ORACLE NETSUITE

Auditing and Data Management Guide

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Tracking Changes in NetSuite

The following topics provide information about tracking changes in NetSuite:

Auditing Primary Data and Configuration Changes in NetSuite

Note: Unless identified as a System Notes v2 feature, the information in this topic applies only to System Notes . For more information about System Notes v2, see the help topic System Notes v2 Overview,

This section provides details about NetSuite features for tracking changes, including links to a wide variety of related topics. This background about NetSuite's auditing capabilities is intended to assist you in developing a strategy to achieve your control objectives. This content will be enhanced as new information is added and as existing procedures are refined, so check back regularly for updates.

Tools for Auditing in NetSuite

NetSuite provides system notes that track many data and configuration changes. In most cases, you can determine whether a record, or a group of configuration settings, supports system notes based on whether a System Notes subtab is available on its NetSuite page. For more information about system notes, see the help topic System Notes Overview.

You can use NetSuite's search capabilities to access system notes for auditing purposes.

- A general system note search can return system notes for all record types. A system note search can be filtered by record type, so that the results include only system notes for a particular record type. See Searching System Notes.
- Searches of record types that support system notes can include system notes details in results. For example, a customer search can include values for system notes fields related to customer record changes in results. This support is based on a join between system notes records and their related parent records. See the help topic Defining an Advanced Search.

- System notes include a **Context** field. The context describes how the change was made. For example, users and external systems can perform updates through the user interface, web services, SuiteScript, and a variety of other methods. Each method is considered a context. See Understanding the Context for Changes.

NetSuite provides predefined audit trails for many frequently used records. Audit trails are searches of system notes, with filters and results already defined.

- An audit trail link, available at the top of most list pages, can return system notes for a particular record type. See Viewing an Audit Trail for a Record Type.
- The audit trail for transaction records is available at Transactions > Management > View Audit Trail. See Using the Transaction Audit Trail.

Also see Auditing Data Changes using Searches.

Many record types also include a History subtab where you can track updates to each record, including line-level changes.

The deleted record search type lets you retrieve details about records that have been deleted. See Searching for Deleted Records.

Auditing Changes to Enabled Features

The Enable Features page (Setup > Company > Enable Features) indicates which features are currently enabled for use in a NetSuite account. Although this page does not have a System Notes tab, it does support system notes.

You can create a system note saved search that returns system notes for the Enable Features page, by choosing the **Enable Feature** filter for the **Record Type** field of the search. You can run this search regularly to track changes to enabled features.

The Enable Features page includes a link to an Audit Trail page. It is available from the **More** list in the upper right of the page. See Auditing Account Preferences.

Auditing Changes to Configuration Settings

Changes to general configuration settings that have a financial impact are logged in system notes. Areas covered by these system notes include: company information, general preferences, accounting lists, and tax setup.

For a list of the specific pages covered, see System Notes for Changes to Configuration and Setup Pages.

The Company Information page (Setup > Company > Company Information) has a System Notes subtab. Most of the other configuration pages do not have this tab. You can create a system note saved search that returns system notes for these pages, by setting a filter for the **Record Type** field of the search. For system notes for the Company Information page, choose the **Company Information** filter. For system notes for the General Preferences and Accounting Preferences pages, choose the **Company Preferences** filter. For system notes for an accounting list, set a filter that matches the name of that list.

The General Preferences and Accounting Preferences configuration pages include a link to an Audit Trail page. It is available from the **More** list in the upper right of the page. See Auditing Account Preferences.

Tracking Roles and Permissions

You can use searches to return details about role and permission assignments in your NetSuite account.

System Notes

- NetSuite provides a simple role search you can use to find a particular role or set of roles, or to return a list of roles and their characteristics. For information about running simple searches, see the help topic Defining a Simple Search.
- You can use the SuiteScript Search APIs to create and automate role searches. For more information see the help topic Search APIs. Note that role record searches do not support the `nlapiLoadSearch(type, id)` search API.
- You can create advanced employee and role record saved searches to find information about roles and permissions. For example, you can verify permissions assigned to a role, or verify permissions assigned to an employee or an employee's role. For information about auditing permissions, see the help topics Use Searches to Audit Roles and Use Searches to Audit Permissions By Employee.
- A History subtab is available on the Access tab of the Employee record, that shows changes to roles and global permissions assignments for the employee. The History subtab includes date/time, user, and a description for each change.
- NetSuite provides a function you can use to quickly review the differences in permissions between roles. See the help topic Showing Role Permission Differences.
- As of 2020.1, system notes for roles and permissions captures change information related to primary fields only. It does not capture change information made on available tabs.

System Notes v2

- You can access System Notes v2 for roles and permissions by clicking System Notes in the upper right of the Role page.
- For information about System Notes v2, see the help topic System Notes v2 Overview.
- For more information about System Notes v2 for roles and permissions, see the help topic Viewing System Notes v2.

Auditing Changes to Customization Objects

See the following for tips for tracking changes to customizations in your account:

- Custom Lists, Custom Records, and Custom Transactions
- Custom Fields
- Custom Forms
- SuiteScripts
- Plug-in Implementations
- Workflows
- Customized Reports and Saved Searches

Custom Lists, Custom Records, and Custom Transactions

Each custom list definition page has a History subtab and a System Notes subtab. These subtabs have mostly the same information, except the System Notes subtab includes the context for changes.

Each custom record type definition page has a History subtab and a System Notes subtab. The System Notes subtab has additional fields not included on the History subtab, and the History subtab includes Notes. You can include system notes fields in a custom record type search, by selecting them on the

Results tab of the saved search definition page. You can create a system note saved search that returns system notes for a custom record type, by choosing the record type name as a filter for the **Record Type** field of the search.

Currently each custom transaction type definition page does not have a History subtab or System Notes subtab. You can include system notes fields in a custom transaction type search, by selecting them on the Results tab of the saved search definition page. (To create a search for a custom transaction type, you need to create a Transaction search and set the **Type** field to the specific custom transaction type.) You can create a system note saved search that returns system notes for all transactions, including custom transaction types, by choosing the **Transaction** filter for the **Record Type** field of the search.

Custom Fields

Each custom field definition page, for most types of custom fields, has a History subtab and a System Notes subtab, both of which are displayed under History. These two subtabs have slightly varying fields.

System notes for fields with encrypted stored values mask old and new field values, displaying asterisks only, for security reasons.

History and system notes are supported for custom entity fields, custom item fields, custom transaction body fields, custom transaction column fields, custom transaction item option fields, and other custom fields.

History and system notes currently are not supported for custom item number fields or custom segments.

Custom Forms

Each custom form definition page has a History subtab. For each change, this subtab lists the date/time, user, type of change, and any notes.

History is supported for custom entry forms, custom transaction forms, and custom address forms.

SuiteScripts

Script and script deployment record activity is logged on the System Notes subtab.

Each system note for a change to a script or script deployment captures the following information:

- Date when the change was made
- Who made the change
- Context for the change (for example, UI)
- Type of change, for example, Edit
- Field changed
- Old value
- New value

Note: Script and script deployment records created before 2016.2 have a History subtab and a System Notes subtab. The History subtab lists logged activity that occurred before 2016.2, and the information on this subtab is no longer updated.

During script execution, a detailed script execution log is generated when either an unexpected error occurs or the `nlapiLogExecution` method is called. See the help topic Creating Script Execution Logs.

NetSuite provides access to the current and past runtime statuses of all SuiteScript 1.0 scheduled scripts that have been executed in your account. See the help topic Monitoring a Scheduled Script's Runtime Status. A similar page is provided for monitoring the status of SuiteScript 2.0 map/reduce scripts.

You can view a list of all record types that have user event or global client scripts associated with them in your account. See the help topic The Scripted Records Page.

Change management for edits to script files can be handled outside of NetSuite, through the source control management system used by script developers.

Plug-in Implementations

Plug-in implementation record activity is logged on the System Notes subtab.

System notes are also logged for Custom GL Lines Plug-in configuration changes.

Each system note for a change to a plug-in implementation captures the following information:

- Date when the change was made
- Who made the change
- Context for the change (for example, UI)
- Type of change, for example, Edit
- Field changed
- Old value
- New value

Note: Plug-in implementation records created before 2016.2 have a History subtab and a System Notes subtab. The History subtab lists logged activity that occurred before 2016.2, and the information on this subtab is no longer updated.

Workflows

The Workflow Manager in NetSuite includes information about changes to the workflow definition. For more information, see the help topic Workflow Definition Page History Subtab. You can view workflow history statistics and delete workflow instances and history records on the Workflow History Record Statistics dialog. When you delete workflow instances and history records, the event is logged on the Workflow Definition Page History subtab. Additionally, when the workflow instances and history records are deleted, the user who initiated the action receives an email indicating that the deletion is complete. See the help topic Deleting Workflow Instances and History Records. Additionally, you can specify whether workflow history records are saved for workflows.

You can specify whether workflow instances and history records are saved for workflows. You can enable the **Only When Testing** option to generate workflow history records only when the **Release Status** is set to **Testing**. See the help topic Disabling History for a Workflow.

You can run a search to get a list of workflow instances that completed or are currently in progress for a specific workflow definition or multiple workflow definitions. See the help topic Workflow Instance Search. You can also run a system notes search to see if changes have been made to a workflow. You can find more detailed information about the changes indicated in system notes search results on the Workflow Definition Page History Subtab.

For more detailed monitoring of what a workflow is doing, you can enable logging that tracks all actions and transitions that execute on a record for each state that a workflow enters. See the help topic Workflow Execution Log. You can specify that the history records related to the workflow instance's

execution be deleted from the database after the workflow finishes or is canceled. See the help topic Workflow History Subtab.

You can use workflow revisions to track the nature and number of modifications made to a workflow. You can track workflow revisions on the Workflow Definition Page History subtab, and through System Notes searches with the new **Revision** column. For details about the revision changes tracked on the Workflow Definition Page History subtab, see the help topic Workflow Definition Page History Subtab. For more information about workflow definition revisions, see the help topic Workflow Revisions.

Customized Reports and Saved Searches

You can use the Analytics Audit Trail search to display audit trail data covering changes to the definitions of saved searches, custom reports, report schedules, and financial report layouts. See the help topic Audit Trail Search.

Information on execution of saved searches is available via the saved search Execution Log and the Saved Searches list. See the help topic Auditing Saved Search Execution.

Tracking User Logins

You can use the Login Audit Trail to keep track of account users, when they have logged in, and from where. See the help topic Login Audit Trail Overview. This specialized search includes fields to track tokens associated to users, for accounts that use token-based authentication. See the help topic Troubleshoot Token-based Authentication (TBA).

System Notes capture password change information for employee, customer, vendor, partner, and prospect records. The system notes include details about who made the change, the date and time the change was made, and the type of change. Some examples of types of changes include USER_CHANGE, USER_RESET, EXPIRED, ADMIN_SET, GENERATED, and so on.

If a user has access to roles in different NetSuite accounts, the password changes are also tracked in those accounts. For more information, see the help topic Password Changes Are Logged in System Notes on Entity Records.

Tracking Emails

The Sent Email List provides a view into all outgoing email sent from an account. You can view email that was delivered successfully as well as email that was not delivered to the recipient.

The Sent Email feature provides information on all outbound email sent from an account and records the following details for all outbound email:

- Send date and sender (From)
- Recipients (To/Cc/Bcc), message ID, subject
- Email delivery status per recipient

For more information about how you can view the Sent Email List, incorporate new saved searches, and schedule saved searches, see the help topic Using the Sent Email List.

