Advanced Settings . |
| Sales order-related NetSuite web service error - Export failed for "643". Error occurred while trying to add record #0: That is not a valid record transformation. | The sales order is for a cash sales, not invoice. The error indicates that you cannot invoice the sales order because it is for a cash sale. | Change the cash sale associated with this OpenAir invoice to a sales order. |
| Expense Item or Service error -NetSuite internal ID for an expense item or service is no longer valid - Invalid <i>something</i> reference key 5 | 1) In OpenAir, look for the expense item or service with NetSuite ID = 5. Verify the expense category or service item also exists and is active in NetSuite. 2) If the item does not exist in NetSuite, create it. 3)change the item on the expense report or invoice in OpenAir to something else or update the NetSuite ID on the existing item in OpenAir. | 1) If the item is inactive in NetSuite, mark it as active and run the integration again. 2) If the item does not exist in NetSuite, create it and run the integration again. If you want to correlate it with the OpenAir item, change the NetSuite ID = # to the new number. |
| Expense report export error - Export failed for " Expense report for 03/09/09 to 03/15/09 - number 159" Error occurred while trying to add record #0: Invalid customer reference key 37177 for entity 33 . | 1) This is an expense report error. There is confusing terminology in that <i>customer</i> actually means <i>project</i> . 2) This error means that the NetSuite employee with internal ID 33 does not have access to enter expenses against the NetSuite project with an internal ID 37177. | 1) This could be caused by the flag "Limit Time to Assignees" on the NetSuite project. By default, projects in NetSuite should have this flag disabled when the bundle is installed. However, users may reset the flag. The user should verify that this flag is disabled (not checked) on the corresponding project in NetSuite. In this example, locate the project with NetSuite ID = 37177 in OpenAir. Look for that project in NetSuite. In NetSuite, the flag is on the "General" subtab of the project. 2) It is also possible that the employee and the project are in separate subsidiaries. 3) Or, there may be some other role or permission issue. |
| Expense report export error - Project associated with an Expense report does not have NetSuite project ID - Export | The project associated with this expense report does not have a NetSuite ID. | 1) Find the project in NetSuite, make sure it transfers to OpenAir, and type the NetSuite internal ID |

| Error Message | Possible Causes | Steps to Correct |
|--|---|--|
| failed: "Expense report for 03/16/09 to 03/22/09" is not associated with a NetSuite job . | | <p>of the project into the OpenAir project.</p> <p>2) Or, create a new project in NetSuite and copy the internal ID of the project to the NetSuite ID field in OpenAir.</p> |
| Expense report approver and/or supervisor error - Invalid custbody_oa_exp_approver_supervisor reference key 12200. | <p>Expense report export sets both the supervisor and project approver if these are available in OpenAir. These are mapped to custom fields on the expense report transaction in NetSuite. These two fields source their data from an approvers list in NetSuite.</p> <p>1) This error means that the NetSuite employee with internal ID 12200 is not available in the supervisor approver custom field in NetSuite.</p> <p>2) This could be due to the employee being inactive or some other reason.</p> | <p>1) In OpenAir, find the user with NetSuite ID 12200. Remember, you can customize the User list view to list the NetSuite ID.</p> <p>2) Find this user/employee in NetSuite and make sure that this person is flagged as an approver to appear in that custom field.</p> |
| Expense report export error - Invalid category reference key XXX for entity YYY . | <p>This may appear when expense reports are exported. The error means that the user with NetSuite ID YYY does not have access to the expense category (OpenAir expense item) with NetSuite ID XXX. One possible cause is that the G/L account associated with expense category XXX is not visible to the subsidiary of the user YYY.</p> | <p>In NetSuite, make sure that the subsidiary of user YYY is able to see the expense category XXX.</p> |
| Expense report tax export - Export failed for "Envelope/ Expense Report Name - number X". Error occurred while trying to add record #0. Please enter a value for Tax Code. | <p>This error may occur with the expense report export when taxes are required on the expense report line in NetSuite but it was either not set up in NetSuite or it is not being passed from OpenAir. If taxes are set up in OpenAir for the expenses, you may need to enable the feature "Enable tax export on exp reports" on the OpenAir NetSuite integration administration form.</p> | <p>Make sure that the NetSuite Tax Code ID on the OpenAir Tax Location form matches the NetSuite Internal ID of the Tax Code or Tax Group. To verify:</p> <ul style="list-style-type: none"> ■ In OpenAir, go to Administration > Global Settings > Tax locations. Verify the ID on the list view or edit the location form to change the code. ■ In NetSuite, go to Setup > Accounting > Tax Codes or Tax Groups. <p>Make sure that the OpenAir Expense Report includes</p> |

| Error Message | Possible Causes | Steps to Correct |
|--|--|--|
| | | <p>appropriate location and tax fields. To modify the form, go to Administration > Application Settings > Expense report layout. The shipping address or billing address on the NetSuite Employee form establishes the NetSuite Tax Nexus Type for each employee. Verify the address is present in NetSuite. The NetSuite Tax Nexus Type is populated when the user is transferred to OpenAir and the nexus displays on the OpenAir User Demographic form.</p> <div>  Note: Ensure the internal account switch is not enabled for the following switch: Get the receipt tax location from the expense item. This conflicts with the Tax calculation method selection: Tax locations. </div> |
| Employee ID error - Export failed for "Jan 5-8 at Pepsico in Dallas - number 134" Error occurred while trying to add record #0: Invalid entity reference key 12470 | <p>1) Errors like this may occur on expenses when there is no longer an employee with an internal ID 12470 in NetSuite.</p> <p>2) This may also be caused by the vendor to user integration. That integration allows the import of NetSuite vendors and creates OpenAir users. Expenses entered for those users cannot be exported to NetSuite since they are not employee entities but vendor entities.</p> <p>3) Another possible scenario is that employee with NetSuite ID 12470 is inactive or there is a date in the release date field of the employee in NetSuite.</p> | <p>1) In OpenAir, find the user with NetSuite ID 12470. Look for the corresponding entity in NetSuite.</p> <p>2) Ensure the corresponding entity in NetSuite is a NOT vendor. Vendors cannot submit OpenAir expense reports to NetSuite.</p> <p>3) Ensure the user is assigned as a resource to the project. Make sure the Limit Time to Assignees is NOT selected and Allow Expenses is selected.</p> <p>4) If the employee does not exist at all in NetSuite, a new employee needs to be created in NetSuite and the internal ID of that new employee should be used as the NetSuite ID for the corresponding OpenAir user.</p> |
| Advanced settings error - Export failed for "267". Error occurred while trying to add record #0: org.xml.sax.SAXException: 'value' on {urn:core_2008_2.platform.webservices.netsuite.com}String CustomFieldRef is required | Check the advanced settings. There is likely a bad field mapping. Possibly a field name is misspelled. | <p>1) Make sure that the NetSuite field names match what is available in the NetSuite schema.</p> <p>2) See NetSuite developers documentation for the schema browser.</p> |

| Error Message | Possible Causes | Steps to Correct |
|--|--|--|
| Advanced settings error - ARRAY(0x27f92b30) is missing IF/THEN for EXPENSE_REP_LINE | The error indicates that you are using more than one IF block in a specific mapping section. In the example here, it is the EXPENSE_REP_LINE section. | All of the IF statements should be in one block within the <EXPENSE_REP_LINE> section in this example. Make sure you have all of the IF statements in one IF block, not multiple IF blocks in one mapping section. |
| Advanced settings error - NetSuite web service error: org.xml.sax.SAXException: is not a legal value for {urn:types.core_2008_2.platform.webservices.netsuite.com}RecordType | This is related to a bad user-defined custom mapping, most likely a field in a SOAP request is set to a value of blank when blank is not a valid value. For example, on an export, a NS drop-down field is set to blank but in the NS UI, it cannot be set to blank. | Review the user-defined custom mappings. 1) Try to isolate the error to a specific transaction which can often be seen by simply running the integration. Once you have done that, look at the field mappings. You may need to capture the SOAP request, examine which fields are set to a blank internal ID. Then add some additional logic to map a value to the field only when there is a value, not when it is blank. 2) Also, make sure that you are not attempting to map from a custom list in NetSuite; only a custom field. |
| Employee/User error - Invalid payrollitem reference key 98 for employee 693 | The payroll type with a NetSuite internal ID 98 on a time entry for the OpenAir user with NetSuite internal ID 693 is: 1) possibly invalid 2) Or, the employee in NetSuite does not have access to this payroll item. | 1) Make sure that the NetSuite payroll item ID is correct. 2) Also check this employee in NetSuite and make sure that the NetSuite payroll item with internal ID 98 is valid for this employee. |
| Project integration error - <i>Project name</i> was not updated because the NetSuite customer for this project has changed. | The NetSuite internal ID associated with <i>project name</i> is already associated with a different customer/project association in OpenAir. | This should never occur unless: 1) multiple NetSuite accounts have been used to sync against this OpenAir account 2) internal IDs have been manually changed on projects. This will require manual cleanup of the internal IDs of the projects in the OpenAir account. |
| Server SuiteScript error - Unable to retrieve OpenAir billing rule types from NetSuite. | This error may occur when Server SuiteScript has not been enabled in the NetSuite account. This is required for the integration to function properly. | Check that Server SuiteScript has been enabled. Setup -> Company -> Enable Features -> SuiteFlex. See Contacting NetSuite and OpenAir for assistance. |
| SuiteSignOn error - Account mismatch from initial call to verify call. | This is a SuiteSignOn error as a result of being unable to clearly identify the OpenAir account and user in question. | Make sure you have at least Internal ID and Account as part of the "User Identification" tab on the SuiteSignOn record in |

