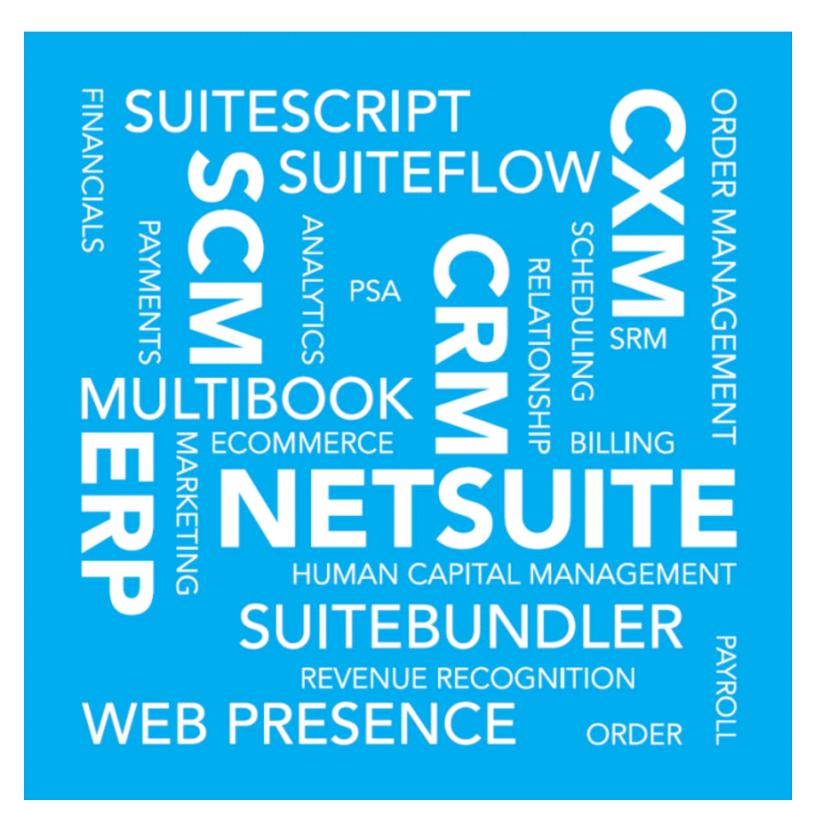
NetSuite Point of Sale Release Notes 2018.1



April 6, 2018 Release 2018.1.X

Copyright © 2005, 2018, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

If this document is in public or private pre-General Availability status:

This documentation is in pre-General Availability status and is intended for demonstration and preliminary use only. It may not be specific to the hardware on which you are using the software. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to this documentation and will not be responsible for any loss, costs, or damages incurred due to the use of this documentation.

If this document is in private pre-General Availability status:

The information contained in this document is for informational sharing purposes only and should be considered in your capacity as a customer advisory board member or pursuant to your pre-General Availability trial agreement only. It is not a commitment to deliver any material, code, or functionality,

and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described in this document remains at the sole discretion of Oracle.

This document in any form, software or printed matter, contains proprietary information that is the exclusive property of Oracle. Your access to and use of this confidential material is subject to the terms and conditions of your Oracle Master Agreement, Oracle License and Services Agreement, Oracle PartnerNetwork Agreement, Oracle distribution agreement, or other license agreement which has been executed by you and Oracle and with which you agree to comply. This document and information contained herein may not be disclosed, copied, reproduced, or distributed to anyone outside Oracle without prior written consent of Oracle. This document is not part of your license agreement nor can it be incorporated into any contractual agreement with Oracle or its subsidiaries or affiliates.

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Sample Code

Oracle may provide sample code in SuiteAnswers, the Help Center, User Guides, or elsewhere through help links. All such sample code is provided "as is" and "as available", for use only with an authorized NetSuite Service account, and is made available as a SuiteCloud Technology subject to the SuiteCloud Terms of Service at www.netsuite.com/tos.

Oracle may modify or remove sample code at any time without notice.