Tracking Key Financial Record Audit Trails

See the following for tips for tracking changes to key financial records:

- General Transaction Audit Trail

General Transaction Audit Trail

NetSuite stores data on each entry that a user makes to create, change, or delete a transaction. This data includes all users involved in the history of this transaction, each user's action, the user's role, the date and time of that action, whether there was an account impacted, and the amount after the change. This historical data may be referred to as system notes, an audit trail, or as history. NetSuite provides a variety of methods for you to retrieve historical details about changes made to transaction records. See the following for information:

- Transaction System Information and Communication Subtabs
- Granting User Access to Transaction History
- Using the Transaction Audit Trail
- Viewing Transaction System Notes
- General Ledger Tracking in Transaction System Notes
- Tracking Financial Account Changes
- Line-Level Audit Trail for Transactions
- Transaction Line-Level History Window

Tracking Transaction Deletion

The deleted record search type lets you retrieve details about records that have been deleted. See Searching for Deleted Records. To search for deleted transactions, choose the **Transaction** filter for the **Record Type** field of the search.

Some countries legally require that a reason is provided whenever a transaction is deleted. The Use Deletion Reason feature satisfies this requirement by making it mandatory for users to record the reason for deleting a transaction. For details, see Recording a Reason for Deleting a Transaction. The field that tracks deletion reasons is available to SuiteScript and web services.

Tracking Revenue Recognition Changes

System notes are supported for advanced revenue management records, including revenue arrangements, revenue elements, revenue recognition rules, revenue recognition plans, and advanced revenue setup records. For details, see the help topic Change Information for Revenue Recognition Records.

Tracking Changes to Items

An audit trail link is available on the Items list page. This link provides access to a simple search page where you can search for items by old value or new value, as well as by other field values.

Each item record includes a System Information subtab that provides system notes, a list of active workflows on the item, and a history of workflows executed against the item.

Tracking Changes to Journal Entries

Each journal entry record includes a System Information subtab that provides system notes, a list of active workflows on the journal entry, and a history of workflows executed against the journal entry.

Tracking Changes to Projects

An audit trail link is available on the Projects list page. This link provides access to a simple search page where you can search for projects by old value or new value, as well as by other field values.

Each project record includes a System Information subtab that provides system notes, a list of active workflows on the project, and a history of workflows executed against the project.

Tracking GL Audit Numbering

The GL Audit Numbering Sequences page provides general ledger audit numbering information specific to the accounting period in which the sequence was run, even if the period is closed. Each numbering sequence is saved as a separate record and the history is maintained. You can also create a GL numbering sequence from the GL Audit Numbering Sequences page. For details, see the help topic Viewing GL Audit Numbering Sequences.

You can customize financial reports including the Trial Balance, Balance Sheet, and Income Statement to include or exclude general ledger audit numbered transactions. You can also filter transactions on reports through the GL Audit Number field. For details, see the help topic Reports and Saved Searches.

System-Generated Journal for NetSuite OneWorld

NetSuite provides a system-generated, read-only journal. This journal represents the general ledger impact of payments that are at varying states of completeness in your system.

To view system journals, on the bill payment record, click the Related Records subtab. Click the number link associated with the system journal you want to view. You must have at least View level of the Make Journal Entry permission to view system journals.

For additional information about system-generated journals, see the help topic System-Generated Journals for Payments.

Auditing Account Preferences

The Enable Features, General Preferences, and Accounting Preferences configuration pages include a link to an Audit Trail page.

Account administrators can use the Audit Trail to review a list of changes, including the names of changed preferences and features, who changed them, when they were changed, what the values of the preference were before and after the changes, and whether the changed features were enabled or disabled.

To access the Audit Trail link:

1. Go to the desired Setup page:
   - For **Enable Features**:

     access this page at Setup > Company > Enable Features.

- For **General Preferences**:

  access this page at Setup > Company > General Preferences.

- For **Accounting Preferences**:

  access this page at Setup > Accounting > Accounting Preferences.

2. Click **More** and select **Audit Trail** from the dropdown list.
3. If desired, filter the result list by selecting from the **Feature**, **User**, **Preference**, or **Modified by** dropdowns.

Note: The General Preferences and Accounting Preferences pages support SuiteScript. If a preference has been reset through scripting, NetSuite administrators will be able to view all details regarding the change.

Important: Although SuiteScript developers will be able to programmatically obtain values on the Enable Features page, SuiteScript cannot be used to set or change values.

Documenting Changes

It is important that you design appropriate controls in your system development life cycle (SDLC) related to customizations of the NetSuite application, such as custom roles, scripts, custom records, workflows, and other customizations. Your change management process should ensure that changes are authorized, tested, approved, and documented.

You should document changes on a standard change request form. This form can be physical, but an electronic form is recommended. For example, depending on the nature of the change, the NetSuite product team maintains change documentation through issue records, production maintenance records (a custom record type created for this purpose), or feature records.

Depending on business needs, NetSuite custom records can be tailored to serve as change request forms. Ideally, whatever documentation is used, the form should contain information that can easily be completed by the requestor. The request should be tracked internally via a document repository tool, and should include an approval mechanism to move the request from stage to stage in the change management process. A benefit to using issue records or custom records within NetSuite is that you can run saved searches on these records to generate a list of all changes for specific periods. Saved searches also support filtering to deliver information needed for audits or reviews. Using custom records also makes it easier to ensure that required fields are completed before tickets are closed, and that approvals are obtained before a change request moves to the next level. Fields such as attachments of test plans, or summary of test results can be required within the request.

A change request form should include information such as:

- Requestor name
- Date of change request
- Description of change request
- Reason for change
- Assignee to implement change
- Authorization to begin work to implement change

Custom forms can be combined with a workflow to ensure that approvals are routed automatically when specific steps are completed. For example, after a requestor submits the form, it can go to an authorized

individual or group to approve the change. The request can then be routed to other approvers as it moves through the following steps of the process:

- Development
- Testing / Quality Assurance (QA)
- Implementation in Production

Each step along the way should be documented on the request form. This documentation provides point-in-time information on each change, identifying the account in which the code change resides, responsibility for the change, and the impact of the change.

As with any process, exceptions may occur, and when they do, the change management process needs to document how to handle these exceptions and capture appropriate evidence. It is possible, for example, that if production code breaks, a developer may be required to go directly into the production code to quickly correct the problem. That change would then be worked backwards into the other accounts, like test and development. In this example, that emergency change would be documented on the request form. It would be noted who performed the change in the production account, when it was performed and why it did not follow normal SDLC procedures. It is important to capture these details as evidence for auditors. A well-controlled program code change management process includes strong segregation-of-duties controls to ensure the right people are making the code changes and moving code to the correct accounts, only after receiving the proper approvals.

Audit Enablement

The NetSuite application has many features that enable user entities to build and manage proper internal controls over its financial reporting. The use of NetSuite as a financial system provides the opportunity for financial process controls to exist in a single system for the organization and then extend that functionality with applications from Fastpath or Strongpoint.

There are several customizations that can be done to help ensure that financial transactions are reasonably free from misstatements due to errors. These include:

- Workflows to establish dual authorization to address segregation of duties issues

  Workflows provide additional segregation of duties controls beyond logical security. For example, workflows can provide approval limits and prevent users from approving their own transactions. Workflows can be designed and built in NetSuite by organizations to meet that company's specific needs.

- Scripting

  Scripts are another way to establish controls that are not built into NetSuite by default. For example: currently within NetSuite, invoices are required to be reviewed and approved by the person who created the PO and who is the business owner for the expense. This requirement enables the Accounts Payable team to determine whether the invoices from the vendors are appropriate, and to ensure that they are matched against the proper invoice. Currently, this determination is done through scripting. When the Accounts Payable team creates an invoice against a vendor and PO, an email is sent to the business owner requesting approval of the invoice for payment.

- Audit trail saved searches to monitor specific transactions

  For most financial transactions in NetSuite, an audit trail is established and can be tracked and searched. Changes to roles, customizations released into the system, transactions created, as well as other common changes, can all be tracked in the system, with some exceptions. Saved search alerts can be created to identify items outside of ordinary processing. A saved search alert for any transactions initiated by personnel who would not normally be initiating such transactions is an example. A company may want to identify any POs created by Accounts Payable because they are part of the procure-to-pay process. Monitoring POs created by Accounts Payable could allow management

to detect any questionable transactions, especially if the user is involved in another part of the process. Monitoring changes to credit levels, terms, and addresses are other examples of changes that can be monitored through saved searches.

- Manual controls

  There are some areas in NetSuite not yet addressed by automatic control. It is important to review these items and ensure that controls outside the system are established to monitor these types of transactions.

  - Audit trails for journal entries post-approval

    Currently, there is no audit trail to detect when a journal entry is edited after it has been approved, or when the approver edits the entry prior to approval. Therefore, it is important to establish proper journal entry review and account reconciliations. It may also be prudent to add spending reviews for expense or disbursement accounts to check for any unusual entries. As the reviews are now the key controls, proper segregation of duties should be used for selecting the reviewer.

  - Audit trails for account setup

    Account setup is currently not tracked, except for the header information (user who performed an edit, date and time). This tracking does not include details of changes. It is important to establish post-setup reviews by a different person, and also to establish controls for certain significant transactions that can be impacted by changes to the setup. One example is the credit limit for customers. This feature can be turned on or off, which could allow customers to exceed their credit limits. A periodic review of customer balances against their credit limits could be used to detect whether any have exceeded their limits. Because there may be instances where the excess to the credit limit is approved, it is important to carefully design and establish how approval is obtained and documented.

  - Three-way matching for PO, invoice, and receipt of goods

    It is important to establish a process to monitor purchases. Monitoring, scripting, and evidence of approval may be used to support purchase and invoice authorization. Within NetSuite, the Accounts Payable team monitors and ensures that there is a PO before any transaction is entered into with a vendor, and if this is not the case, a PO violation is reported and monitored. Invoices are approved and validated to ensure that they do not go over the PO amount. Invoices over the PO amount require another approved PO or will result in a reported PO violation. The Accounts Payable team also validates that services or goods are being received.

NetSuite is a tool designed to help its customers meet their business needs, but it is up to customers to ensure that they properly understand their requirements and figure out how they can use NetSuite to meet those requirements. The implementation of controls to enable auditing is customizable for each customer's business needs. Customers should properly understand their risks, how they want to address them, the level of controls to be put in place, and how they will monitor these controls. They also need to understand their compliance obligations, and the requirements for each of these obligations.

Internal Controls in NetSuite

This section lists internal controls that are readily available in NetSuite. This listing is provided as a reference to assist you in building strong internal controls in your NetSuite implementation.

- Some controls do not require setup after your NetSuite account is operational. See Standard Internal Controls.
- Other controls require some basic setup in the NetSuite UI before they are available. See Internal Controls that Require Basic Configuration.

No customizations are required for you to utilize any of these general controls in your NetSuite implementation. Audited companies should consider taking credit for the partial or full mitigation of risks provided these internal controls.

Many internal control processes specific to your company may require the creation of some basic customizations, such as custom fields, custom records, workflows, and scripts. These types of custom solutions may be available as NetSuite SuiteApps, or Partner Applications. These solutions can also be built by NetSuite developers.

Customizations made for internal controls are tracked in system notes. For more information, see the help topic System Notes Overview.

Warning: This content is not intended to be an all-inclusive list or to represent what a company needs to adopt to be SOX-compliant. There are many other internal controls available in NetSuite and all companies should take a risk— based approach to ensuring materially accurate financial statements. This content provides examples of internal controls utilized in our system.

Standard Internal Controls

The following internal controls do not require any setup after your NetSuite account is operational.

- Accounts Receivable
  - Outstanding invoices are aged and added to an A/R aging report in real time.
- Financial Close
  - General ledger accounts automatically roll up into financial statement line items.
  - The financial statement consolidation process is performed on a real-time basis.
  - The general ledger is automatically configured to include all accounts with balances.
  - All transactions automatically roll up into the general ledger in real-time.
  - Transactions cannot be posted to closed periods in NetSuite.
  - Out of balance transactions are automatically rejected.
  - Transactions referencing a closed period are automatically rejected.
  - Transactions containing an invalid or inactive GL segment, for example, account or cost center, are automatically rejected.
  - CTA (cumulative translation adjustments) are automatically calculated in NetSuite.
  - FX (currency translation) related adjustments are automatically calculated in NetSuite.
  - Access to open and close the GL accounting period in NetSuite is restricted to selected users. After a GL period is closed, NetSuite subsequently does not allow posting of any GL-impacting entries to a closed period.
  - Allocation weight is dynamically calculated when an allocation journal is generated, based on the current statistical account balance.