| Error Message | Possible Causes | Steps to Correct |
|--|--|--|
| | | NetSuite. If you have been in multiple OpenAir accounts, clear out your cache and browser cookies and then try it again. |
| Web service error - Connection to webservices.netsuite.com timed out. | 1) There may be a network or system issue. 2) The NetSuite account is heavily customized so when the integration attempts to retrieve NetSuite account features and preferences to be used in the integration, the request times out. | Verify there aren't any network or system issues by logging in directly into the NetSuite UI. |
| Web service error - custentity_oa_rate is not a valid search custom field. | In this example, custentity_oa_rate is a custom field in the NetSuite account, but the following applies to all similar messages. 1) The custom field does not store values and so the field is not available for query in web services. 2) Custom fields in NetSuite can be set up to only display a value, but nothing is stored in that database. 3) The field references another field and just displays without storing anything. 4) When the web service query is issued, there is nothing in the database for this field and so there is nothing to return. | Check that the custom field actually stores a value in the database. 1) In NetSuite, go to Setup -> Customization -> type of custom field -> name of your custom field. 2) Look for the "Store Value" checkbox. It should be checked if this field is to be used in web service queries. 3) Verify that the custom field is valid for searching. To do so, create a "Saved Search" and include the field in the saved search. If you cannot do it, the field is not available. |
| Web service error - Export failed for "PS-5499". Error occurred while trying to add record #0: Invalid doc,line reference key 17519,1. | The error means that the line 1 on the expense report with NetSuite internal ID 17519 in NetSuite, does not appear in the "Billable Expenses" tab when you try to create an invoice in the NetSuite UI. There are several possible causes: 1) Has it already been rebilled on another charge/invoice? 2) Has the expense report in NS or OA been altered? after the initial approval and export to NetSuite? 3) Is the expense non-billable in NetSuite? | 1) If the expense has already been re-billed, remove that charge from the OpenAir invoice. 2) If the expense is non-billable but should be, change this on the NetSuite expense report. 3) If the expense reports have been altered in either or both systems, the simplest would be to delete the NetSuite version of the expense report, un-export and re-export the OpenAir expense report, and re-export the invoice again. 4) If you cannot re-export the invoice, manually create that invoice in NetSuite and then have engineering mark the OpenAir invoice as exported to NetSuite. See Contacting NetSuite and OpenAir . |

| Error Message | Possible Causes | Steps to Correct |
|--|---|--|
| Web Service error - Export Failed for "ldaptive media courier fees Dec 2010 - number 112" Error occurred while trying to add record#0: Invalid custbody_oa_exp_approver_project reference key 280. | <p>1) The expense report export is attempting to set the expense report project approver in NetSuite.</p> <p>2) The project approver is set in a custom field in NetSuite called custbody_oa_exp_approver_project but the employee corresponding to ID 280 does not appear in that list.</p> | Add the employee with ID 280 to the list of project approvers in NetSuite. |
| Web Service error - {urn:core_2008_2.platform.webservice.s.netsuite.com}SearchColumnSelectCustomField must be used to search custom field custentity_projectmanage | <p>1) The error is related to the custom field changing its type in NetSuite.</p> <p>2) NetSuite custom field attributes are cached in OpenAir after the first time that custom field is used in the integration. So if the type is changed, the attributes cached in OpenAir need to be updated.</p> | <p>Try manually resyncing the custom fields. Go to the Openair NetSuite administration integration form and select the following: Manually synchronize NetSuite custom fields used in the integration. When enabled, a link displays in tips of the OpenAir NetSuite integration form. You may need to Contact OpenAir support and request that the switch be enabled. See Contacting NetSuite and OpenAir</p> |
| NetSuite error - Error occurred while trying to add record #0: An unexpected error occurred. Error ID: grrq2pstj9tt3tcr6qj1 | That error is something unexpected that occurred in NetSuite directly. It is outside of OpenAir. Those errors are analogous to OpenAir server errors when you get that "Page not found, support has been contacted" response. | <p>Create a support case and request that the NetSuite web services support team look at the support case.</p> <p>Someone who works directly with NS should look at it since OpenAir support cannot help. Sometimes these errors are genuine bugs, but often they are caused by bad data in NetSuite.</p> |

OpenAir Connector Default Integration Settings

This section lists the default integration settings for Connector. In the new Connector UI, these mappings are present whenever a chapter is added to the integration, and appear as light grey text in the interface.

Employees (Users)

Employee

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-------------------|---------------|---------------------------|--------------------------|------------------------------------|
| Employees (Users) | Employee | Employee.internalId | User.netsuite_user_id__c | NetSuite to OpenAir (PULL) |
| Employees (Users) | Employee | =“1” | User.active | NetSuite to OpenAir (PULL) |
| Employees (Users) | Employee | Employee.entityID | User.nickname | NetSuite to OpenAir (PULL) |
| Employees (Users) | Employee | Employee.email | User.email | NetSuite to OpenAir (PULL) |
| Employees (Users) | Employee | Employee.lastName | User.last | NetSuite to OpenAir (PULL) |
| Employees (Users) | Employee | Employee.firstName | User.first | NetSuite to OpenAir (PULL) |
| Employees (Users) | Employee | NetSuite account currency | User.currency | NetSuite to OpenAir (PULL) |

Clients (Customers)

Client

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|---|----------------------------------|------------------------------------|
| Clients (Customers) | Client | Customer.internalId | Customer.netsuite_customer_id__c | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | =“C” | Customer.type | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | Customer.entityID | Customer.name | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | Customer.companyName or Customer.entityId | Customer.company | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | Customer.email | Customer.email | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | Customer.billAddress1 | Customer.address1 | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|---------------------------|-------------------|------------------------------------|
| Clients (Customers) | Client | Customer.billAddress2 | Customer.address2 | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | Customer.billCity | Customer.city | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | Customer.billstate | Customer.state | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | Customer.billZipCode | Customer.zip | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | = "1" | Customer.active | NetSuite to OpenAir (PULL) |
| Clients (Customers) | Client | NetSuite account currency | Customer.currency | NetSuite to OpenAir (PULL) |

Projects (Projects)

Project

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|------------------------------------|--------------------------------|------------------------------------|
| Projects (Projects) | Project | Job.internalId | Project.netsuite_project_id__c | NetSuite to OpenAir (PULL) |
| Projects (Projects) | Project | Job.companyName OR Job.entityId | Project.name | NetSuite to OpenAir (PULL) |
| Projects (Projects) | Project | Job.customer | Project.customer_id | NetSuite to OpenAir (PULL) |
| Projects (Projects) | Project | Job.startDate | Project.start_date | NetSuite to OpenAir (PULL) |
| Projects (Projects) | Project | = "1" | Project.active | NetSuite to OpenAir (PULL) |
| Projects (Projects) | Project | NetSuite account currency | Project.currency | NetSuite to OpenAir (PULL) |

Services (Service Items)

Service

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|--------------------------|---------------|-----------------|----------------------------------|------------------------------------|
| Services (Service Items) | Service | Item.internalId | Category.netsuite_category_id__c | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|--------------------------|---------------|----------------|-----------------|------------------------------------|
| Services (Service Items) | Service | = "1" | Category.active | NetSuite to OpenAir (PULL) |
| Services (Service Items) | Service | Item.idemId | Category.name | NetSuite to OpenAir (PULL) |
| Services (Service Items) | Service | Item.basePrice | Category.rate | NetSuite to OpenAir (PULL) |

Expense Items (Expense Categories)