No Excessive Use of the Service

As the Service is a multi-tenant service offering on shared databases, Customer may not use the Service in excess of limits or thresholds that Oracle considers commercially reasonable for the Service. If Oracle reasonably concludes that a Customer's use is excessive and/or will cause immediate or ongoing performance issues for one or more of Oracle's other customers, Oracle may slow down or throttle Customer's excess use until such time that Customer's use stays within reasonable limits. If Customer's particular usage pattern requires a higher limit or threshold, then the Customer should procure a subscription to the Service that accommodates a higher limit and/or threshold that more effectively aligns with the Customer's actual usage pattern.

Beta Features

Oracle may make available to Customer certain features that are labeled "beta" that are not yet generally available. To use such features, Customer acknowledges and agrees that such beta features are subject to the terms and conditions accepted by Customer upon activation of the feature, or in the absence of such terms, subject to the limitations for the feature described in the User Guide and as follows: The beta feature is a prototype or beta version only and is not error or bug free and Customer agrees that it will use the beta feature carefully and will not use it in any way which might result in any loss, corruption or unauthorized access of or to its or any third party's property or information. Customer must promptly report to Oracle any defects, errors or other problems in beta features to support@netsuite.com or other designated contact for the specific beta feature. Oracle cannot guarantee the continued availability of such beta features and may substantially modify or cease providing such beta features without entitling Customer to any refund, credit, or other compensation. Oracle makes no representations or warranties regarding functionality or use of beta features and Oracle shall have no liability for any lost data, incomplete data, re-run time, inaccurate input, work delay, lost profits or adverse effect on the performance of the Service resulting from the use of beta features. Oracle's standard service levels, warranties and related commitments regarding the Service shall not apply to beta features and they may not be fully supported by Oracle's customer support. These limitations and exclusions shall apply until the date that Oracle at its sole option makes a beta feature generally available to its customers and partners as part of the Service without a "beta" label.

Table of Contents

NetSuite POS 2018.1.0 Release Notes	. 1
Product Enhancements 2018.1	3
Backward Compatibility for NSPOS upgrades	
Separate Database for Item information	
Item Restrictions by Subsidiary or Location	
Price Filtering for Currency by Location	7
zipPay Integration through PC-EFTPOS	
Enhanced Workstation Hardware Monitoring	
Hardware Recommendations for NSPOS 2018.1	
Fixes 2018.1	15
Update the NetSuite Point of Sale Bundle to 2018.1	16
NetSuite POS Release Guidelines 2018.1	17
Resources and Recommendations	17
Areas to Verify prior to Upgrading	
NetSuite POS Documentation Resources 2018.1	

NetSuite POS 2018.1.0 Release Notes

(i) Applies to: NetSuite Point of Sale (NSPOS)

This chapter lists the important updates provided in NetSuite Point of Sale (POS or NSPOS) version 2018.1. Updates are not available to NetSuite POS customers until they have upgraded to the release. NetSuite will modify these release notes when needed to provide our customers with additional information.

- Required User Actions
- Prerequisites
- Product Enhancements 2018.1
- Fixes 2018.1
- Update the NetSuite Point of Sale Bundle to 2018.1

Required User Actions

To use the functionality included in this release, your business must perform the following steps:

- Update the NetSuite Point of Sale Bundle to 2018.1
- Modify configurations as needed and described for each enhancement.

Your assistance will be required to perform the upgrade. Technical Support or another representative will contact you in advance to agree on the details.

Upgrade verification and UAT: When your NetSuite POS upgrade is complete, we recommend testing at least one register in each store. You can find our **Terminal Verification Checklist – NSPOS 2018.1** in the NetSuite Help Center > User Guides > NetSuite Point of Sale section. Log into NetSuite before clicking the link.

You can use the checklist for verification after the upgrade and as a guide for performing initial User Acceptance Testing (UAT).

Prerequisites

The following are prerequisites for performing the upgrade to 2018.1.

Current Release Requirement

You must be on NSPOS release 2017.2.2 prior to moving to 2018.1.

Third Party Application Requirements

Release 2018.1.0 or greater requires that the following be installed on each register or terminal server. You should perform the installations in phases to ensure you always have working registers available.