- Elimination journal entries are automatically generated based on intercompany transactions.
- Password strength for access to NetSuite accounts is required to comply with password policy.
- Calculation is automatic for a reversing journal entry that voids checks and transactions on days or periods different from the original transaction date.
- Journal entries require approval in line with Journal Entry Approval Policy prior to posting to the general ledger.
- Transactions posted outside of a posting period can be prevented or can initiate a warning.
- Limitations can be set on the individuals who can impact the account listed on an item record.
- A gapless numbering sequence is applied to all GL-posting transactions.

- Financial Reporting
  - Financial statements are automatically generated for each separate entity in NetSuite.
  - Financial reports for each entity are automatically prepared in their local currency and are converted in real-time into headquarters currency for consolidation purposes.
- Fixed Assets
  - NetSuite automatically calculates depreciation expense.
  - The Fixed Asset Module automatically calculates and posts the depreciation expense to the asset record and to the related journal entries to the General Ledger.
- Inventory
  - NetSuite values inventory at standard cost.
  - Inventory transactions created and/or edited in closed periods can be disallowed.
- IT General Controls
  - A minimum password length is required to comply with password policy.
  - Users are required to update their passwords with a regular frequency.
  - System notes are captured on the creation of all records and are not editable by users.
  - System notes are captured on the edit of all records and are not editable by users.
  - System notes are captured on the import and export of all custom fields.
- Order to Cash
  - Items purchased in a sales order for a customer are automatically reflected in the invoice and are automatically sent to the customer by email when the **Save & Email** button on the Next Bill tab is clicked. The order status of the sales order is automatically changed to Partially Fulfilled (several invoices or installment) or Billed (single invoice).
  - For orders on an installment basis, the billing schedule in the body of a sales order for a customer is automatically populated in NetSuite and can be viewed on the History tab of the customer record. This tab indicates scheduled billing dates and amounts for each date.
  - Upon invoicing, NetSuite automatically generates an entry.
  - NetSuite prevents creation of a customer with a blank credit limit.
  - NetSuite creates invoices only after an order has been shipped.
  - NetSuite restricts changes made to item quantity, pricing, and shipping income per sales order during the invoicing process.
  - NetSuite books an entry to debit Accounts Receivable and to credit Revenue upon invoice creation.
  - NetSuite places an order on hold when the customer exceeds the assigned credit limit. There is a workflow trigger, where an increase in the credit limit, if applicable, is generated and approved by the CFO.

- When a customer exceeds their credit limit, NetSuite can enforce an automatic hold or simply initiate a warning message.
- Orders that are entered into NetSuite, but not yet billed, can be included in customer credit limit calculations.
- Standard grace periods for overdue invoices prior to placing a customer on hold can be set up in line with the customer credit policy.
- Edits to previously approved sales orders are disallowed.
- NetSuite prohibits users from making any changes to a revenue recognition schedule for a transaction after the A/R period has been closed.

- Procure to Pay
  - Records and transactions can optionally be limited by the department of the individual entering or editing them.
  - Records and transactions can optionally be limited by the class of the individual entering or editing them.
  - Records and transactions can optionally be limited by the location of the individual entering or editing them.
- Revenue
  - NetSuite does not allow revenue recognition greater than 100% of the total amount of the project.
- Time Entry
  - Time entry requires supervisor approval.
  - There is a maximum number of hours an employee can enter for a specific week in line with the HCM policy.
  - There is a maximum number of hours an employee can enter for a specific day in line with the HCM policy.
  - There is a minimum number of hours an employee can enter for a specific day in line with the HCM policy.

Internal Controls that Require Basic Configuration

The following controls require some basic setup in the NetSuite UI.

- Accounts Receivable
  - Open receivables identified by user-defined conditions, such as large invoices or exceeding the credit limit, are automatically identified and routed for review.
- Financial Close
  - The amount of expense to be amortized per month is automatically spread based on the amortization schedule prepared by A/P.
  - NetSuite automatically allocates the expenses to different departments based on the allocation percentages.
  - Access to open and close the sub-ledgers (A/P, A/R, and Payroll) and the general ledger is restricted to approved roles.
  - Elimination journal entries are automatically generated based on intercompany drop-ship workflow transactions.
  - Intercompany accounts are automatically reconciled.
- Commissions

- Monthly, NetSuite automatically calculates eligible commission amounts based on the plan type linked to the participant (employee or partner).
- After a commission is approved, it is automatically posted to A/P and to the general ledger, and is auto-populated for the payroll run.
- Commissions are calculated and processed in line with standard compensation agreements.

- Fixed Assets
  - Edit access to the Fixed Asset Module is restricted to users with approved roles only.
  - NetSuite FAM is configured to calculate monthly depreciation based on the asset's cost, depreciation method, and useful life.
- Human Resources and Payroll
  - Edit access to the Payroll folder, which contains the Payroll Worksheet, is restricted to users with approved roles.
  - NetSuite auto-populates employee hours and expenses after appropriate approvals are obtained in the system.
  - After a payroll is committed, the related payroll taxes, benefits, bonuses, and commission expenses are automatically calculated and posted to the general ledger.
- IT General Controls
  - NetSuite compares contact and customer records and provides notifications of possible duplicate records.
  - Employee access can be restricted based upon IP address.
- Order to Cash
  - A general ledger journal entry is automatically created when an authorized credit memo is created and approved.
  - A journal entry is automatically generated when a batch payment posting is created and approved.
  - After all payments from a bank batch are applied, a deposit activity is performed in NetSuite and the related journal entry is automatically generated.
  - When payment from the bank for a single activity is applied, a deposit activity is performed in NetSuite, and the related journal entry to accounts receivable is automatically generated.
  - Unbilled approved T&M hours are automatically populated in NS for invoicing.
  - NetSuite only allows fulfillment and shipment of inventory if the following conditions are met:
    - Sales order is in Pending Fulfillment or Partially Fulfilled status and is not on hold for any reason.
    - Part numbers of items being fulfilled match part numbers on the Sales order and the quantity being fulfilled does not exceed the quantity on the sales order.
    - For serialized inventory items, such as switches, each fulfilled serial number matches a serial number that exists in finished goods inventory.
  - Shipping amounts are automatically calculated and applied to transactions based on rules.
  - A 1099 or W2 is required prior to vendor approval.
- Procure to Pay
  - NetSuite automatically routes a PO for approval based on the approval policy set. Only POs that have been properly approved can be processed for invoicing.
  - Spending thresholds on POs are built into a workflow as required by governance.
  - Spending thresholds on non-PO spending are built into a workflow as required by governance.
  - Use of vendors in purchase orders is restricted to pre-approved vendors.

- Updates to vendor information route automatically for review to designated approvers.
- Non-inventory purchase requests are automatically routed for approval request to the relevant reviewer/approver.
- Inventory purchase requests are automatically routed for approval request to the relevant reviewer/approver.
- A three-way match is automatically performed for POs that have lines mapped to item receivable general ledger accounts. The control is configured at the item-level. If any item quantity or price does not match, an error message is displayed, the invoice is not posted, and the invoice is placed in Pending Approval status in NetSuite.
- Expense reports are automatically routed to the employee's manager and, after approval by the manager, to A/P for review and approval. After approval by the employee manager and A/P, the expense report is marked for payment.
- Purchase requests are routed for approval based on set approval limits.
- Expense reports are routed for approval based on set approval limits.

- Revenue
  - The relative fair value allocation at the time of an invoice is applied. The allocations are based on the relative fair values for all line items in the invoice based on the BESP data contained in NetSuite.
  - On invoicing, NetSuite creates a service amortization schedule for all of the service line items on invoice.
  - NetSuite is set up to defer revenue and the related COGS per terms and conditions set out in the customer primary file. These terms include: rights of return, acceptance, shipping terms, and others.
  - NetSuite automatically recognizes and defers revenue based on the Revenue Recognition Policy. (Note: The Revenue Recognition Policy must be set up in NetSuite for each item.)
  - NetSuite is configured to recognize revenue on a monthly straight-line basis, prorated daily basis for the first and last month, for subscription and support revenue based on the provisioned date, contract start and end dates, and revenue recognition schedule.

Managing Transactions

NetSuite provides several features that enable you to record reasons for deleting transactions and view transaction history. See the following topics.

- Recording a Reason for Deleting a Transaction
- Reviewing Transaction History
- Transaction System Information and Communication Subtabs
- Granting User Access to Transaction History
- Viewing Transaction System Notes
- Using the Transaction Audit Trail
- Tracking Financial Account Changes
- Line-Level Audit Trail for Transactions
- Transaction Line-Level History Window

Processed lines for specific transaction types contribute to the Monthly Transaction Lines metric that counts toward maximum limits for your NetSuite service tier. For more information, see Transaction Types Included in Transaction Types Included in Monthly Transaction Lines Metric.

Note: For information about permissions needed for managing transactions, see the help topics NetSuite Permissions Overview and Permissions Documentation.

Recording a Reason for Deleting a Transaction

In some countries, it is a legal requirement to provide the reason why a transaction is deleted. The Use Deletion Reason feature satisfies this requirement because users must record the reason why they deleted a transaction.

How to Enable the Feature

To enable the feature, go to Setup > Company > Enable Features. On the Company subtab in the ERP General section, check the Use Deletion Reason box, and then click Save.

Transaction Types Impacted by the Feature

The Use Deletion Reason feature impacts all of the transactions listed at Setup > Company > Auto-Generated Numbers on the Transaction Numbers subtab. When you use this feature, users must provide a reason for deleting a transaction record. The Transaction Numbering Audit Log provides a list of the deleted transactions. It provides their transaction number, the date on which the transaction was deleted, and by whom. It also provides the reason the user deleted the transaction record and any related memo. For a list of transactions on the Transactions subtab, see the help topic Records and Transactions Available for Auto-Numbering. For information about the Transaction Numbering Audit Log, see the help topic Transaction Numbering Audit Log.

Deletion Reasons: Standard and Unique

The Use Deletion Reason feature includes two standard deletion reasons: Original Document Damaged and Other. If users choose the standard deletion reason Original Document Damaged, they do not have to include a memo. If users choose the standard deletion reason Other, they must include a memo. When you remove the reversal date on an original journal entry to delete a reversal journal entry, the deletion reason code is Other. The memo is Reversal date removed.

Users with the Administrator role or access to Accounting Lists can create and modify deletion reasons. These users can create, modify, inactivate, and choose display languages for a unique deletion reasons.

Go to Setup > Accounting > Accounting Lists > New and click Transaction Deletion Reason. Complete the fields as required, and then save the record. For more information about accounting lists, see the help topic Setting Up Accounting Lists.

Note: Transaction deletion reasons must be unique to avoid duplication, and cannot exceed 30 characters. The name is case sensitive. Therefore, the transaction deletion reason **MY CODE** is unique from the transaction deletion reason **my code**.

Account Changes Caused by Disabling the Feature

You can disable the feature at any time. Transactions to be deleted will no longer require a deletion reason, and deletion reasons will not be accessible from Accounting Lists. However, the Transaction Numbering Audit Log will maintain the deleted transactions and their associated data.

Note: For more information about deleting transactions, see the help topic Voiding, Deleting, or Closing Transactions.

Reviewing Transaction History

Note: The information in this topic applies to System Notes and System Notes v2.

There may be times when you have questions about a transaction such as:

- When was it created, and by whom?
- Have there been any changes to it?
- Did someone void or delete it, and when?

NetSuite stores data on each entry that a user makes to create, change, or delete a transaction. This data includes all users involved in the history of this transaction, each user's action, the date and time of that action, if there was an account impacted, and the amount after the change.