Expense item

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|------------------------------------|---------------|----------------------------|-------------------------|------------------------------------|
| Expense Items (Expense Categories) | Expense item | ExpenseCategory.internalId | Item.netsuite_item_id_c | NetSuite to OpenAir (PULL) |
| Expense Items (Expense Categories) | Expense item | = "1" | Item.active | NetSuite to OpenAir (PULL) |
| Expense Items (Expense Categories) | Expense item | ExpenseCategory.name | Item.name | NetSuite to OpenAir (PULL) |
| Expense Items (Expense Categories) | Expense item | = "M" OR = "R" | Item.type | NetSuite to OpenAir (PULL) |

Contacts (Contacts)

Contact

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|---------------------|---------------------|------------------------------------|
| Contacts (Contacts) | Contact | Customer.internalId | Contact.customer_id | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|-------------------------|-------------------|------------------------------------|
| Contacts (Contacts) | Contact | Contact.entityId | Contact.name | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.lastName | Contact.last | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.firstName | Contact.first | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.email | Contact.email | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.phone | Contact.phone | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.fax | Contact.fax | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.mobilePhone | Contact.mobile | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.title | Contact.job_title | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | = "1" | Contact.active | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.billAddress1 | Address.address1 | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.billAddress2 | Address.address2 | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.billAddress3 | Address.address3 | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.billCity | Address.city | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.billState | Address.state | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.billZipCode | Address.zip | NetSuite to OpenAir (PULL) |
| Contacts (Contacts) | Contact | Contact.billCountryCode | Address.country | NetSuite to OpenAir (PULL) |

Employees (Vendors)

Vendor

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|-------------------|--|------------------------------------|
| Employees (Vendors) | Vendor | Vendor.internalId | User.netsuite_vendor_id_c or User.netsuite_vendor_2_id_c | NetSuite to OpenAir (PULL) |
| Employees (Vendors) | Vendor | = "1" | User.active | NetSuite to OpenAir (PULL) |
| Employees (Vendors) | Vendor | Vendor.entityId | User.nickname | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|------------------|---------------|------------------------------------|
| Employees (Vendors) | Vendor | Vendor.email | User.email | NetSuite to OpenAir (PULL) |
| Employees (Vendors) | Vendor | Vendor.lastName | User.last | NetSuite to OpenAir (PULL) |
| Employees (Vendors) | Vendor | Vendor.firstName | User.first | NetSuite to OpenAir (PULL) |

Vendors (Vendors)

Vendor

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-------------------|---------------|---------------------------|------------------------------|------------------------------------|
| Vendors (Vendors) | Vendor | Vendor.internalId | Vendor.netsuite_vendor_id__c | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | = "1" | Vendor.active | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.entityId | Vendor.name | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.email | Vendor.email | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.fax | Vendor.fax | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.billPhone | Vendor.phone | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.billAddress1 | Vendor.address1 | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.billAddress2 | Vendor.address2 | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.billAddress3 | Vendor.address3 | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.billCity | Vendor.city | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.billstate | Vendor.state | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.billZipCode | Vendor.zip | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | Vendor.url | Vendor.web | NetSuite to OpenAir (PULL) |
| Vendors (Vendors) | Vendor | NetSuite account currency | Vendor.currency | NetSuite to OpenAir (PULL) |

Products (Purchase Items)

Product

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------------|---------------|------------------------------|---|------------------------------------|
| Products (Purchase Items) | Product | Item.internalId | Product.netsuite_product_id__c | NetSuite to OpenAir (PULL) |
| Products (Purchase Items) | Product | = "1" | Product.active | NetSuite to OpenAir (PULL) |
| Products (Purchase Items) | Product | Item.itemId | Product.name | NetSuite to OpenAir (PULL) |
| Products (Purchase Items) | Product | Item.incomeAccount | Product.netsuite_product_inc_acct_id__c | NetSuite to OpenAir (PULL) |
| Products (Purchase Items) | Product | Item.deferredRevenue Account | Product.netsuite_product_def_rev_acct_id__c | NetSuite to OpenAir (PULL) |
| Products (Purchase Items) | Product | Item.expenseAccount | Product.netsuite_product_expense_acct_id__c | NetSuite to OpenAir (PULL) |
| Products (Purchase Items) | Product | Item.deferredExpense Account | Product.netsuite_product_def_expense_acct_id__c | NetSuite to OpenAir (PULL) |
| Products (Purchase Items) | Product | Item.subType | Product.netsuite_product_subtype__c | NetSuite to OpenAir (PULL) |

Customer POs (Sales Orders)

Customer PO

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|---------------|------------------------|---|------------------------------------|
| Customer POs (Sales Orders) | Customer PO | Transaction.internalId | Customerpo.netsuite_sales_order_id__c | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Transaction.line | Customerpo.netsuite_sales_order_line_id__c | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Transaction.entity | Customerpo.netsuite_sales_order_project_id__c | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|---------------|-------------------------|---|------------------------------------|
| Customer POs (Sales Orders) | Customer PO | Transaction.item | Customerpo.netsuite_sales_order_item_id__c | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Item group ID | Customerpo.netsuite_sales_order_item_group_id__c | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Item group line ID | Customerpo.netsuite_sales_order_item_group_line_id__c | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Transaction.netAmount | Customerpo.netsuite_sales_order_net_amount__c | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Transaction.quantity | Customerpo.netsuite_sales_order_line_quantity__c | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | OA Customerpo.id | Customerpo.netsuite_discount_po__c | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | SO number — Item name | Customerpo.name | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | OA Customer.id | Customerpo.customer_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Transaction.number | Customerpo.number | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Transaction.grossAmount | Customerpo.total | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Transaction.currency | Customerpo.currency | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | = "1" | Customerpo.active | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Customer PO | Transaction.tranDate | Customerpo.date | NetSuite to OpenAir (PULL) |

Date/Milestone Fixed Fee

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|--------------------------|-------------------------|--|------------------------------------|
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | Transaction.grossAmount | Revenue_recognition_rule_amount.amount | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | = "R" | Revenue_recognition_rule_amount.recognition_type | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|--------------------------|---|---|------------------------------------|
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | Category.id | Revenue_recognition_rule_amount.category_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | Customerpo.id | Revenue_recognition_rule_amount.customerpo_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | NetSuite Sales Order [SO number] — [SO Item ID] | Revenue_recognition_rule.name | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | Project.customer_id | Revenue_recognition_rule.customer_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | Project.id | Revenue_recognition_rule.project_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | = "1" | Revenue_recognition_rule.active | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | Transaction.currency | Revenue_recognition_rule.currency | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | Rev Rec rule created from [rule name] | Revenue_recognition_rule.notes | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | = "F" | Revenue_recognition_rule.type | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | = "2050-01-01" | Revenue_recognition_rule.start_date | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Date/Milestone Fixed Fee | = "1" | Revenue_recognition_rule.row | NetSuite to OpenAir (PULL) |

Percent Complete

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|------------------|---|--------------------------------------|------------------------------------|
| Customer POs (Sales Orders) | Percent Complete | NetSuite Sales Order [SO number] — [SO Item ID] | Revenue_recognition_rule.name | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Percent Complete | Project.customer_id | Revenue_recognition_rule.customer_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Percent Complete | Project.id | Revenue_recognition_rule.project_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Percent Complete | Category.id | Revenue_recognition_rule.category_id | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|------------------|---------------------------------------|--|------------------------------------|
| Customer POs (Sales Orders) | Percent Complete | Customerpo.id | Revenue_recognition_rule.customerpo_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Percent Complete | = "0" | Revenue_recognition_rule.active | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Percent Complete | Transaction.currency | Revenue_recognition_rule.currency | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Percent Complete | Rev Rec rule created from [rule name] | Revenue_recognition_rule.notes | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Percent Complete | = "P" | Revenue_recognition_rule.type | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Percent Complete | = "A" | Revenue_recognition_rule.percent_how | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Percent Complete | Transaction.grossAmount | Revenue_recognition_rule.amount | NetSuite to OpenAir (PULL) |

As Billed

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|---------------|---|--|------------------------------------|
| Customer POs (Sales Orders) | As Billed | Form inc_time 1 | Revenue_recognition_rule.extra_data | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | NetSuite Sales Order [SO number] — [SO Item ID] | Revenue_recognition_rule.name | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | Project.customer_id | Revenue_recognition_rule.customer_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | Project.id | Revenue_recognition_rule.project_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | Category.id | Revenue_recognition_rule.category_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | Customerpo.id | Revenue_recognition_rule.customerpo_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | = "1" | Revenue_recognition_rule.active | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | Transaction.currency | Revenue_recognition_rule.currency | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|---------------|---------------------------------------|-------------------------------------|------------------------------------|
| Customer POs (Sales Orders) | As Billed | Rev Rec rule created from [rule name] | Revenue_recognition_rule.notes | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | = "A" | Revenue_recognition_rule.type | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | = "2050-01-01" | Revenue_recognition_rule.start_date | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | As Billed | = "2050-01-01" | Revenue_recognition_rule.end_date | NetSuite to OpenAir (PULL) |