- **(i)** Note: These third-party requirements were in place for other recent NSPOS releases. If you are an existing customer, you likely have fulfilled these prerequisites.
- Microsoft® SQL Server 2008 R2 Service Pack 3 See Verify MS SQL 2008 R2 SP 3 loaded on Workstations.
- Microsoft Point of Service for .NET v1.14
- Microsoft .NET Framework 4.6.2

Note: For Windows 10, Microsoft .NET Framework 4.6.2 framework is included and installed automatically in the Windows 10 Anniversary Update.

OPOS 1.14 for some devices.

OPOS v1.14 is not required for peripheral hardware devices from the following manufacturers. It might be required for devices from other manufacturers. Please consult your hardware installation guides.

- Epson®
- Hewlett Packard (HP)®
- Logic Controls®
- Star Micronics®
- Toshiba®

Verify your peripheral hardware



Note: These third-party requirements were in place for other recent NSPOS releases. If you are an existing customer, you likely have fulfilled these prerequisites.

HP, Logic Controls, Star Micronics and Toshiba: We have tested these peripherals after installing the software required for NSPOS 2018.X. If you have the latest drivers installed, no further driver setup should be required. However, we recommend that you install the latest peripheral drivers and test all peripherals after installing the required software.

Epson printers: Our tests show that some Epson driver versions will not work with NSPOS 2017.X, particularly the Epson OPOS ADK for .NET driver.

The recommended OPOS driver is Epson OPOS ADK v2.80 or later.

To verify which Epson OPOS driver is installed:

- 1. Click the Windows Start button.
- 2. Open the Control Panel.
- 3. Click Programs or Programs and Features.
- 4. Review the list for the following drivers:
 - Epson OPOS ADK v2.70 or below
 - Epson OPOS ADK for .NET, any version
- 5. If either of these drivers is installed, replace it with Epson OPOS ADK v2.80 or later. Be aware that replacing the driver will reset your device configurations.

Device manufacturers not listed: Install the latest peripheral drivers and test all peripherals after installing the required software.



Product Enhancements 2018.1

This NetSuite Point of Sale (NSPOS) release provides customer-controlled register upgrades, item and price restriction capabilities, a separate item Db, a new payment method and enhanced hardware monitoring.

- Backward Compatibility for NSPOS upgrades
- Separate Database for Item information
- Item Restrictions by Subsidiary or Location
- Price Filtering for Currency by Location
- zipPay Integration through PC-EFTPOS
- Enhanced Workstation Hardware Monitoring
- Hardware Recommendations for NSPOS 2018.1

Also see the Fixes 2018.1 section for:

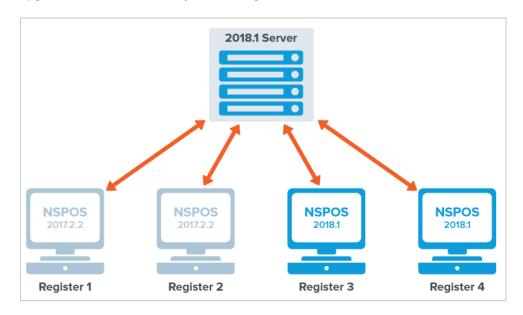
DbSize vs. RowSize Corrected

For full steps on how to use a feature, see the NetSuite POS Administrator Guide. Log into NetSuite before clicking this link to the guide.

Backward Compatibility for NSPOS upgrades

We listened to your feedback on the downtimes that can occur when upgrading your NSPOS registers to the next release. We are pleased to announce that NSPOS **2018.1** includes a new feature called **Backward Compatibility**. With this feature, we can upgrade your server to 2018.1 and then let you upgrade each register when it is convenient for your business. Your registers running 2017.2.2 will continue communicating with the 2018.1 server until you are ready to make the move.

Backward Compatibility means that you decide when the time is right to perform an upgrade. You can upgrade an entire location or just a few registers at a time.



Why this change?

In the past, upgrades were all or nothing. Moving to a new release took approximately 90 minutes to upgrade the server and around 30 minutes for every 50 registers. However, multiple factors could delay or increase the time spent on the process. For example:

- Registers being offline
- Users left signed in
- Network connectivity issues

On the average, around 10% of registers will fail to upgrade on the first try. Plus, working to upgrade all registers at the same time requires coordination between NetSuite Technical Support, your administrator, your employees, and - in the event of downtime - your customers. Backward Compatibility under 2018.1 lets you decide when the time is right on a register-by-register basis.