This historical data may be referred to as system notes, an audit trail, or as history. NetSuite provides a variety of methods for you to retrieve historical details about changes made to transaction records. See the following topics for information:

System Notes

- Transaction System Information and Communication Subtabs
- Granting User Access to Transaction History
- Viewing Transaction System Notes
- General Ledger Tracking in Transaction System Notes
- Using the Transaction Audit Trail
- Tracking Financial Account Changes
- Line-Level Audit Trail for Transactions
- Transaction Line-Level History Window
- System Notes Overview

NetSuite also provides a more general system note search function that retrieves details about other types of records in addition to transactions. For information about this function, see Searching System Notes.

System Notes v2

- Viewing System Notes v2
- Searching and Filtering System Notes v2
- System Notes v2 Overview

Transaction System Information and Communication Subtabs

The following subtabs can be used to track tasks and information or send messages associated with transactions you enter in NetSuite:

- **System Information subtab**

  Note: The following information applies to System Notes only. For information about System Notes v2, see the help topic System Notes v2 Overview.

  On the System Information subtab, you can find system notes which track the date and time of each update to the transaction. System notes also track each user who made changes to the transaction. For more information, see Viewing Transaction System Notes.

  If you use the SuiteFlow feature, you can also see the Active Workflows and Workflow History subtabs. For more information, see the help topic Viewing Workflow Activity.

  You can access the System Information subtab only for a transaction type you have access to.

- **Communication subtab**

  Use the Communication subtab to create and send messages to your customer. You can add the message as an HTML or PDF attachment or embed the transaction within the body of the message.

  The Communication subtab tracks all related email and faxes sent and received.

  When creating some transactions, you can create and add tasks, events and phone calls associated with the transaction from the Communication subtab. After you save the transaction, this information is combined on an Activities subtab. This enables you to track meetings and conference calls you schedule in the process of finalizing a sale.

To use transaction subtabs, go to the Transactions tab and click the type of transaction you want to use. On the transaction form, click the System Information or Communication subtab. Not all transaction records have a System Information or Communication subtab.

Notes:

- The System Information subtab is available on most transaction records. However, some records available from the Transactions menu are not classified by the system as transactions and do not provide the System Information subtab, including Amortization Schedules, Budgets, Commissions, Partner Commissions, Paychecks, and Quotas.
- The Communication subtab is not included on all transaction records.

Granting User Access to Transaction History

The Financial History permission is required for users to view transaction history. Some roles have this permission by default, such as accounting clerks and sales administrators. To review permissions for standard roles, see the help topic Standard Roles Permissions Table.

An administrator can provide other users with access to transaction histories by customizing their roles to include the Financial History permission. For example, support reps can be allowed to see the sales transactions that customers inquire about.

To create a custom role with transaction history access:

1. Go to Setup > Users/Roles > User Management > Manage Roles.
2. Click **Customize** next to the name of the role you want to customize.
3. In the **Name** field, enter the name for this new role.

   This role name will be available in employee records on the **Access** tab.
4. On the **Permissions** subtab, click the **Lists** subtab.
5. In the **Permission** column, select **Financial History**.
6. In the **Level** column, select **View**.
7. Click **Add**.
8. Click **Save**.

Now, employees with the new customized role can view the Transaction History subtab on customer records and click the links to view those transactions.

To assign employees this custom role, go to Lists > Employees > Employees, and click Edit beside the employee you want to assign the role. Click the Access tab. Select the new role in the Role field, and click Add/Edit. Click Save.

Important: If the Global Permissions feature is enabled, the Financial History permission also can be added on a per-employee basis. For information, see the help topic Using the Global Permissions Feature.

Viewing Transaction System Notes

Note: This topic applies to System Notes only. For information about viewing transaction System Notes v2, see the help topic Viewing System Notes v2.

To review changes made to an individual transaction, click the System Information and then click the System Notes. System notes store details about each change.

By default, system notes for all transaction fields are listed. Select a field from the Field dropdown list to view changes for one field.

On the System Notes subtab, you can view history related to the transaction, including system logs. System notes list each change made to the transaction, with the following information:

- **Date/Time** – when each change was made to the transaction. The date and time are shown in the company timezone.
- **Set by** – the user that made each change.
  - Some changes are made by the system, for example, fields where values are automatically populated.
- **Field** – the field where each change was made.
  - If you are using the Accounting feature, system notes include general ledger impact of changes with an entry of Impact in this column. For information, see the help topic General Ledger Tracking in Transaction System Notes.

- **Type** – the type of each change.
- **Old Value/New Value** – the data in the field before it was edited and the new information entered for each change.
- **Role** – the role of the user that made the change (included as of 2017.1 — you must customize the view to see the Role column)

Note the following:

- The setting for Log System Notes on Updates Only at Setup > Company > General Preferences determines whether system notes are generated when a transaction is created. This preference was introduced in 2012.2. By default, it is enabled for new accounts as of that release or later and disabled for accounts that existed before that release. For more information, see the help topic Setting General Account Preferences.
- Click the Customize View button to define criteria for filtering system notes or to change the displayed results columns, or both. Clicking this button opens a Saved System Note Search definition page. After you have defined this type of search, you can select it from the View dropdown list for an alternate system notes display. For information about creating this type of search, see the help topic Creating Saved Searches for System Notes.
- System notes on the System Information subtab relate to each transaction as a whole. Line-level system notes also are available from History links for individual items, expenses, and journal line items on transactions. For more information, see Line-Level Audit Trail for Transactions.
- To view system notes for multiple transactions, filtered by field values, go to Transactions > Management > View Audit Trail. For more information, see Using the Transaction Audit Trail.

Using the Transaction Audit Trail

Note: This topic applies to System Notes only. For information about viewing System Notes v2, see the help topic Viewing System Notes v2.

The Transaction Audit Trail enables you to produce a report that provides a detailed history of all transactions entered into NetSuite. The audit trail provides information about the transaction, who entered the transaction, and when the transaction was created or modified.

To view the Transaction Audit Trail, go to Transactions > Management > View Audit Trail. In the NetSuite U.K. edition, go to Transactions > Other.

View Audit Trail Page

On the View Audit Trail page, you can filter the report to limit audit trail results to a manageable number or to focus on a group of specific transactions. Filters can be based on:

- Users who entered transaction edits
- Action taken for the transactions: create, change, or delete
- Transactions date range, either relative (such as last month) or absolute
- Amount of transactions, defined as an exact number or a range
- Types of transactions
- Accounts affected by transactions
- Entity or entities involved in transaction, defined by name

  Can be customers, employees, partners, vendors, or other entities

Audit Results Page

Select the desired filter options and then click Submit to open the Audit Results page. This list includes the following columns of data:

- Date and time that the transaction change was executed
- Name of the user who made the change
- The action taken: create, change, or delete
- Type of transaction
- Internal ID
- Transaction number
- Posting date of transaction change.
- Account affected
- Amount

By default, the Audit Results page sorts transactions by their system-generated internal ID. Click the text at the top of any column to sort the list using that attribute.

The page displays a one-line summary for each transaction. Click a transaction link in the Date/Time column to view details and GL Impact for that transaction.

For more information about audit results data, see Tracking Financial Account Changes.

Other Ways to View System Notes

- You can view system notes for an individual transaction on the transaction record. Click the System Information subtab, then the System Notes subtab. For more information, see Viewing Transaction System Notes.
- Line-level system notes are available from History links next to individual items, expenses, and journal line items on transactions. For more information, see Line-Level Audit Trail for Transactions.
- To view system notes for multiple transactions, filtered by field values, go to Transactions > Management > View Audit Trail. For more information, see Using the Transaction Audit Trail.
- A system note search is available at Reports > New Search. The system note search includes system notes for records other than transaction. It provides different filter fields from the transaction audit trail, and offers additional functionality. This functionality includes the ability to export data, advanced search filters and results options, and the creation of saved searches. For more information, see Searching System Notes.

Tracking Financial Account Changes

You can use the audit trail function to search for changes made to your financial accounts.

To use the Audit Trail:

1. Go to Transactions > Management > View Audit Trail (Administrator).
2. Select criteria to quickly find the information you seek.

   For example, which user performed the action, between which dates the transactions were changed, or which account the transactions affected. You can select more than one user, action, transaction type, account, or name by pressing the Ctrl key and selecting with your mouse.

3. Click **Submit**.

When the Audit Results page appears, there are 8 columns that contain information:

- **Date/Time** – This is the date and time your data was saved.

  All times are expressed in Pacific Standard Time (PST). When Daylight Savings Time is in effect, all times are expressed in Pacific Daylight Time (PDT).

  If you import data or load sample data, all the dates and times of existing transactions appear as the date and time your data was loaded.
- **Username** – This is the name of the person who created, changed, or deleted the transaction.

  If your company memorizes transactions, the name of the user who created these transactions appears.
- **Action** – This is what was done to the transaction. This can be CREATE, CHANGE, or DELETE.

  If you void a transaction, CHANGE appears.
- **Type** – This is the type of transaction that was created, changed, or deleted.
- **Number** – This is the number specific to each transaction. For example, invoice number 18 or check number 1400.
- **Post Date** – This is the date your transaction was posted to the account.
- **Account** – This is the financial account that is affected by the transaction. For example, if you create an invoice, Accounts Receivable appears in the Account column.

  If no account was affected, the corresponding field in this column is blank.
- **Amount** – This is the total amount of the transaction.

  Deleted and voided transactions have zero in this column. Zero also appears in this column next to changed transactions if you made a change that didn't affect the original amount.

Click any date in the **Date/Time** column to view the details of a transaction. When the Audit Results page appears with the particular transaction you selected, click **View**. The details for this transaction appears. If you want to make changes, click **Edit**, enter your changes, and then click Save.

Line-Level Audit Trail for Transactions

Note: This topic applies to System Notes only. For information about System Notes v2, see the help topic System Notes v2 Overview.

The audit trail for transactions includes the ability to track updates to individual line items. You can view the audit trail for individual line items directly from each transaction record's listings for items, expenses, and journal line items.

On a transaction record, each line item includes a **History** link that you can click to open a new window displaying all updates to that particular line item. This link is visible to users with the Notes Tab permission.

Note: The line-level audit trail does not track the initial creation or deletion of line items. Only updates to existing line items are tracked.

Export Line-Level System Notes Data

This History window includes buttons you can click to export line-level history data as a CSV or XLS file. For more information about the History window's contents, see Transaction Line-Level History Window.

Include Line-Level System Notes in Saved Searches

To review the history of multiple line items at one time, create a transaction saved search that includes one or more Line System Notes fields in its results. You can also use Line System Notes fields as transaction saved search filters to return only selected line-item history data.

Note: The Log System Notes on Update Only preference prevents NetSuite from logging system notes when records are created. When this preference is set, system notes are logged only when records are updated. See the help topic Setting General Account Preferences. Before you set this preference in an account that existed before that release, you should first review any saved searches containing system notes fields, as these searches may use data from record creation system notes. If your account includes searches that rely on record creation system notes, you can either revise the searches before setting the Log System Notes on Update Only preference, or you can leave this preference not set.

For example, a case search may use record creation system notes fields to retrieve dates when cases were first escalated. To make this search work with the Log System Notes on Update Only preference set, this search would need to be edited to use expressions and to return values for cases' Date Created field if the escalation date was not available through record update system notes fields.

For custom transaction body fields, if the Log System Notes on Update Only preference is not set, and you have the View access level to a field, the default value of your custom transaction body field is displayed in system notes fields when you create a transaction search. For more information, see Searching System Notes.

Other Ways to View System Notes

You can retrieve other types of transaction system notes in the following ways:

- View each transaction's header-level system notes on the transaction record's History subtab, System Notes subtab. For more information, see Viewing Transaction System Notes.
- View system notes for multiple transactions, filtered by field values. Go to Transactions > Management > View Audit Trail. For more information, see Using the Transaction Audit Trail.
- Perform a system note search, available at Reports > New Search. The system note search includes system notes for records other than transactions and provides different filter fields from the transaction audit trail. It also offers additional functionality including the ability to export data, advanced search filters and results options, and the creation of saved searches. For more information, see Searching System Notes.