Time Project

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|---------------|---|--|------------------------------------|
| Customer POs (Sales Orders) | Time Project | Form inc_time 1 | Revenue_recognition_rule.extra_data | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project | NetSuite Sales Order [SO number] — [SO Item ID] | Revenue_recognition_rule.name | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project | Project.customer_id | Revenue_recognition_rule.customer_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project | Project.id | Revenue_recognition_rule.project_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project | = "1" | Revenue_recognition_rule.active | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project | Rev Rec rule created from [rule name] | Revenue_recognition_rule.notes | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project | = "T" | Revenue_recognition_rule.type | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project | Project_billing_rule.id | Revenue_recognition_rule.project_billing_rule_filter | NetSuite to OpenAir (PULL) |

Fixed Fee Percent Complete

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|----------------------------|-------------------------|--|------------------------------------|
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | Transaction.grossAmount | Revenue_recognition_rule.amount.amount | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|----------------------------|---|--|------------------------------------|
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | = "R" | Revenue_recognition_rule_amount.recognition_type | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | Category.id | Revenue_recognition_rule_amount.category_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | Customerpo.id | Revenue_recognition_rule_amount.customerpo_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | NetSuite Sales Order [SO number] — [SO Item ID] | Revenue_recognition_rule.name | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | Project.customer_id | Revenue_recognition_rule.customer_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | Project.id | Revenue_recognition_rule.project_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | = "1" | Revenue_recognition_rule.active | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | Transaction.currency | Revenue_recognition_rule.currency | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | Rev Rec rule created from [rule name] | Revenue_recognition_rule.notes | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | = "F" | Revenue_recognition_rule.type | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | = "A" | Revenue_recognition_rule.percent_trigger | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | = "100" | Revenue_recognition_rule.percent | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Fixed Fee Percent Complete | = "1" | Revenue_recognition_rule.row | NetSuite to OpenAir (PULL) |

Incurred vs. Forecast

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|-----------------------|---|-------------------------------------|------------------------------------|
| Customer POs (Sales Orders) | Incurred vs. Forecast | Form inc_approved_time 1 and fore_approvedbooked_time 1 | Revenue_recognition_rule.extra_data | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | NetSuite Sales Order [SO number] — [SO Item ID] | Revenue_recognition_rule.name | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|-----------------------|---------------------------------------|--|------------------------------------|
| Customer POs (Sales Orders) | Incurred vs. Forecast | Project.customer_id | Revenue_recognition_rule.customer_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | Project.id | Revenue_recognition_rule.project_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | Category.id | Revenue_recognition_rule.category_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | Customerpo.id | Revenue_recognition_rule.customerpo_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | = "1" | Revenue_recognition_rule.active | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | Transaction.currency | Revenue_recognition_rule.currency | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | Rev Rec rule created from [rule name] | Revenue_recognition_rule.notes | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | = "I" | Revenue_recognition_rule.type | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | Transaction.grossAmount | Revenue_recognition_rule.amount | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Incurred vs. Forecast | = "0" | Revenue_recognition_rule.lc_level | NetSuite to OpenAir (PULL) |

Project Fixed Fee Billing

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|---------------------------|---|------------------------------------|------------------------------------|
| Customer POs (Sales Orders) | Project Fixed Fee Billing | NetSuite Sales Order [SO number] — [SO Item ID] | Project_billing_rule.name | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | Customer.id | Project_billing_rule.customer_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | Project.id | Project_billing_rule.project_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | Category.id | Project_billing_rule.category_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | Customerpo.id | Project_billing_rule.customerpo_id | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|---------------------------|---|----------------------------------|------------------------------------|
| Customer POs (Sales Orders) | Project Fixed Fee Billing | = "1" | Project_billing_rule.active | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | Transaction.currency | Project_billing_rule.currency | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | Project billing rule created from [rule name] | Project_billing_rule.notes | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | Autogenerated description | Project_billing_rule.description | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | = "F" | Project_billing_rule.type | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | Transaction.grossAmount | Project_billing_rule.amount | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | = "A" if percent complete rule | Project_billing_rule.percent_how | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | = "100" if percent complete rule | Project_billing_rule.percent | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Project Fixed Fee Billing | = "2050-01-01" unless percent complete rule | Project_billing_rule.start_date | NetSuite to OpenAir (PULL) |

Time Project Billing

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|----------------------|---|------------------------------------|------------------------------------|
| Customer POs (Sales Orders) | Time Project Billing | NetSuite Sales Order [SO number] — [SO Item ID] | Project_billing_rule.name | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | Customer.id | Project_billing_rule.customer_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | Project.id | Project_billing_rule.project_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | Category.id | Project_billing_rule.category_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | Customerpo.id | Project_billing_rule.customerpo_id | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | = "1" | Project_billing_rule.active | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|----------------------|---|----------------------------------|------------------------------------|
| Customer POs (Sales Orders) | Time Project Billing | Transaction.currency | Project_billing_rule.currency | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | Project billing rule created from [rule name] | Project_billing_rule.notes | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | Autogenerated description | Project_billing_rule.description | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | = "T" | Project_billing_rule.type | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | Transaction.grossAmount | Project_billing_rule.cap | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | = "2015-01-01" | Project_billing_rule.start_date | NetSuite to OpenAir (PULL) |
| Customer POs (Sales Orders) | Time Project Billing | = "2015-01-01" | Project_billing_rule.end_date | NetSuite to OpenAir (PULL) |

Reimbursements (Expense Report Reimbursements)

Expense Reimbursement

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|--|-----------------------|-------------------------|---|------------------------------------|
| Reimbursements (Expense Report Reimbursements) | Expense Reimbursement | Transaction.internalId | Reimbursement.netsuite_reimbursement_id_c | NetSuite to OpenAir (PULL) |
| Reimbursements (Expense Report Reimbursements) | Expense Reimbursement | OA Envelope.id | Reimbursement.envelope_id | NetSuite to OpenAir (PULL) |
| Reimbursements (Expense Report Reimbursements) | Expense Reimbursement | Transaction.dateCreated | Reimbursement.date | NetSuite to OpenAir (PULL) |
| Reimbursements (Expense Report Reimbursements) | Expense Reimbursement | Transaction.amountPaid | Reimbursement.total | NetSuite to OpenAir (PULL) |
| Reimbursements (Expense Report Reimbursements) | Expense Reimbursement | Transaction.tranId | Reimbursement.notes | NetSuite to OpenAir (PULL) |
| Reimbursements (Expense Report Reimbursements) | Expense Reimbursement | Transaction.currency | Reimbursement.currency | NetSuite to OpenAir (PULL) |

Payments (Invoice Payments)

Invoice payment

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------------|-----------------|---------------------------------|--------------------------------|------------------------------------|
| Payments (Invoice Payments) | Invoice payment | Transaction.internalId | Payment.netsuite_payment_id__c | NetSuite to OpenAir (PULL) |
| Payments (Invoice Payments) | Invoice payment | OA Invoice.id | Payment.invoice_id | NetSuite to OpenAir (PULL) |
| Payments (Invoice Payments) | Invoice payment | Transaction.dateCreated | Payment.date | NetSuite to OpenAir (PULL) |
| Payments (Invoice Payments) | Invoice payment | Transaction.appliedToLinkAmount | Payment.total | NetSuite to OpenAir (PULL) |
| Payments (Invoice Payments) | Invoice payment | Transaction.internalId | Payment.notes | NetSuite to OpenAir (PULL) |
| Payments (Invoice Payments) | Invoice payment | Transaction.currency | Payment.currency | NetSuite to OpenAir (PULL) |

Tasks (Project Tasks)

Task

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------|---------------|--|--|------------------------------------|
| Tasks (Project Tasks) | Task | ProjectTask.internalId | Project_task.netsuite_project_task_id__c | NetSuite to OpenAir (PULL) |
| Tasks (Project Tasks) | Task | ProjectTask.custevent_oa_project_task_name | Project_task.name | NetSuite to OpenAir (PULL) |
| Tasks (Project Tasks) | Task | ProjectTask.company | Project_task.customer_id | NetSuite to OpenAir (PULL) |
| Tasks (Project Tasks) | Task | ProjectTask.company | Project_task.project_id | NetSuite to OpenAir (PULL) |
| Tasks (Project Tasks) | Task | ProjectTask.startDate | Project_task.start_date | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------|---------------|---------------------------|----------------------------|------------------------------------|
| Tasks (Project Tasks) | Task | currency | Project_task.currency | NetSuite to OpenAir (PULL) |
| Tasks (Project Tasks) | Task | ProjectTask.estimatedWork | Project_task.planned_hours | NetSuite to OpenAir (PULL) |