To start with Backward Compatibility

First, if you haven't already, you must upgrade all registers to 2017.2.2. Then work with your Account Manager or Technical Support to have your server upgraded to NSPOS 2018.1. After that, upgrade your registers to 2018.1 on your timeline.

Doing a self upgrade requires that you restage your registers. The NetSuite Point of Sale Administrator Guide contains complete instructions. See the help topic Stage a Register.

We recommend starting with only a few registers. We also strongly recommend completing all register upgrades within 30 days of your server upgrade.



(i) Note: To ensure all of your registers receive an upgrade, we will alert you through prompts in NSPOS (Closed mode) and NetSuite ERP (RA-Workstation record) that a new release is available for the terminal. In the event that another release is coming soon, the prompts to upgrade to the current version will include a do-by date.

What if I don't have the time or staff to perform register upgrades?

We can still do a full upgrade to 2018.1 on your behalf. Contact your Account Manager or Technical Support with any questions.



Important: When a 2018.1 upgrade is performed by the NSPOS Release Team, it requires a temporary disk space allocation to perform a migration to the new item database. Selfupgrades performed by restaging do not require this temporary disk space. See Temporary disk space allocation required.

Separate Database for Item information

The item information held in the NSPOS database (RaposDb) on each register includes not only item details, such as the item name, description, and UPC, but also the information associated with each item. For example, item information will include prices, price levels, and location-specific restrictions. A single item can have multiple data points that support it. This data is in addition to the other types of data held for NSPOS on your registers, such as customers, locations, promotions and transactions.

As our retailers grow their business, they often increase the number of unique items that they carry. In the past, the NSPOS RaposDb database was required to hold all information, up to a maximum of 10 GB. Free space in the database could become an issue when scaling for business growth.

Now, in NSPOS 2018.1, your registers will use a separate 10 GB database for item and item-related data. The new item database architecture frees space on the Rapos database for transaction, customer and other data. It increases the maximum data size per register to 20 GB total. The item database is labeled the RaposInventoryDb on the register's Workstation Monitoring tab.





Note: The "Inventory" portion of the RaposInventoryDb name refers to item information only. NSPOS does not offer inventory monitoring.

Temporary disk space allocation required



Important: When a 2018.1 upgrade is performed by the NSPOS Release Team, it requires a temporary disk space allocation to perform a migration to the new item database. Self-upgrades performed by restaging do not require this temporary disk space.

During a standard Release Team upgrade, the migration to a separate item database requires temporary storage. The requirement is the total space currently holding item and item-related data, times two, and then add 5 GB. For example:

Item data = 7 GB

7 GB x 2 = 14 GB

14 GB + 5 GB = 19 GB free disk space required

The extra space required is released after the migration. If you do not have space available on a register, you can restage the register. Staging to 2018.1 will remove and replace all NSPOS data and build the separate item database using your current free space.



Tip: Always try to maintain plenty of free disk space on your registers. Loading data and applications that are not related to NSPOS might cause space issues in the future.

Item Restrictions by Subsidiary or Location

With NSPOS 2018.1, you can set restrictions on where an item can be sold. In the past, all items were visible to the cashier at every location. Now, by selecting one or more subsidiaries or a single location on an NetSuite ERP Item record, you can limit the stores that are authorized to handle an item. If a store is not included in a subsidiary or location chosen for an item, the item is not authorized to the store and is not visible to the cashier at the store.

If the cashier searches for or scans an unauthorized item, NSPOS returns a prompt stating "No results found." This prompt also appears if the cashier attempts to process a return for an unauthorized item.

You can set restrictions one item at a time, or you can perform a mass update of Item records through an upload. Note that for mass updates, we recommend the following:

- Do not perform mass item updates during business hours, when transactions are occurring on your registers.
- Limit mass updates to 60,000 records per 24-hour period. Exceeding this limit can impact synchronization between your server and your registers.