Transaction Line-Level History Window

The history window that appears when you click **History** for a transaction line item includes the following columns:

- action that occurred to update the transaction line item
- date and time of the action
- specific field altered (if applicable)
- transaction line number

- new value of the line item after the action
- old value of the line item before the action
- posting date of the transaction
- transaction type
- username of the user performing the action

The following fields are tracked in the History window:

- All stored-value custom fields
- Alt.Sales
- Amortization Residual
- Amount
- Billable
- Billing Schedule
- Class
- Closed
- Commit
- Create PO
- Customer
- Delay Rev. Rec.
- Department
- Item
- Cost Category
- License Code
- Location
- Memo
- PO Rate
- PO Vendor
- Price Level
- Quantity
- Rate
- Restock
- Revenue Recognition End Date
- Revenue Recognition Schedule
- Revenue Recognition Start Date
- Revenue Recognition Term in Months
- Tax
- Units

Note: The line-level audit trail does not track the initial creation or deletion of line items. Only updates to existing line items are tracked.

Personal Information (PI) Removal

Note: This topic applies to removing personal information to assist you in addressing your obligations related to privacy laws such as GDPR, CCPA and other similar regulations.

The Personal Information (PI) Removal feature enables NetSuite users with the appropriate permissions to remove personal information from NetSuite fields, records, and audit logs. The main purpose of PI removal is to help customers address privacy regulations related to data subject requests.

The right to be forgotten is one of the key requirements in recent privacy laws, including in General Data Protection Regulation (GDPR). Administrators can use the Personal Information Removal feature to replace the data stored in both the system log notes and the workflow history with a user-defined value. Examples of fields and records that can be addressed by the Personal Information Removal feature include: first names, last names, email address, social security number, credit card number, gender, and so on. The functionality is available on entity records, transactions, and custom records.

The Personal Information Removal feature:

- Improves compliance with privacy regulation
- Supports removing Personal Information data from record field values, notes logs, and workflow history
- Permits a privileged user to remove Personal Information data without contacting NetSuite Customer Support
- Replaces the Audit Trail History field value with a user-defined message
- Does not remove the Audit Trail History logs

You can perform individual information removal requests from within NetSuite. You can view all the requests that have been submitted, including who created the request, when it was created, and the current status of the request. For more complex requests, you can build the request from SuiteScript. For more information, see the help topic N/piremoval Module.

For more information about removing personal information, see the following topics:

- Enabling the Remove Personal Information Feature
- Reviewing PI Removal Requests
- Creating and Approving a New PI Removal Request
- Checking PI Removal Results in the System Notes
- Personal Information Removal

Permissions

The following permission types are available for the Personal Information Removal feature:

- Remove Personal Information Create – User can create, edit, and delete requests.
- Remove Personal Information Run – User can approve, run and delete requests.

For more information, see the help topics NetSuite Permissions Overview and Permissions Documentation.

Supported Field Types

The Personal Information Removal feature supports removal of information for the following field types:

- Hyperlink
- Long Text
- Phone Number
- Rich Text Object
- Text Area
- Date
- Email Address
- Free-Form Text
- Security Number
- Address

Note: The Personal Information Removal feature does not support removing details on sublist fields. For information about how to remove sublist field details, see Removing Personal Information on a Sublist Field.

Enabling the Remove Personal Information Feature

Before you can remove personal information, you must enable the feature.

To enable the Remove Personal Information feature:

1. Go to Setup > Company > Setup Tasks > Enable Features.
2. On the **SuiteCloud** subtab, check the **Remove Personal Information** box, and review the SuiteCloud Terms of Service, if necessary.
3. Click **Save**.

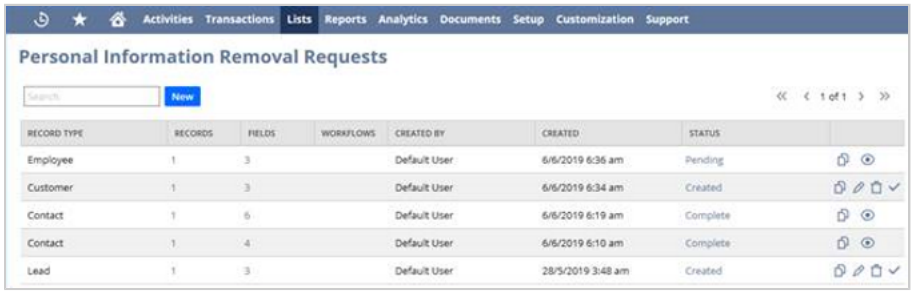
After you enable the feature, you can review and submit PI removal requests. For information, see Reviewing PI Removal Requests and Creating and Approving a New PI Removal Request.

Reviewing PI Removal Requests

On the Personal Information Removal Request page, you can review the current status of PI removal requests. From this page you can also view details of a request, make a copy of a request, and approve, edit, or delete a request.

To review PI removal requests

1. Go to Lists > Mass Update > Remove Personal Information.



2. For each request, you can see which records, fields, and workflows were removed. To view details of what information was processed in each request, click the field.
3. To view details of the request's status, click the **Status** field.
4. To display only requests of a specific record type, enter the record type name into the search box.
5. Using the icons on the far right, you can make a copy, edit, delete, view, or approve a request. See the following section for details of how to use these icons.

Using PI Removal Request Icons

Use the icons on the Personal Information Removal Request page to view details of a request, make a copy of a request, or approve, edit or delete a request. Options available depend on the status of the request.

When a removal request has the Created status, the following icons are available:

- For the Create role:

(Make Copy, Edit, Delete)

- For the Run role:

(View, Delete, Approve)

When a removal request has the Pending or Complete status, the following icons are available:

(Make Copy, View)

Make Copy - Optionally make changes. Then click **Create**. A copy of the request is created. For example, you may want to make a duplication of a previous selection if you forgot to include one of the items for removal.

Edit - Make changes as needed. Click **Save**. Your changes are saved.

Delete – A confirmation message appears. To continue with the deletion, click **Delete**. The request is deleted.

Approve – A message warns you that all data will be lost **permanently**. To continue with the approval, click **Yes, Proceed**. The request status changes to Pending until the removal has been processed. Then the status changes to Complete.

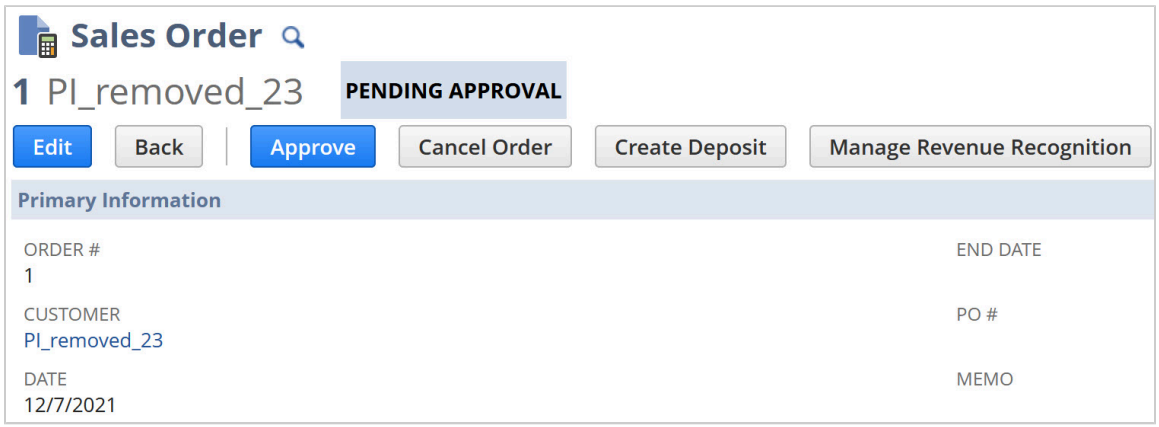
View - The new PI Removal Request Page appears in view-only mode. View the information as needed.

Creating and Approving a New PI Removal Request

Use the Personal Information (PI) Removal feature to create and approve requests to remove personal information from NetSuite fields, records, and audit logs.

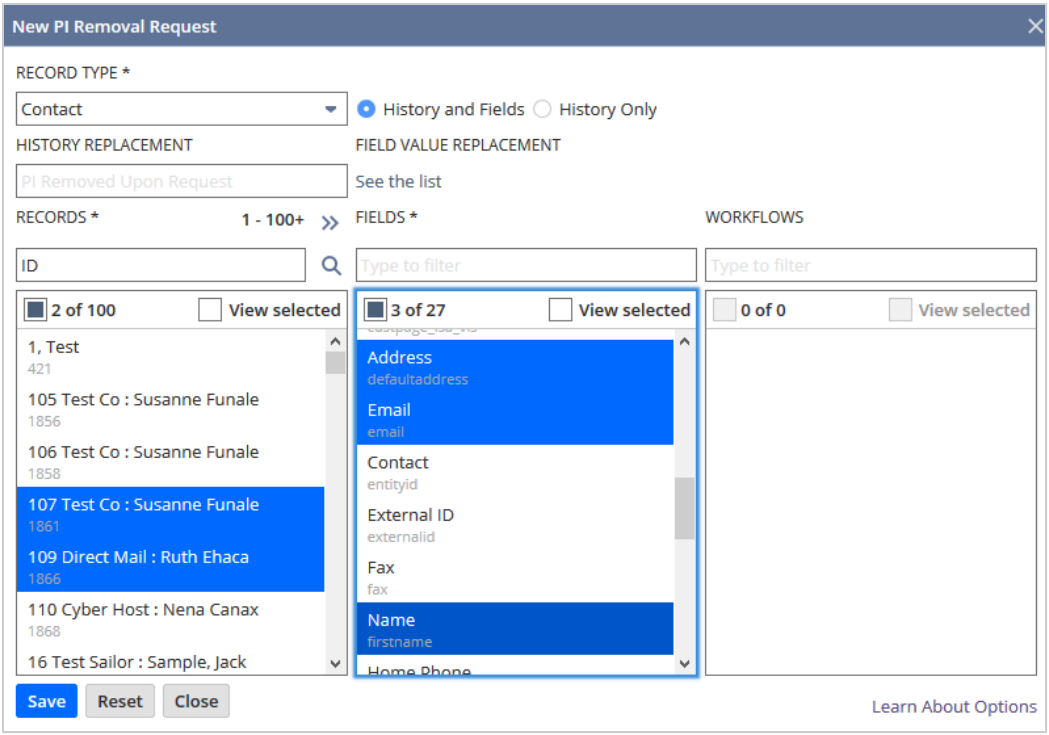
Note: The Personal Information Removal feature does not support removing details on sublist fields. For information about how to remove sublist field details, see Removing Personal Information on a Sublist Field.

Warning: When you remove personal information, it is removed from all transaction records. In the following example a company name was removed.



To create a new PI removal request:

1. Go to Lists > Mass Update > Remove Personal Information.
2. On the Personal Information Removal Request page, click **New**.
3. In the **Record Type** field, choose the record type for the records you want to process.



4. In the **Records** list, choose which records you want to process.

You can use the search field to find specific records using a search word or ID number. Do one of the following

- Enter a search word, such as a contact name, and then click the Search icon or press Enter.
- Enter **ID: XX** (where XX is the ID number). To search for multiple IDs, separate the ID numbers with commas, for example, **ID: XX, YY, ZZ**. Then click the Search icon or **press Enter**

The Records column displays only partial information about the records. When more than 100 records exist, the range of records that have been loaded appears. You download records in groups of 100. The first 100 records load automatically. To load the next 100 records, click the double arrows beside the number range. The plus sign (+) beside the number range indicates there are more records to load. As records are loaded, the range updates to show the number of loaded records.

When you enter a term into the Records filter field, results appear as they are found. The range of numbers adjusts to show the number of records loaded to find the filtered results. If all records were loaded before you applied the filter, the range of numbers does not change.