POs (Vendor Bills)

PO

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|--------------------|---------------|--------------------------|---|------------------------------------|
| POs (Vendor Bills) | PO | Transaction.tranDate | Purchaseorder.date | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | Transaction.entity | Purchaseorder.vendor_id | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | default terms | Purchaseorder.terms | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | Transaction.currency | Purchaseorder.currency | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | OA Purchaser.id | Purchaseorder.user_id | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | = "NS-" | Purchaseorder.prefix | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | Transaction.tranID | Purchaseorder.number | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | = "NS-" + Transaction.Id | Purchaseorder.name | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | = "1" | Purchaseorder.auto_track_payable_with_fulfilled | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | from purchaser set | Purchaseorder.carrier_id | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | from purchaser set | Purchaseorder.accounts_payable_id | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | from purchaser set | Purchaseorder.receiving_id | NetSuite to OpenAir (PULL) |
| POs (Vendor Bills) | PO | from purchaser set | Purchaseorder.ship_complete_only | NetSuite to OpenAir (PULL) |

Purchase item

No default mappings.

Retainers (Applied Customer Deposits)

Retainer

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------------------------|---------------|----------------------------------|---|------------------------------------|
| Retainers (Applied Customer Deposits) | Retainer | Transaction.internalId | Payment.netsuite_retainer_id__c | NetSuite to OpenAir (PULL) |
| Retainers (Applied Customer Deposits) | Retainer | Transaction.appliedToTransaction | Payment.netsuite_deposit_applied_to_id__c | NetSuite to OpenAir (PULL) |
| Retainers (Applied Customer Deposits) | Retainer | OA Customer.id | Payment.customer_id | NetSuite to OpenAir (PULL) |
| Retainers (Applied Customer Deposits) | Retainer | Transaction.dateCreated | Payment.date | NetSuite to OpenAir (PULL) |
| Retainers (Applied Customer Deposits) | Retainer | Transaction.appliedToLinkAmount | Payment.total | NetSuite to OpenAir (PULL) |
| Retainers (Applied Customer Deposits) | Retainer | Transaction.internalId | Payment.notes | NetSuite to OpenAir (PULL) |
| Retainers (Applied Customer Deposits) | Retainer | Transaction.currency | Payment.currency | NetSuite to OpenAir (PULL) |

Credits (Applied Credit Memos)

Credit Memo

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|--------------------------------|---------------|----------------------|---------------------|------------------------------------|
| Credits (Applied Credit Memos) | Credit Memo | Transaction.tranDate | Invoice.date | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Credit Memo | OA Customer.id | Invoice.customer_id | NetSuite to OpenAir (PULL) |
| Credits (Applied) | Credit Memo | = "1" | Invoice.status | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|--------------------------------|---------------|------------------------|--|------------------------------------|
| Credit Memos) | | | | |
| Credits (Applied Credit Memos) | Credit Memo | Autogenerated notes | Invoice.notes | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Credit Memo | currency | Invoice.currency | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Credit Memo | = "A" | Invoice.approval_status | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Credit Memo | Transaction.internalId | Invoice.netsuite_credit_memo_invoice_id__c | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Credit Memo | Transaction.tranId | Invoice.netsuite_credit_memo_number__c | NetSuite to OpenAir (PULL) |

Negative charge

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|--------------------------------|-----------------|--|------------------|------------------------------------|
| Credits (Applied Credit Memos) | Negative charge | CreditMemo.tranDate | Slip.date | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | -CreditMemo.amount | Slip.total | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | Created from NetSuite credit memo [tranId] | Slip.notes | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | Invoice.id | Slip.invoice_id | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | OA Customer.id | Slip.customer_id | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | OA Category.id | Slip.category_id | NetSuite to OpenAir (PULL) |
| Credits (Applied) | Negative charge | OA Product.id | Slip.product_id | NetSuite to OpenAir (PULL) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|--------------------------------|-----------------|--|-------------------|------------------------------------|
| Credit Memos) | | | | |
| Credits (Applied Credit Memos) | Negative charge | OA Project.id | Slip.project_id | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | currency | Slip.currency | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | OA slip type | Slip.type | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | Slip_type.id | Slip.slip_type_id | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | Calculated hours for type T and O | Slip.hour | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | Calculated minutes for type T and O | Slip.minute | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | Calculated rate for type T and O | Slip.rate | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | - CreditMemoltemList.quantity for type P | Slip.quantity | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | Calculated costs for type P | Slip.cost | NetSuite to OpenAir (PULL) |
| Credits (Applied Credit Memos) | Negative charge | Unit of measure for type P | Slip.um | NetSuite to OpenAir (PULL) |

Tasks (Support cases)

Support Case

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-----------------------|---------------|---|--|------------------------------------|
| Tasks (Support cases) | Support Case | ProjectTask.internalId | Project_task.netsuite_project_task_id__c | NetSuite to OpenAir (PULL) |
| Tasks (Support cases) | Support Case | = "1" | Project_task.netsuite_supportcase_record_type__c | NetSuite to OpenAir (PULL) |
| Tasks (Support cases) | Support Case | = "Case #" + ProjectTask.caseNumber + ". " + ProjectTask.name | Project_task.name | NetSuite to OpenAir (PULL) |
| Tasks (Support cases) | Support Case | ProjectTask.company | Project_task.customer_id | NetSuite to OpenAir (PULL) |
| Tasks (Support cases) | Support Case | ProjectTask.company | Project_task.project_id | NetSuite to OpenAir (PULL) |
| Tasks (Support cases) | Support Case | ProjectTask.startDate | Project_task.start_date | NetSuite to OpenAir (PULL) |
| Tasks (Support cases) | Support Case | currency | Project_task.currency | NetSuite to OpenAir (PULL) |
| Tasks (Support cases) | Support Case | ProjectTask.estimatedWork | Project_task.planned_hours | NetSuite to OpenAir (PULL) |
| Tasks (Support cases) | Support Case | Category.id | Project_task.default_category | NetSuite to OpenAir (PULL) |
| Tasks (Support cases) | Support Case | ProjectTask.stage == "_closed" | Project_task.closed | NetSuite to OpenAir (PULL) |

Purchase request (Purchase requisition)

Purchase request

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|------------------|----------------------------|--------------------------|------------------------------------|
| Purchase request (Purchase requisition) | Purchase request | purchaserequisition.entity | User.netsuite_user_id__c | OpenAir to NetSuite (PUSH) |

Request item

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|---------------|-----------------------------------|--------------------------------|------------------------------------|
| Purchase request (Purchase requisition) | Request item | purchaserequisition_item.item | Product.netsuite_product_id__c | OpenAir to NetSuite (PUSH) |
| Purchase request (Purchase requisition) | Request item | purchaserequisition_item.quantity | Request_item.quantity | OpenAir to NetSuite (PUSH) |

Exp Reports (Expense Reports)

Exp report

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-------------------------------|---------------|---|--------------------------|------------------------------------|
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.entity | User.netsuite_user_id__c | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.tranDate | Envelope.date | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.tranId | Envelope.number | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.custbody_oa_exp_approver_supervisor | User.netsuite_user_id__c | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.custbody_oa_exp_approver_project | User.netsuite_user_id__c | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.custbody_oa_expense_report_user | User vendor ID | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.advance | Envelope.advance | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.memo | Envelope.notes | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.accountingApproval | =true | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.supervisorApproval | =true | OpenAir to NetSuite (PUSH) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-------------------------------|---------------|--------------------------------|---------------|------------------------------------|
| Exp Reports (Expense Reports) | Exp report | ExpenseReport.useMultiCurrency | =true | OpenAir to NetSuite (PUSH) |

Vendor Bill

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-------------------------------|---------------|--|--------------------------|------------------------------------|
| Exp Reports (Expense Reports) | Vendor Bill | VendorBill.entity | User.netsuite_user_id_c | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill | VendorBill.tranDate | Envelope.date | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill | VendorBill.tranId | Envelope.number | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill | VendorBill.custbody_oa_exp_approver_supervisor | User.netsuite_user_id_cc | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill | VendorBill.custbody_oa_exp_approver_project | User.netsuite_user_id_c | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill | VendorBill.custbody_oa_expense_report_user | User vendor ID | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill | VendorBill.memo | Envelope.notes | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill | VendorBill.currency | Envelope.currency | OpenAir to NetSuite (PUSH) |