Note: To keep an item available without restrictions, leave the **Subsidiary** set to **Parent Company**. This subsidiary choice is the default.

Considerations for current item restrictions

Because restrictions by subsidiary or location previously had no effect, this information was not downloaded to your registers. After the upgrade to 2018.1, restrictions on existing items will not



become active until you update those items in NetSuite ERP. Any update to an item's record will cause the applicable item information to be included in the next synchronization cycle.



Warning: If an unwanted restriction is in place, updating other information on the item will cause the restriction to be downloaded. We highly recommend that you Review Current Item Restrictions prior to your upgrade.

To restrict a single item to subsidiaries or a location:

Restricting an item means that it will only be visible to the cashier and available for sale at the selected subsidiary's locations or optionally, a single location. For information about complex setups for assigning subsidiaries and locations, see the help topic Creating Item Records in the NetSuite ERP Help Center. Look under Item Record Header Fields > Classification > Subsidiary > Advanced Item Location Configuration.

- 1. Log in to NetSuite as an administrator.
- 2. Go to Lists > Accounting > Items.
- 3. Locate the desired item and click Edit.
- 4. To restrict the item to all locations within a subsidiary, select the **Subsidiary**.

You can select more than one subsidiary.



- 5. To restrict the item to a single location within the chosen subsidiary, select the **Location**.
- 6. Click Save.

Review Current Item Restrictions

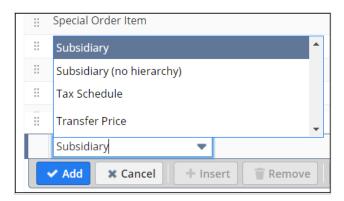
In the past, subsidiary or location restrictions had no effect on what was available on each register. Now, with the restriction feature, settings applied in the past might not be desirable for your current needs. We recommend that you create a search and review all items for their assigned subsidiaries and locations.

To perform an item search for restrictions:

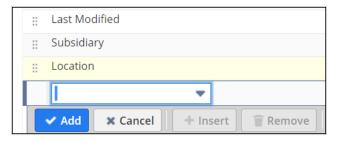
These steps display an item list customized to include the Subsidiary and Location fields.

- 1. Log in to NetSuite as an administrator.
- 2. Go to Lists > Accounting > Items.
- 3. Click Customize View or Edit View.
- 4. Scroll to the bottom of the Field list.
- 5. Enter Subsidiary and click Add.

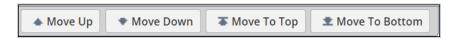




6. Enter Location and click Add.



7. Select **Subsidiary** and click **Move To Top**.



- 8. Select Location and click Move To Top.
- 9. Click Preview.
- 10. Sort the list by clicking a column heading as desired.
- 11. Click an export option to save the list for review.



Price Filtering for Currency by Location

The NSPOS 2018.1 release includes replication filtering for price levels using the currency assigned to the location. In the past, all prices in all currencies handled by a retailer were downloaded to all registers. However, registers in Oklahoma City, OK USA do not need pricing in Euros and registers in Tokyo, Japan would not typically trade in US Dollars.

Our new price filtering feature only downloads item price levels that are applicable to a store's business. For retailers handling multiple currencies, the feature can significantly lower the amount of data stored on each register's database.

Before 2018.1, all price levels were downloaded everywhere:

Items x Price Levels x n Currencies = Number of lines downloaded to all registers, all locations



1000 x 2 x 3(\$ and ¥ and €)= 6000 lines

With 2018.1, locations only receive price levels for the currency used:

Items x Price Levels x 1 Currency = Number of lines downloaded to registers at each currency location

1000 x 2 x 1(\$ or ¥ or €) = 2000 lines

During data downloads (down syncs), the server checks the currency set on the retailer's NetSuite ERP Location records. If no currency is defined for a location, we use the currency set on the location's parent Subsidiary record.

Removing unneeded currencies from your registers

In previous releases, pricing for all the currencies you accept was loaded to all registers. Restaging a register **after** designating a currency on the Location record associated with the workstation removes any price data that is not valid for the register's store. This action frees valuable disk space on each register's database.