5. (Optional) To view only the selected records, check the **View selected** box. Note that the view selected option is not available for records filtered using the ID search.
6. In the **Fields** list, choose the fields you want to replace with the replacement value. Use the Fields filter to filter the list.
7. (Optional) To view only the selected fields, check the **View selected** box.
8. In the **Workflows** list, choose the workflows for which you want to remove personal information from the workflow history. Use the Workflows filter field to filter the list.
9. (Optional) To view only the selected workflows, check the **View selected** box.
10. Choose whether you want to process **History Only** (system notes and workflow logs) or **History and Fields** (history plus record fields).
11. (Optional) In the **History Replacement** field, enter the text to use in history (system notes and workflow logs) to replace the original values. If no text is entered, NetSuite uses the default replacement value of PI Removed Upon Request. These values appear in gray text.
12. When personal information is removed from fields, the field value is replaced with a default replacement value. To see the list of replacement values, click **See the list** in the **Field Value Replacement** field. These values are:
    - **PI_removed** for text fields

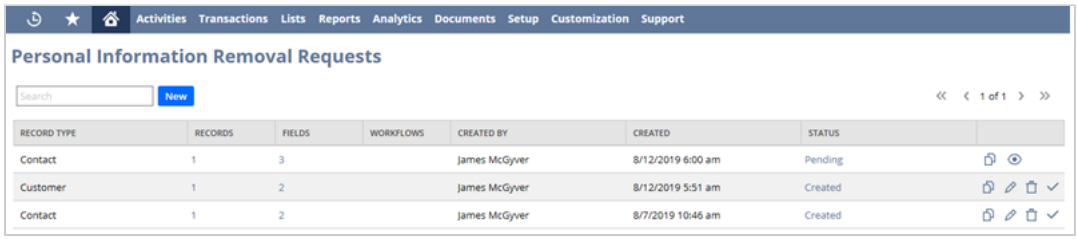
      Note: Record names must be unique. Therefore, for records, the default value includes a sequence number.

    - **000000000** for phone numbers
    - **PI_removed@example.com** for email addresses
    - **http://example.com** for web addresses
    - **1/1/1900** for date fields.

    Note: Due to constraints and validations, record updates for the field types in the preceding list may fail, and only system notes will be updated. If the record update fails, you must manually update the value on the record. For example, to remove an address from a customer record, go to Lists > Relationships > Customers. Click Edit for the appropriate customer record, and then remove the address information, as needed.
13. To continue with the data removal, click **Save**. The removal request is generated and appears with a status of Created.
14. To approve the removal, click the Approve icon.

A confirmation message appears warning you that all data will be lost permanently and asking if you want to proceed. To proceed, click **Yes, Proceed**. Otherwise, click **Cancel**.

The request waits in the queue with a Pending status until it is processed.



For more information about PI Removal Request icons, see Using PI Removal Request Icons.

Removing Personal Information from the System Notes

Removing PI from the System Notes

This is the second video in a 4–part series of videos about System Notes. To watch the other parts of the series, see:

- System Notes Overview
- System Notes v2 Overview
- Using the System Notes v2 Workbook

Removing Personal Information on a Sublist Field

You cannot use the Personal Information Removal feature to remove details on a sublist field. You must remove the sublist field details manually.

To remove sublist field details manually:

1. Manually clear the details from the sublist field on the record.
2. Use the Personal Information Removal feature to remove the sublist field system note details.

Removing Customer Name Information

When you want to remove the customer name information, note that the behavior of the Personal Information Removal feature is different depending on whether the Auto-Generated Numbers feature is enabled or disabled.

Auto-Generated Numbers Feature Enabled

When the Auto-Generated Numbers Feature is enabled in your account:

- The customer name is stored in the Alternate Name field.

- To remove the customer name information from the System Notes, in addition to the name fields you want to remove, select the Alternate Name field.

Auto-Generated Numbers Feature Disabled

When the Auto-Generated Numbers feature is disabled:

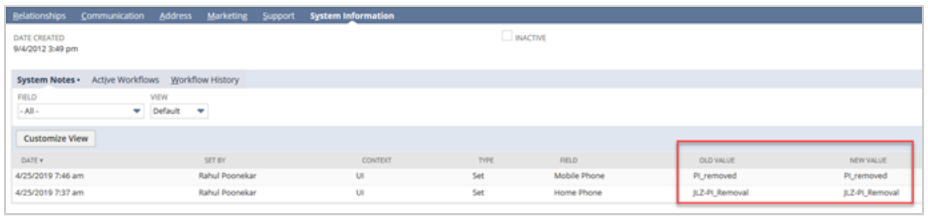
- The customer name is stored in the Customer ID field.
- To remove the customer name information, in addition to the name fields you want to remove, select the Customer ID field.

Checking Pl Removal Results in the System Notes

Note: This topic applies to System Notes only. For information about System Notes v2, see the help topic System Notes v2 Overview.

If your company uses Personal Information (PI) Removal, where available, you can see the PI removal results in the record's system notes. The location and path to access the system notes information varies depending on the type of record. In the following example, changes were made to the Acme Medical Supplies contact record. To view the system notes for this, you would go to Lists > Relationships > Contacts and click View beside Acme Medical Supply. Then you would click the System Information subtab and then the System Notes subtab.

You can see in the system notes that certain records were rewritten by a constant string. The first entry uses the default replacement text of PI_Removed. The second entry shows text entered in the History Replacement field when the user created the request to remove personal information.



For more information about system notes, see the help topic System Notes Overview.

Auditing Data Changes using Searches

To monitor changes made to NetSuite data, you can search system notes records.

Note: This topic applies to System Notes only. For information about searching System Notes v2, see the help topic Searching and Filtering System Notes v2.

You can use the following tools to access system notes records:

- A general system notes search can return system notes for all record types. A system notes search can be filtered by record type, so that the results include only system notes for a particular record type. See Searching System Notes.
- Searches of record types that support system notes can include system notes details in results. For example, a customer search can include values for system notes fields related to customer record changes in results. This support is based on a join between system notes records and their related parent records. See the help topic Defining an Advanced Search.
- An audit trail link, available at the top of most list pages, can return system notes for a particular record type. See Viewing an Audit Trail for a Record Type.
- The audit trail for transaction records is available at Transactions > Management > View Audit Trail. See Using the Transaction Audit Trail.
- System notes are not created by the execution of saved searches, because they do not change data. However, each saved search has a log listing the users who have run or exported the search. This log shows who has used the search in the past 60 days, with the dates and times of each execution. You can also see an audit trail about changes made to each saved search. See the help topic Audit Trail for Saved Searches, Reports and Schedules.

  Known Limitations: If you search for System Notes Fields and you elect to use Type = Change as a filter, NetSuite will return all results having type Change, Set or Unset as these are all internally considered a change. As a workaround, you can also use the following formula: Formula (text): is change: {systemnotes.type}.

Additionally, the Deleted Record search type lets you retrieve details about records that have been deleted. For information about searching for deleted records, see Searching for Deleted Records.

Note: Searching System Notes task requires View permissions and only an administrator or another user with Notes Tab permission can use it. For more information about permissions, see the help topic NetSuite Permissions Overview.

Searching System Notes

Note: Unless identified as System Notes v2, this topic applies to System Notes only. For information about searching System Notes v2, see the help topic Searching and Filtering System Notes v2.

Each system note record stores details about a specific change made to a NetSuite record.

NetSuite provides a system note search that you can use to retrieve system notes data. To use this search, go to Reports > New Search and click System Note.

- Use a simple search to retrieve system notes data filtered by: the user(s) who entered the changes, role of the user who entered the changes, the date and time of the changes, the type of change, the field(s) changed, the value before the changes, the context for the change, and the value after the changes. For information, see the help topic Defining a Simple Search.
- Use an advanced search to retrieve system notes based on more advanced filtering and results display options. For information about the capabilities available, see the help topic Defining an Advanced Search.
- Use a saved search to take advantage of additional functionality such as emailing search results, and of course, the ability to quickly rerun the search. For information, see the help topic Defining a Saved Search.

System notes fields also are available to be used as filters and displayed as results for other record types' advanced and saved searches, including the following: contact, customer, employee, issue, item, project, opportunity, partner, transaction, and vendor.

Searching System Notes v2

For information about searching in System Notes v2, see the help topics Viewing System Notes v2 and Searching and Filtering System Notes v2.

System Notes and Deleted Records

- System Notes for existing records are never automatically deleted. The only time system notes are deleted is when the record containing the system notes is deleted.
- System Notes v2 are never deleted, even in cases where a record is deleted.
- In some cases, NetSuite creates a log of the deleted record. The log provides some basic information about the deleted record. For more information, see Searching for Deleted Records.
- The Log System Notes on Update Only preference prevents NetSuite from logging system notes when records are created. When this preference is set, system notes are logged only when records are updated. See the help topic Setting General Account Preferences.

  > **Important:** Before you enable this option, you should first review any saved searches containing system notes fields. These searches may use data from record creation system notes. If your account includes searches that rely on record creation system notes, you can revise the searches before enabling the Log System Notes on Update Only option. Or, you can leave this option disabled

  For example, a case search may use record creation system notes fields to retrieve dates when cases were first escalated. To make this search work with the Log System Notes on Update Only option enabled, you would need to edit this search. Use expressions and return values for cases' Date Created field if the escalation date was not available through record update system notes fields.

  You can view deleted records using a dataset or workbook in Analytics. For more information, see the help topic SuiteAnalytics Workbook Overview.

  For custom transaction body fields, if the Log System Notes on Update Only preference is not set, and you have the View access level to a field, the default value of your custom transaction body field is displayed in system notes fields when you create a transaction search. For example, when you create a custom transaction body field and apply it to sales transactions, system notes for this field only appear on the System Information subtab for sales transactions. However, if you create a transaction search and include system notes fields on the Results subtab, you see the custom transaction body field with its default value in the search results on all transactions.

System Notes for Changes to Configuration and Setup Pages

System notes log changes made to enabled features, company information, and account-level preferences.

The following configuration and setup page changes are captured in system notes:

- Company Information (Setup > Company > Company Information)
- Enable Features (Setup > Company > General Preferences)
- General Preferences (Setup > Company > Enable Features)
- Expense Categories (Setup > Accounting > Expense Categories)
- Accounting Lists: Payment Method (Setup > Accounting > Accounting Lists)
- Accounting Lists: Term (Setup > Accounting > Accounting Lists)
- Accounting Lists: Cost Category (Setup > Accounting > Accounting Lists)
- Accounting Lists: Budget Category (Setup > Accounting > Accounting Lists)
- Accounting Lists: Subscription Term (Setup > Accounting > Accounting Lists)
- Accounting Preferences (Setup > Accounting > Accounting Preferences)
- Location Costing Groups (Setup > Accounting > Setup Tasks > Location Costing Groups)
- Nexuses (Setup > Accounting > Nexuses)
- Tax Types (Setup > Accounting > Tax Types)
- Tax Codes (Setup > Accounting > Tax Codes)
- Tax Groups (Setup > Accounting > Tax Groups)

Account administrators can use searches to find system notes that were generated on configuration and setup pages. For example, you can create a saved search that shows system notes on features that were enabled.

You can also filter the search results based on record type.

Other Methods for Viewing System Notes

NetSuite provides a variety of other methods that you can use to retrieve system notes for particular record types.

- The audit trail function enables you to retrieve filtered sets of system notes for a selected record type. For information about using the audit trail, see Viewing an Audit Trail for a Record Type and Using the Transaction Audit Trail.
- Each transaction record includes a System Notes subtab on the History subtab where you can view system notes for that transaction. See Viewing Transaction System Notes. History for individual line items also may be available from transaction records. See Line-Level Audit Trail for Transactions.
- Each record of a type other than transaction, such as Employee or Customer, includes a System Notes subtab on the General subtab. You can view system notes for the record on the System Notes subtab.

Viewing an Audit Trail for a Record Type

Note: This topic applies to System Notes only. For information about viewing System Notes v2, see the help topic Viewing System Notes v2.