Expense Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-------------------------------|---------------|----------------------------------|-------------------------|------------------------------------|
| Exp Reports (Expense Reports) | Expense Line | ExpenseReportExpense.category | Item.netsuite_item_id_c | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Expense Line | ExpenseReportExpense.expenseDate | Ticket.date | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Expense Line | ExpenseReportExpense.memo | Ticket.notes | OpenAir to NetSuite (PUSH) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-------------------------------|---------------|------------------------------------|-----------------------------|------------------------------------|
| Exp Reports (Expense Reports) | Expense Line | ExpenseReportExpense.customer | Project.netsuite_project_id | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Expense Line | ExpenseReportExpense.amount | Ticket.total OR Tax amount | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Expense Line | ExpenseReportExpense.isBillable | see documentation | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Expense Line | ExpenseReportExpense.receipt | !Ticket.missing_receipt | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Expense Line | ExpenseReportExpense.currency | see documentation | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Expense Line | ExpenseReportExpense.foreignAmount | see documentation | OpenAir to NetSuite (PUSH) |

Vendor Bill Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-------------------------------|------------------|------------------------------------|-----------------------------|------------------------------------|
| Exp Reports (Expense Reports) | Vendor Bill Line | ExpenseReportExpense.category | Item.netsuite_item_id_c | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill Line | ExpenseReportExpense.expenseDate | Ticket.date | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill Line | ExpenseReportExpense.memo | Ticket.notes | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill Line | ExpenseReportExpense.customer | Project.netsuite_project_id | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill Line | ExpenseReportExpense.amount | Ticket.total OR Tax amount | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill Line | ExpenseReportExpense.isBillable | see documentation | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill Line | ExpenseReportExpense.receipt | !Ticket.missing_receipt | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill Line | ExpenseReportExpense.currency | see documentation | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Vendor Bill Line | ExpenseReportExpense.foreignAmount | see documentation | OpenAir to NetSuite (PUSH) |

Tax Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|-------------------------------|---------------|---|-----------------------------|------------------------------------|
| Exp Reports (Expense Reports) | Tax Line | ExpenseReportExpense.category | Item.netsuite_item_id_c | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Tax Line | ExpenseReportExpense.expenseDate | Ticket.date | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Tax Line | ExpenseReportExpense.memo | Ticket.notes | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Tax Line | ExpenseReportExpense.customer | Project.netsuite_project_id | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Tax Line | ExpenseReportExpense.amount OR Tax amount | Ticket.total | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Tax Line | ExpenseReportExpense.isBillable | see documentation | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Tax Line | ExpenseReportExpense.receipt | !Ticket.missing_receipt | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Tax Line | ExpenseReportExpense.currency | see documentation | OpenAir to NetSuite (PUSH) |
| Exp Reports (Expense Reports) | Tax Line | ExpenseReportExpense.foreignAmount | see documentation | OpenAir to NetSuite (PUSH) |

Invoices (Invoices)

Invoice

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|------------------------------------|---------------------------|------------------------------------|
| Invoices (Invoices) | Invoice | Invoice.entity | Customer.id OR Project.id | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice | Invoice.tranDate | Invoice.date | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice | Invoice.tranId | Invoice.number | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice | Invoice.job | Invoice.project_id | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice | Invoice.custbody_oa_invoice_number | Invoice.number | OpenAir to NetSuite (PUSH) |

Project

No default mappings.

Invoice Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|--|--|------------------------------------|
| Invoices (Invoices) | Invoice Line | InvoiceItem.item | Category.id | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceItem.quantity | Slip.quantity 1 calculated quantity for type T | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceItem.rate | Slip.cost Slip.rate for type T | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceItem.amount | Slip.total | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceItem.price | -1 if NS multiple prices enabled | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceItem.job | see documentation | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceItem.custcol_oa_credit_charge_type__c | NS credit charge type | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceItem.deferRevRec | = "true" | OpenAir to NetSuite (PUSH) |

Expense Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|-----------------------|-------------------------------|------------------------------------|
| Invoices (Invoices) | Invoice Line | InvoiceExpCost.doc | Envelope.netsuite_envelope_id | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceExpCost.apply | = "true" | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceExpCost.line | Ticket line ID | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Invoice Line | InvoiceExpCost.amount | Slip.total | OpenAir to NetSuite (PUSH) |

Purchase Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|--|----------------------------------|------------------------------------|
| Invoices (Invoices) | Purchase Line | InvoiceItem.item | Project.id | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Purchase Line | InvoiceItem.quantity | Slip.quantity 1 | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Purchase Line | InvoiceItem.rate | Slip.cost | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Purchase Line | InvoiceItem.amount | Slip.total | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Purchase Line | InvoiceItem.price | -1 if NS multiple prices enabled | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Purchase Line | InvoiceItem.job | see documentation | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Purchase Line | InvoiceItem.custcol_oa_credit_charge_type__c | NS credit charge type | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Purchase Line | InvoiceItem.deferRevRec | = "true" | OpenAir to NetSuite (PUSH) |

Bill Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|-----------------------|---------------|------------------------------------|
| Invoices (Invoices) | Bill Line | InvoiceItemCost.doc | PO ID | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Bill Line | InvoiceItemCost.apply | = "true" | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Bill Line | InvoiceItemCost.line | Item line ID | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Bill Line | InvoiceItemCost.cost | Slip.cost | OpenAir to NetSuite (PUSH) |

Vendor Bill Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|------------------|---------------------|---------------|------------------------------------|
| Invoices (Invoices) | Vendor Bill Line | InvoiceItemCost.doc | PO ID | OpenAir to NetSuite (PUSH) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|------------------|-----------------------|--------------------|------------------------------------|
| Invoices (Invoices) | Vendor Bill Line | InvoiceltemCost.apply | =“true” | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Vendor Bill Line | InvoiceltemCost.line | Item line ID | OpenAir to NetSuite (PUSH) |
| Invoices (Invoices) | Vendor Bill Line | InvoiceltemCost.cost | Purchase_item.cost | OpenAir to NetSuite (PUSH) |

Group by Time

No default mappings.

Group by Other

No default mappings.

Group by Fee

No default mappings.

Time Entries (Time)

Timesheet

No default mappings.

Time entry

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|-------------------|----------------------------------|------------------------------------|
| Time Entries (Time) | Time entry | TimeBill.customer | Project.netsuite_project_id__c | OpenAir to NetSuite (PUSH) |
| Time Entries (Time) | Time entry | TimeBill.employee | User.netsuite_user_id__c | OpenAir to NetSuite (PUSH) |
| Time Entries (Time) | Time entry | TimeBill.item | Category.netsuite_category_id__c | OpenAir to NetSuite (PUSH) |
| Time Entries (Time) | Time entry | TimeBill.tranDate | Task.date | OpenAir to NetSuite (PUSH) |
| Time Entries (Time) | Time entry | TimeBill.hours | Task.hours AND Task.minute | OpenAir to NetSuite (PUSH) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------|---------------|-----------------------------|-------------------|------------------------------------|
| Time Entries (Time) | Time entry | TimeBill.supervisorApproval | =true | OpenAir to NetSuite (PUSH) |
| Time Entries (Time) | Time entry | TimeBill.isBillable | see documentation | OpenAir to NetSuite (PUSH) |
| Time Entries (Time) | Time entry | TimeBill.memo | Task.notes | OpenAir to NetSuite (PUSH) |

Recognition transactions (Revenue Recognition Transactions)

Recognition transaction

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|-------------------------|---------------------------|--|------------------------------------|
| Recognition transactions (Revenue Recognition Transactions) | Recognition transaction | JournalEntry.currency | Revenue_recognition_transaction.currency | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Recognition transaction | JournalEntry.exchangeRate | Project.netsuite_exchange_rate | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Recognition transaction | JournalEntry.subsidiary | Project.netsuite_subsidiary_id_c | OpenAir to NetSuite (PUSH) |

Purchases Revenue Recognition

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|-------------------------------|---------------------------|--|------------------------------------|
| Recognition transactions (Revenue Recognition Transactions) | Purchases Revenue Recognition | JournalEntry.currency | Revenue_recognition_transaction.currency | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Purchases Revenue Recognition | JournalEntry.exchangeRate | Project.netsuite_exchange_rate | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Purchases Revenue Recognition | JournalEntry.subsidiary | Project.netsuite_subsidiary_id_c | OpenAir to NetSuite (PUSH) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------------|---------------|----------------|---------------|------------------------------------|
| Recognition Transactions) | | | | |