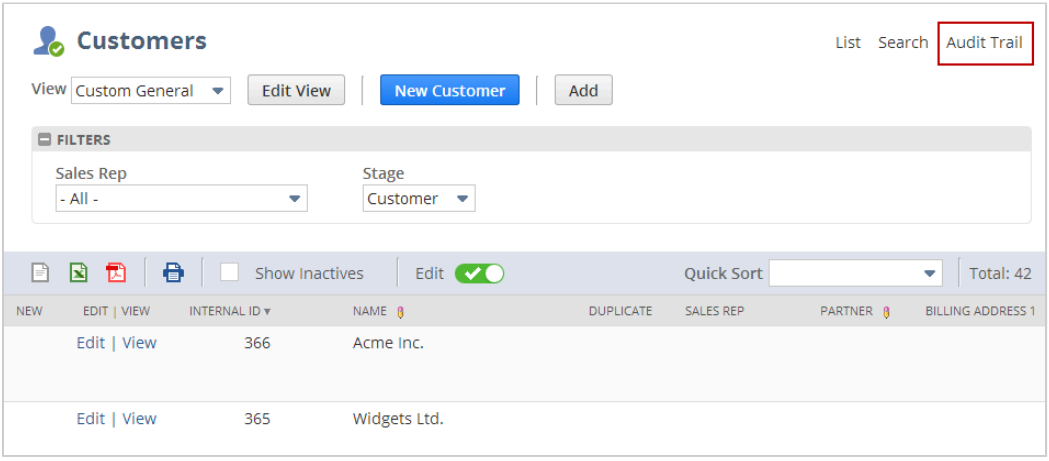
You can view an audit trail to see a list of changes made to a selected record type, such as employee or customer. An audit trail is a search for system note records related to a selected record type.

An Audit Trail link is available from most record type list pages. (These list pages usually are available from the Lists tab.) When you click **Audit Trail** on a list page, an Audit Trail page opens. On this page, you can define field values as filters, to limit results to more relevant data of a manageable size.

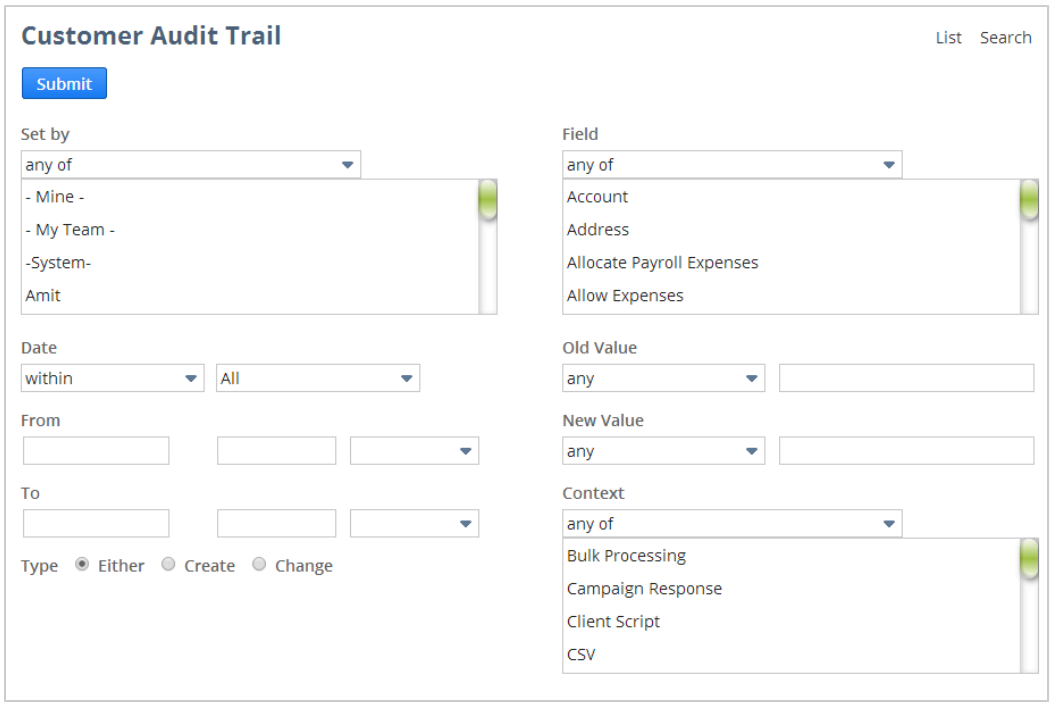
To search a record's audit trail:

1. Go to the list for the record type you want to search.

   For example, to search for changes on customer records, go to Lists > Customers.
2. In the header of the list, click **Audit Trail**.



3. On the Audit Trail page, set the criteria for your search.



You can search system notes by:

- The user ID of the person who made change.
- The date and time the change was made.
- The type of change (for example, whether the field was set for the first time or updated from a previous value).
- The field changed.
- The value before the change.
- The value after the change.
- The context for the change. For more information about context, see Understanding the Context for Changes.

4. Click **Submit**.

Note the following:

- The audit trail for transaction records is available at Transactions > Management > View Audit Trail. For more information, see Using the Transaction Audit Trail.
- A system note search that is more general than the audit trail function is available at Reports > New Search. The system note search includes system notes for multiple record types, and offers additional functionality, including the ability to export data, advanced search filters and results options, and the creation of saved searches. For more information, see Searching System Notes.

Searching for Deleted Records

For some records, when the record is deleted, NetSuite retains some general data about it. The information in this topic applies to records that use System Notes only.

Note: The information in this topic applies only to records that use System Notes. System Notes v2 retains all information for deleted transactions and records. For more information, see the help topic System Notes v2 Overview.

There are two types of records that support deletion tracking. Each type uses a different data source, and the approach you use to search for the records is different depending on the type. For more information about data sources, see the help topic The Analytics Data Source and SuiteAnalytics Workbook.

- **Records that use the old data source** – These records use the old data source that was designed for saved searches and reports. To search for deleted records of this type, you can use the Deleted Record search type. For more information, see Searching Deleted Records That Use the Old Data Source.
- **Records that use the new analytics data source** – These records use the new analytics data source that was designed for SuiteAnalytics Workbook. To search for deleted records of this type, you can use a SuiteQL query in either SuiteScript or SuiteAnalytics Connect. For more information, see Searching for Deleted Records That Use the New Analytics Data Source.

The following table lists the records of each type that support deletion tracking. NetSuite creates a deletion log for deletion instances of these records. The log provides basic information about the deleted record. The information is searchable.

Old Data Source Records		New Analytics Data Source Records	
account	inventory cost template	billing class	generic resource
accounting book	inventory number	bin	incoterm
accounting period	inventory status	charge run	manufacturing operation task
amortization schedule	item account mapping	customer subsidiary relationship	other campaign event
billing revenue event type	item collection	custom field	price book
billing schedule	item demand plan	custom list	pricing group
bill of distribution	item supply plan	custom record type	quantity pricing schedule
bill of materials	location	default campaign event	subscription line revision
bill of materials revision	manufacturing cost template	direct mail campaign event	transaction address mapping
charge	manufacturing routing	drip campaign event	transaction line address mapping
charge rule	merchandising hierarchy level	email campaign event	usage
charge type	merchandising hierarchy node	expense category	vendor category
class	merchandising hierarchy version	—	—
competitor	nexus	—	—
cost category	order allocation strategy	—	—
coupon code	payroll item	—	—

Old Data Source Records		New Analytics Data Source Records	
currency	price plan	—	—
custom segment	revenue element	—	—
department	script	—	—
distribution network	subscription	—	—
employee status	subscription change order	—	—
employee type	subscription online	—	—
event	subsidiary	—	—
fulfilment exception reasons	timesheet	—	—
global account mapping	user notes	—	—
global inventory relationship	workflow	—	—
inbound shipment	—	—	—

Querying a Dataset or Workbook for Deleted Records

The Deleted Records record type is available in Analytics for administrators who want to track deleted records. Datasets can include the Deleted Records as the root record and you can create a dataset or workbook to track deleted records. For more information, see the help topics Defining a Dataset and Creating a Workbook.

Searching Deleted Records That Use the Old Data Source

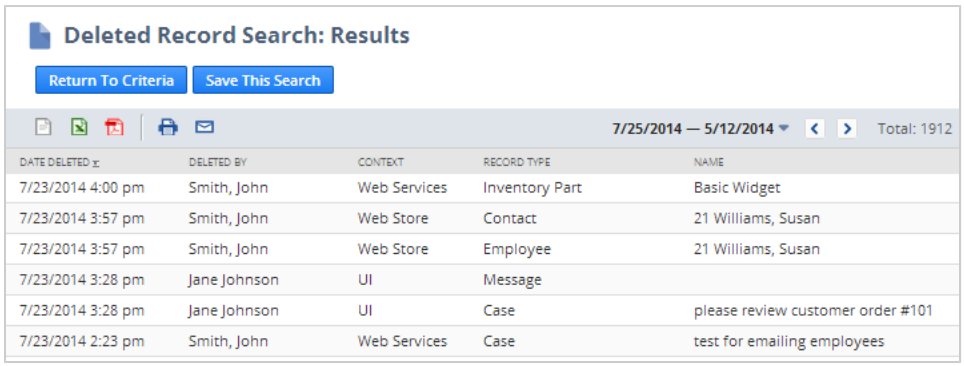
You can retrieve information about the deleted records that use the old data source by using the Deleted Record search type. To use this search type, go to Reports > New Search and click Deleted Record.

You can retrieve the following data:

- The date and time the record was deleted.
- The name of the user who deleted the record.
- The context for the record's deletion. For more information about context, see Understanding the Context for Changes.
- The record type.
- The record name. Note that the values the system returns for this column vary depending on the record type. For some record types, such as entities and items, this column reflects the value of the record's Name field. For other record types, the Name column may include a more general label.
- Optionally, the record's external ID.

You can also use most of these fields as search criteria. The only exception is external ID.

The following screenshot shows results typical of a Deleted Record search.



As with other search types, you can use a simple search, an advanced search, or a saved search, as follows:

- **Simple search** – The most basic approach. For more information, see the help topic Defining a Simple Search.
- **Advanced search** – Lets you select the fields that should be returned and specify how results should be sorted. For more information, see the help topic Defining an Advanced Search.
- **Saved search** – Lets you save your search criteria and rerun the search later. For more information, see the help topic Defining a Saved Search.

You can also query the Deleted Record using SuiteAnalytics Workbook. For more information, see the help topic SuiteAnalytics Workbook Overview.

Note: By default, the Deleted Record search type is available to only those users with the Administrator role. However, you can grant other roles access using the Deleted Record Search permission. Users who have this permission will see results about any type of record that was deleted, even if they do not have permission to create or modify that record type.

You can run deleted records searches in SuiteScript. You can view a record in the SuiteScript Records Browser to determine whether it supports this type of search. For details, see the help topic Deleted Record Search.

You can include the Deleted Records record in an Analytics dataset to monitor deleted records in NetSuite. For more information, see the help topic Custom Workbooks and Datasets.

The retrieval of deleted records in SOAP web services is a bit different. You can use the getDeleted operation rather than running a search. For a complete list of supported record types for this operation, refer to the DeletedRecordType enumeration in the coreTypes xsd.

You can also use SuiteAnalytics Connect to retrieve the deleted records. You need to access the NetSuite.com data source and use the deleted_records table in your query. For more information, see the help topic SuiteAnalytics Connect.

Searching for Deleted Records That Use the New Analytics Data Source

You can retrieve information about deleted records that use the new analytics data source by using a SuiteQL query. SuiteQL is a query language that provides advanced query capabilities you can use to access your NetSuite records and data. You can run SuiteQL queries using the N/query module

in SuiteScript. You can also run SuiteQL queries against NetSuite database tables directly using SuiteAnalytics Connect. For more information, see the help topic SuiteQL.

The following code sample shows how to run a SuiteQL query for deleted records using the N/query module in SuiteScript. You can reference the deletedRecordInConnect table, which contains information for deleted records.

```
require(['N/query'], function(query) {
    var results = query.runSuiteQL({
         query: "SELECT * FROM deletedRecordInConnect WHERE UPPER(recordType) = UPPER('customfield')"
    }).asMappedResults();

    log.debug(results);
});
```

Note: To see the deletedRecordInConnect table, the NetSuite Analytics Warehouse feature must be enabled at Setup > Company > Setup Tasks > Enable Features. For more information, see the help topic NetSuite Analytics Warehouse Overview.