Journal Entry Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|--------------------|--------------------------|---|------------------------------------|
| Recognition transactions (Revenue Recognition Transactions) | Journal Entry Line | JournalEntryLine.account | Category.te_inc_acct_idd_c Category.netsuite_def_rev_acct_id_c | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Journal Entry Line | JournalEntryLine.credit | Revenue_recognition_transaction.total | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Journal Entry Line | JournalEntryLine.debit | Revenue_recognition_transaction.total | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Journal Entry Line | JournalEntryLine.entity | Project.netsuite_project_id_c | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Journal Entry Line | JournalEntryLine.memo | Revenue_recognition_transaction.notes | OpenAir to NetSuite (PUSH) |

Credit Purchase Journal Entry Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|------------------------------------|--------------------------|---|------------------------------------|
| Recognition transactions (Revenue Recognition Transactions) | Credit Purchase Journal Entry Line | JournalEntryLine.account | Category.netsuite_product_inc_acct_id_c | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Credit Purchase Journal Entry Line | JournalEntryLine.credit | Revenue_recognition_transaction.total | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Credit Purchase Journal Entry Line | JournalEntryLine.entity | Project.netsuite_project_id_c | OpenAir to NetSuite (PUSH) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|------------------------------------|-----------------------|---------------------------------------|------------------------------------|
| Recognition transactions (Revenue Recognition Transactions) | Credit Purchase Journal Entry Line | JournalEntryLine.memo | Revenue_recognition_transaction.notes | OpenAir to NetSuite (PUSH) |

Debit Purchase Journal Entry Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|-----------------------------------|--------------------------|--|------------------------------------|
| Recognition transactions (Revenue Recognition Transactions) | Debit Purchase Journal Entry Line | JournalEntryLine.account | Category.netsuite_product_def_rev_acct_id__c | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Debit Purchase Journal Entry Line | JournalEntryLine.debit | Revenue_recognition_transaction.total | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Debit Purchase Journal Entry Line | JournalEntryLine.entity | Project.netsuite_project_id__c | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Debit Purchase Journal Entry Line | JournalEntryLine.memo | Revenue_recognition_transaction.notes | OpenAir to NetSuite (PUSH) |

Credit Journal Entry Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|---------------------------|--------------------------|---------------------------------------|------------------------------------|
| Recognition transactions (Revenue Recognition Transactions) | Credit Journal Entry Line | JournalEntryLine.account | Category.te_inc_acct_idd__c | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Credit Journal Entry Line | JournalEntryLine.credit | Revenue_recognition_transaction.total | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Credit Journal Entry Line | JournalEntryLine.entity | Project.netsuite_project_id__c | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Credit Journal Entry Line | JournalEntryLine.memo | Revenue_recognition_transaction.notes | OpenAir to NetSuite (PUSH) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---------------------------|---------------|----------------|---------------|------------------------------------|
| Recognition Transactions) | | | | |

Debit Journal Entry Line

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|--------------------------|--------------------------|---------------------------------------|------------------------------------|
| Recognition transactions (Revenue Recognition Transactions) | Debit Journal Entry Line | JournalEntryLine.account | Category.netsuite_def_rev_acct_id__c | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Debit Journal Entry Line | JournalEntryLine.debit | Revenue_recognition_transaction.total | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Debit Journal Entry Line | JournalEntryLine.entity | Project.netsuite_project_id__c | OpenAir to NetSuite (PUSH) |
| Recognition transactions (Revenue Recognition Transactions) | Debit Journal Entry Line | JournalEntryLine.memo | Revenue_recognition_transaction.notes | OpenAir to NetSuite (PUSH) |

Send OA Credit (negative invoice) as NS credit memo

Credit

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|---------------|------------------------|----------------------------------|------------------------------------|
| Send OA Credit (negative invoice) as NS credit memo | Credit | CreditMemo.entity | Customer.netsuite_customer_id__c | OpenAir to NetSuite (PUSH) |
| Send OA Credit (negative invoice) as NS credit memo | Credit | CreditMemo.tranDate | Invoice.date | OpenAir to NetSuite (PUSH) |
| Send OA Credit | Credit | CreditMemo.createdFrom | Invoice.netsuite_invoice_id__c | OpenAir to NetSuite (PUSH) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|---------------|-----------------|-----------------------|------------------------------------|
| (negative invoice) as NS credit memo | | | | |
| Send OA Credit (negative invoice) as NS credit memo | Credit | CreditMemo.memo | Invoice.credit_reason | OpenAir to NetSuite (PUSH) |

Credit Memo

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|---------------|-------------------------|--|------------------------------------|
| Send OA Credit (negative invoice) as NS credit memo | Credit Memo | CreditMemoltem.job | Project.netsuite_project_id_c | OpenAir to NetSuite (PUSH) |
| Send OA Credit (negative invoice) as NS credit memo | Credit Memo | CreditMemoltem.item | Category.netsuite_category_id_c or Product.netsuite_product_id_c | OpenAir to NetSuite (PUSH) |
| Send OA Credit (negative invoice) as NS credit memo | Credit Memo | CreditMemoltem.quantity | Slip.quantity or — 1*“overall time” for type T | OpenAir to NetSuite (PUSH) |
| Send OA Credit (negative invoice) as NS credit memo | Credit Memo | CreditMemoltem.rate | Slip.rate for type T otherwise Slip.cost | OpenAir to NetSuite (PUSH) |
| Send OA Credit (negative invoice) as NS credit memo | Credit Memo | CreditMemoltem.amount | - Slip.total | OpenAir to NetSuite (PUSH) |

Credit Memo Apply Item

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|----------------|------------------------|-----------------------|----------------------|------------------------------------|
| Send OA Credit | Credit Memo Apply Item | CreditMemoApply.apply | T for unpaid Invoice | OpenAir to NetSuite (PUSH) |

| Chapter | Mapping Group | NetSuite Field | OpenAir Field | PUSH or PULL Integration Point Tag |
|---|------------------------|-----------------------------|--|------------------------------------|
| (negative invoice) as NS credit memo | | | | |
| Send OA Credit (negative invoice) as NS credit memo | Credit Memo Apply Item | CreditMemoApply.applyDate | Invoice.date | OpenAir to NetSuite (PUSH) |
| Send OA Credit (negative invoice) as NS credit memo | Credit Memo Apply Item | CreditMemoApply.type | =“invoice” | OpenAir to NetSuite (PUSH) |
| Send OA Credit (negative invoice) as NS credit memo | Credit Memo Apply Item | CreditMemoApply.amount | Invoice.total | OpenAir to NetSuite (PUSH) |
| Send OA Credit (negative invoice) as NS credit memo | Credit Memo Apply Item | CreditMemoApply.createdFrom | Invoice.netsuite_invoice_id_c of unpaid original Invoice | OpenAir to NetSuite (PUSH) |

Update NetSuite projects with NS OpenAir project data

Update Project

No default mappings.

Update NetSuite tasks with OpenAir tasks data

Update Task

No default mappings.

What's New

Overview

This chapter documents new features and functionality as they are added to the integration. Since these additions often occur when there is a new OpenAir release, they are categorized under the release date.

April 14, 2018

New features include:

- Added [OpenAir Revenue Recognition with NetSuite Advanced Revenue Management](#).
- Added [Always attempt to send all viable time entries](#).
- Added [Enable use of NetSuite time units of measure](#).

October 14, 2017

New features include:

- Added Token-Based Authentication. See [Token-Based Authentication](#).
- Added ability to integrate OpenAir projects and tasks on save in real-time. See [Configuring the Real-Time Integration](#).
- Added ability to change the number of threads used by NS Connector for integrations with SuiteCloud Plus. See [Setting the Maximum Number of Threads Used by NS Connector](#)
- Added As Billed, Fixed Amount on Date or Milestone, Percent Complete, and Incurred vs. Forecast Revenue Recognition Rules for Advanced Revenue Management. See [OpenAir Revenue Recognition with NetSuite Advanced Revenue Management](#).

April 15, 2017

New features include:

- Added workflow for integrating Vendor Credits from NetSuite to OpenAir. See [Configuring the Vendor Credit Integration](#).
- Added support for the NetSuite 2016.2 endpoint. You need to request NetSuite Professional services to enable this feature. See [Use 2016.2 communication endpoint](#).
- Added the ability to integrate OpenAir Purchase Requests on approval in real-time.

Changes to this guide include:

- Updated procedure for setting up the integration in OpenAir using NetSuite 2016.2 endpoint. See [To set up the NetSuite Integration in OpenAir](#):

October 15, 2016

New features include:

- Added workflow for OpenAir Purchase Requests and Purchase Request Items to NetSuite Purchase Requisitions and Purchase Requisition Items. See [Working with Purchase Requisitions in OpenAir](#), [Terminology Mapping for the Integration](#), and [OpenAir to NetSuite Data Mapping](#).
- Added chapter for default integration mappings. See [OpenAir Connector Default Integration Settings](#).
- Added [Skip merge of matching clients with NS Internal ID](#)

April 16, 2016

New features include:

- User interface now supports advanced mapping in the visual mapping grid. See [New User Interface](#).
- Real-time screen allows you to set rules for integration runs on OpenAir approvals. See [Real-time](#).
- Chapters now include field grouping tabs which organize mapping fields. Tabs which aren't visible due to screen space can be viewed by clicking the ... icon. See [New User Interface](#).
- Added new role permissions. See [Integration Role Permissions](#).
- Added import / export settings from the Tips menu. See [Tips Menu](#).
- Added Real-time sync options, including on saving NS records, approval of OA records. See [Configuring the Real-Time Integration](#) and [Tips Menu](#).
- Added the ability to sync on-demand from the Tips menu or using the API. See [Tips Menu](#), and [To Sync On-Demand from the Tips Menu](#).
- Added the ability to make multiple updates to the same record within a short period of time. See [Enable high-frequency real-time support](#).
- Added the ability to disable NS/OA Connector's check for the NetSuite Revenue Recognition switch. See [Disable NetSuite revenue recognition feature check for recognition transaction integration \(Revenue Recognition Transactions\)](#).
- Added the ability to include taxes applied to exported OA credit invoices. See [Import taxes applied to exported OA Credit \(negative invoice\) \(Send OA Credit \(negative invoice\) as NS credit memo\)](#) [Import taxes applied to exported OA Credit \(negative invoice\) \(Send OA Credit \(negative invoice\) as NS credit memo\)](#)

October 17, 2015


New features include:

- New user interface available with a visual mapping grid. See [New User Interface](#)



Important: Enabling this feature will not convert any advanced mappings to the new interface. This must be done manually. Implementing this feature should be done with PS assistance.

- Add ability to import NetSuite Cases as OpenAir project tasks. See [Configuring the Support Case Integration](#).
- Enhanced NetSuite purchase/vendor bill integration. See [Configuring Purchaser Integration](#).
- Add ability to run the integration more than six times a day.
- Support for multiple, simultaneous runs of the integration. See [Configuring Multi-Threading Support](#)

 **Note:** It's necessary to have active NetSuite SuiteCloud Plus license which allows up to ten multiple webservices threads.

- Support added for Advanced Revenue Management. See [Configuring Integration for Percent Complete Rules with NetSuite Advanced Revenue Management](#)

April 18, 2015

No new features were added for this release.

October 18, 2015

No new features were added for this release.

May 17, 2014

New features include:

- Add ability to use NetSuite exchange rate in revenue transaction export. See [Do not use OpenAir project exchange rate on invoice and recognition transaction export](#).
- Add support for multi-phase depth in OA WBS export to NS opp lines. See [Enable NS OpenAir project work breakdown structure to NetSuite opportunity integration](#).
- Add ability to pass OpenAir loaded cost information to a NetSuite custom record. See [Enable NS OpenAir Loaded Cost to NetSuite custom record integration](#).

February 15, 2014

New features include:

- Add ability to import project tasks from NetSuite into OpenAir. See [Working with Task Records in OpenAir](#).
- Add ability to export project tasks from OpenAir into NetSuite. See [Implementing the Export of OpenAir Task Data to NetSuite](#).
- Mapping NetSuite transaction number to the OpenAir purchase request and purchase order number is now optional. See [Other Options](#).

November 16, 2013

No new features were added for this release.

August 17, 2013

New features include:

- Add support in SRP integration to automatically know what data center URL to use for an account. See [Filling in the NetSuite Integration Form in OpenAir](#).
- Add support for 2013.1 endpoint. You need to request NetSuite Professional services to enable this feature. See [Configuring NetSuite for the Integration](#).

- Add support for setting the role for the integration user. See [Filling in the NetSuite Integration Form in OpenAir](#).
- Add support for NetSuite multi-currency customer feature.
- Add support for advanced mapping (including filtering) of WBS export. See [PUSH Integration Point Tags](#).

May 18, 2013

New features include:

- Add "Email log for manual integration run" option to email the integration log when the integration is run manually. See [Configuring Email Options](#).
- Add option to set integration errors on NetSuite records. See [Enable feature to set import errors on NetSuite records](#).

January 19, 2013

New features include:

- A tip from the NetSuite integration form is available to get the data center specific URL. See note in [Filling in the NetSuite Integration Form in OpenAir](#).
- Support project expense policy feature in NetSuite integration. "Duplicate expense policy" is provided as an available checkbox when creating a project from a template in NetSuite. See [Implementing OpenAir Project Templates](#).

November 17, 2012

New features include:

- Option to move the "Update the NetSuite opportunity line items" link for the Tips section to the header section and rename it as "Finalize WBS". See [Enable NetSuite opportunity export link in project navigation bar](#)
- Add capability to set project-specific rate card through project integration from NetSuite to OpenAir. See [Map the OpenAir rate card from the NetSuite project](#).

September 15, 2012

New features include:

- Add support for portfolio projects when used with the project template feature in NetSuite integration. See [Create new projects based on the project template specified in NetSuite](#).
- Add support for running saved searches for items and saving as job codes.
- Export project task assignments to NetSuite opportunity. See [Enable NS OpenAir project work breakdown structure to NetSuite opportunity integration](#)

July 14, 2012

New features include:

- Add ability to export loaded cost with time entries and import cost centers. See [Enable loaded cost export with the timesheet export](#).
- Add ability to use saved searches to import list data.

May 12, 2012

New features include:

- Added new functionality to *Configuring Optional Features* for Configuring the Sales Order Integration. Added the ability to generate OpenAir revenue recognition rules when you create a new PO that has a corresponding billing rule. See [Configuring the Sales Order Integration](#) and [Customizing Revenue Recognition Rules](#).
- Added new functionality to *Configuring Optional Features* for Configuring the Real#Time Integration. You can update customer, employee, and project records in NetSuite. When you save, the changes transfer to OpenAir real-time. You can also include Leads and Prospects. See [Configuring the Real-Time Integration](#).
- Added new functionality to *Configuring Optional Features* for Configuring the PSA Center Tab now available with version 4.0 of the OpenAir: Single Sign-on feature. See [Configuring NetSuite Single Sign-On](#).
- Added more detail to *Configuring the Integration* for configuring custom preferences for the [OpenAir Integration](#), [OpenAir: Single Sign-on](#), [OpenAir: Real-time Integration](#), and [OpenAir: WIP Accounting](#).
- Updated *Using the Integration* to include revenue recognition rules in [Working with Sales Orders in OpenAir](#) and custom mappings for tax location information in [Working with Expense Reports in NetSuite](#).
- Updated *Data Mapping in the Integration* to include mapping of NetSuite sales orders to OpenAir Purchase Orders (POs). Revenue recognition rules are optionally transferred to OpenAir when new sales orders are created. See [NetSuite to OpenAir Data Mapping](#).
- Updated *Using Advanced Settings* integration points to add mapping syntax for revenue recognition rule types and expense report line tax information for NetSuite expense report exports. See [Using PULL and PUSH Tags](#).
- Updated *Using Advanced Settings* to include a Frequently Asked Questions section. See [Frequently Asked Questions \(FAQs\)](#).

March 17, 2012

New features include:

- Added new functionality to *Configuring Optional Features* for Configuring the Purchases/Vendor Bills Integration. You can transfer vendor bills from NetSuite to OpenAir purchase orders. See [Configuring the Purchases/Vendor Bills Integration](#) and specifically [NetSuite Vendor Bills to OpenAir Purchase Orders](#).
- Updated *Using the Integration* to include Working with Purchases/Vendor Bills in OpenAir to include NetSuite Vendor Bills to OpenAir Purchase Orders. See [Working with Purchases/Vendor Bills in OpenAir](#) and specifically [NetSuite Vendor Bills to OpenAir Purchase Orders](#).
- Added new functionality to *Configuring Optional Features* for the Email alerts. Receive email notifications every time you run the integration or only when an error occurs. See [Configuring Email Options](#).
- Updated *Using Advanced Settings* to include a new conditional transformation. Use a comparison of fields in conditions and set a value based on results of the comparison. See [Compare Fields and Conditionally Set a Value](#).

- Updated *Using Advanced Settings* integration points used to exchange data from NetSuite vendor bills to OpenAir purchase items and purchase orders. See [Using PULL and PUSH Tags](#).

Enhancements to the document include an expansion of [Error Messages](#) to include all known errors to date. Also added more information such as possible causes, in addition to steps for correcting an error condition.