The preceding code sample queries for deleted records that represent custom fields (that is, the recordType value is customfield). For a list of record type strings you can use in this query, see the help topic query.Type. You can use strings for only those record types that are supported for deletion tracking, as described in Searching for Deleted Records. If you use a string for a record type that is not supported for deletion tracking, the query returns zero results.

The preceding code sample also uses the UPPER() function to convert record type strings to uppercase before comparing them. The casing of record type strings may not always be consistent. For example, the customfield record type string may appear as customField or CustomField when it is retrieved from the database. Using the UPPER() function ensures that the casing is consistent before comparison occurs. For more information about functions you can use in SuiteQL queries, see the help topic SuiteQL Supported and Unsupported Functions.

For more information about running SuiteQL queries using SuiteScript, see the help topic Using SuiteQL with the N/query Module in SuiteScript.

You can run the same SuiteQL query, and obtain the same results, using SuiteAnalytics Connect. For more information, see the help topic Using SuiteQL with the Connect Service.

Understanding the Context for Changes

When viewing data about records, you can view the context for each change. The context describes how the change was made. For example, users and external systems can perform updates through the user interface, web services, SuiteScript, and a variety of other methods. Each method is considered a context. For a full list of contexts, see Available Context Values.

You can view context data in any of the following ways:

- Each change to a record is typically recorded in a system notes record. This record describes the context for the change, among other details. For help navigating to system notes records and using the System Notes search type, see Searching System Notes. For help finding system notes data using the Audit Trail feature, see Viewing an Audit Trail for a Record Type.
- When a record is deleted, you can typically view the context for the record's deletion. You do this using the Deleted Record search type. For more information about this search type, see Searching for Deleted Records.

Note: Context was introduced in Version 2014 Releases 2. Prior to this release, context data was not collected. For that reason, it is not possible to show the context for changes made before your account was upgraded to Version 2014 Release 2.

Available Context Values

The following table summarizes possible context values.

Important: For further details about how the system assigns context values, see Usage Notes.

Context	Change Initiated Through	Corresponding Help Topic
Bulk Processing	Any of the pages in the user interface that let you mark multiple records for simultaneous processing. Such pages include the Authorize Commissions page (at Transactions > Commissions > Authorize Employee Commissions) and the Mark Work Orders Built page (at Transactions > Manufacturing > Mark Work Orders Built).	—
Campaign Response	A campaign response	Tracking Campaign Responses
CSV	The CSV Import Assistant	CSV Imports Overview
Mass Update	The utility at Lists > Mass Update > Mass Updates	Mass Changes or Updates
Mobile	The mobile interface. However, not all changes initiated through the mobile interface have this context label. For details, see Some Contexts Occur Within Other Contexts.	—
Scheduled Workflow	A workflow configured to run at a specific time or interval. See also Workflow.	Initiating a Workflow on a Schedule
Script (Client)	A script that runs in the browser	Client Scripts
Script (Mass Update)	A script that initiates a Mass Update	Mass Update Scripts
Script (Portlet)	A script rendered in the NetSuite dashboard	Portlet Scripts
Script (RESTlet)	A script invoked by an HTTP request to a system-generated URL	RESTlets
Script (Scheduled)	A script configured to run at a specific time or interval	Scheduled Scripts
Script (SSP Application)	A script implemented using the SuiteScript Server Pages feature	SSP Application Overview
Script (Suitelet)	A script that operates in a request-response model using extensions of the SuiteScript API	Suitelets
Script (User Event)	A script triggered by an action performed on a record	User Event Scripts

Context	Change Initiated Through	Corresponding Help Topic
Script (Workflow Action)	A script invoked as a custom action from a workflow state	Workflow Action Scripts
UI	The user interface. However, not all changes initiated through the user interface have this context label. For details, see Some Contexts Occur Within Other Contexts.	—
SOAP Web Services	A SOAP web services request	SuiteTalk SOAP Web Services Platform Overview
Web Store	A SuiteCommerce website	Commerce Product Overview
Workflow	A SuiteFlow workflow that occurs asynchronously. Examples include workflows initiated by nlapiInitiateWorkflowAsync and workflows invoked because they are subscribed to other records. If a workflow is triggered synchronously, by an event, the resulting changes generally share the same context as the triggering event. For examples, see Related Changes May Share a Single Context. Changes made by scheduled workflows have a context of Scheduled Workflow.	nlapiInitiateWorkflowAsync(recordType, id, workflowId, initialValues); Subscribe To Record Action

Usage Notes

Be aware of the following conditions.

Some Contexts Occur Within Other Contexts

The list of available context values includes some contexts that occur within other contexts. For example, one context is UI, but other contexts are specific parts of the UI. In these cases, the system uses the more specific label. For example:

- All CSV imports are initiated through the user interface, but a change made by the Import Assistant is labeled CSV, not UI.
- If a user conducts a Mass Update from a mobile device, the context listed is Mass Update, not Mobile.

Related Changes May Share a Single Context

Note that if one change triggers another change, generally the system lists the same context for both changes, even if they occurred in different ways. The context listed is the context for the change that triggered the series of events.

The reason for this behavior is as follows: The system does not save a context value for each discrete field change. Rather, the system logs a context value for each operation, such as each save operation, which may include many field changes. However, a System Notes record is created for each field change, and each field change must list a context value. For this reason, if one change directly triggers a sequence of events resulting in subsequent changes, the system lists the same context for all changes.

The following hypothetical cases illustrate this concept:

- A scheduled workflow runs, changing Field A on a particular record. If that scheduled workflow triggers a SuiteScript that makes a change to Field B, the context for both changes is Scheduled Workflow.
- A user edits a record. The user's actions trigger a workflow that makes other changes to the record. All changes have the same context, which is UI.
- The CSV Import Assistant is used to import a record. Some aspect of the new record triggers a workflow, which makes changes to the newly imported record. The context for all changes is CSV Import.

Avoiding Duplicates

The topics listed below can help you avoid unintended duplicate entries in NetSuite.

- Avoiding Duplicate Transaction Numbers
- Duplicate Number Warnings
- Using Auto-Generated Numbering for Transactions
- Avoiding Duplicate Processing of Memorized Transactions

Important: On a transaction, use caution when you click the Submit button. If you click Submit more than one time, multiple transactions may be created.

Avoiding Duplicate Transaction Numbers

NetSuite provides a number of methods you can use to avoid the entry of duplicate transaction numbers.

- Set a user-level preference to receive a warning when a duplicate transaction number is entered. Go to Home > Set Preferences. On the Transactions subtab, check the Duplicate Number Warnings box.

  To access preferences, you need the View level of the Set Preferences permission.
- Set an account-level preference to receive a warning when a duplicate transaction number is entered. For information, see Duplicate Number Warnings.
- Use auto-generated numbering for transactions. For information, see Using Auto-Generated Numbering for Transactions.

Important: If auto-generated numbering is enabled in a OneWorld account, subsidiary-specific prefixes for transaction numbers can be defined in subsidiary records. This ensures that each subsidiary's transactions has its own numbering sequence. See the help topic Using Subsidiary-Specific Transaction Auto-Numbering.

Duplicate Number Warnings

Any user with the Accounting Preferences permission can set up an account so that all users are alerted or blocked from proceeding when they attempt to save transaction records with duplicate document numbers.

If you import transactions and use the Advanced Numbering feature, NetSuite responds to duplicates according to these settings. If you import transactions and use the Advanced Numbering feature, NetSuite responds to duplicates according to these settings. When you import a transaction, NetSuite determines which advanced numbering rule applies to it using your rules' criteria. It then checks if a transaction with the same document numbers already exist for the same rule. If a duplicate is detected, NetSuite uses your Duplicate Number Warnings preference as described below.

To enable these warnings, go to Setup > Accounting > Preferences > Accounting Preferences. On the Items/Transactions subtab in the Other Transaction Preferences section, select one of the following Duplicate Number Warnings from the list:

- **No Warnings** – Users are not warned when the transaction they are saving will create a duplicate document number.

  If you import transactions and use Advanced Numbering, NetSuite does not warn you when the imported transactions use duplicate document numbers and imports all transactions.

- **Warn (UI only)** – Users receive a message when attempting to save a transaction record with the same document number as another record of the same type. When the warning is displayed, a user can enter a different number before attempting to save again.

  If you import transactions and use Advanced Numbering, NetSuite does not warn you when the imported transactions use duplicate document numbers and imports all transactions.

- **Warn and Block** - Users receive a message when attempting to save a transaction record with the same number as another record of the same type. When the warning is displayed, the user must click Cancel and change the document number in the record. This option affects the following transaction types:

  - Vendor bills
  - Vendor credits
  - Card charges
  - Card refunds
  - Custom purchase transactions

  If you import transactions and use Advanced Numbering, NetSuite warns you when imported transactions create duplicate document numbers, and does not import these transactions.

Important: On a transaction, use caution when you click the Submit button. If you click Submit more than one time, multiple transactions may be created.

Using Auto-Generated Numbering for Transactions

When enabled, the auto-generated numbering feature prevents assigning duplicate numbers to transactions in NetSuite. This ensures that the number cannot be edited and cannot be duplicated. Auto-generated numbering for transactions is enabled by default and cannot be disabled. For information about this feature, see the help topic Set Auto-Generated Numbers.

To have transaction numbers generated when forms are saved:

1. An administrator can go to Setup > Company > Auto-Generated Numbers.
2. Click the **Transactions** subtab.
3. To ensure that no duplicate transaction numbers are used, clear the box in the **Allow Override** column for each transaction.
4. Click **Save**.

   When you create a transaction, the number field reads **To be generated**. When you return to the transaction, the generated number shows in this field. For example, if you create an invoice, the Invoice # field reads **To be generated**. When you save the invoice, a number is assigned. If you return to the invoice at Transactions > Sales > Create Invoices > List, you can view the number for the invoice.

Warning: You cannot auto-generate numbers for journals if you enable the Always Allow Per-line Classifications on Journals preference.

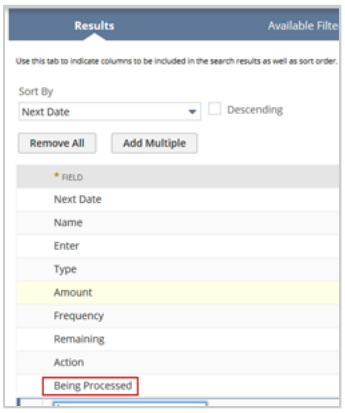
Warning: You should never override auto-generated numbers to delete any part of a default prefix or suffix on transaction numbers. Doing this may corrupt data used in transaction searches.

Important: If auto-generated numbering is enabled in a OneWorld account, subsidiary-specific prefixes for transaction numbers can be defined in subsidiary records. This ensures that each subsidiary's transactions has its own numbering sequence. See the help topic Using Subsidiary-Specific Transaction Auto-Numbering.

Avoiding Duplicate Processing of Memorized Transactions

You can avoid duplicate processing of memorized transactions in a bulk update by customizing a Memorized Transaction Search form:

1. Go to Transactions > Management > Enter Memorized Transactions > List (Administrator).
2. In the header, click **Search**.
3. On the Memorized Transaction Search page, click **Personalize Search**.
4. On the custom search form, enter a search title.
5. Click the **Results** subtab.
6. Select **Being Processed** for the result column.



7. Click **Add**.
8. Click **Save**.

When you view the results of this search, the Being Processed column displays Yes or No to indicate if a memorized transaction is being processed as part of a bulk update. If the column displays Yes for a transaction and you select the transaction for processing, it is possible to duplicate processing. Best practice is to avoid processing transactions that display Yes in the Being Processed column.

If you do submit a memorized transaction that is currently in a processing state, NetSuite displays an error message on the Processed Orders page and the memorized transaction is not processed.

Note: To access memorized transactions, you need View access level for the Memorized Transaction permission.