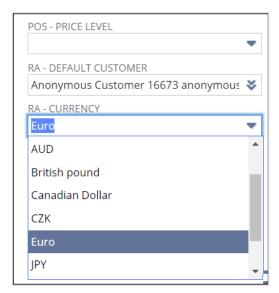
To set a Currency for a Location:

Perform these steps to set up a store currency different from the default set on your parent Subsidiary record. You must restage the registers assigned to the store location.



Note: You must designate a currency for all locations that sell NetSuite Gift Cards or Gift Certificates.

- 1. Log in to NetSuite as an administrator.
- 2. Go to Setup > Company > Locations.
- 3. Click **Edit** for the desired Location record.
- 4. Select from the RA-Currency list.
- 5. Click Save.



- 6. Repeat for other Location records as needed.
- 7. Restage the registers at each affected location.





Important: Changing the currency field (RA-CURRENCY) on a Location record switches the price currency sent to all registers at the location. You must restage all registers at the location to activate the new currency.

Otherwise, your registers will continue using the old currency, causing price discrepancies at the point of sale.



(i) Note: To set up price levels in NetSuite ERP, go to Setup > Accounting > Setup Tasks > Accounting Lists > New > Price Level.

zipPay Integration through PC-EFTPOS

zipPay is payment method customers can use to tender payment for a transaction. zipPay is based in Australia. It sends the consumer a code via their mobile device that is entered at the point of sale. The code authorizes payment to the retailer.

NSPOS 2018.1 uses our existing integration with the PC-EFTPOS payment gateway to enable zipPay tender transactions. zipPay supports sales transactions and return transactions for NSPOS. Consumers must have a zipPay account and the application at hand on their mobile devices to tender payment. With the exception of a prompt that requests the code from the customer, the transaction process flows similar to any other tender payment.



Retailers choosing to include zipPay as a tender option must update each register's RA-Workstation record in NetSuite ERP to set EFTPOS as the Payment Provider. EFTPOS is an abbreviation for PC-EFTPOS.



Note: zipPay is only available through the PC-EFTPOS payment gateway. You cannot have more than one payment gateway per register.

Restrictions when using zipPay

The only transaction types enabled for zipPay in NSPOS are sales and returns.

If a purchase is made through zipPay, return of those item must be refunded to the customer's zipPay account.



zipPay cannot be used to make deposits for Sales Orders.

Setting up zipPay for your Registers

Follow these steps to set up zipPay in your tender list. The NSPOS zipPay function and button setup only needs to be applied to one register in each workstation group.

- 1. Configure PC-EFTPOS in NetSuite ERP for each RA-Workstation record.
- 2. Add the zipPay function and button on your registers.

To configure PC-EFTPOS in NetSuite ERP:

- 1. Log in to NetSuite as an administrator.
- 2. Go to Customization > Lists, Records, & Fields > Record Types.
- 3. Locate the RA-Workstation row and click List.
- 4. Click Edit for the first workstation to update.
- 5. For Payment Provider, select EFTPOS.

No further setup is required on this record.



- 6. Click Save.
- 7. Repeat for the next RA-Workstation record until all active workstation records are updated.

Next, add the zipPay function and button on your registers.



Tip: Function and button changes for one register appear on all registers in its workstation group.

To add the zipPay function and button on your registers:

- 1. Sign on to a NSPOS register as an administrator.
- Tap Manager Functions > System Configuration > Button Edit.
 Or press Ctrl+F12, search for and tap Button Edit.
- 3. Tap the **Side** button bar option and tap **Pages**.
- 4. Tap the **Tender** row in the **Button Page** list.
- 5. Tap **Activate** so that you can see the changes immediately.
- 6. Tap Buttons.



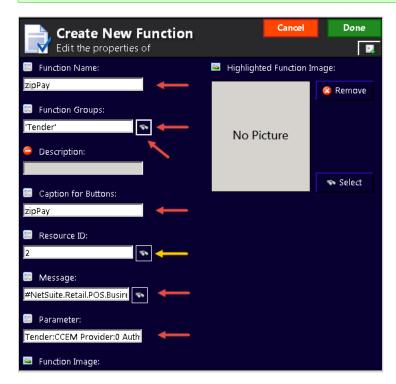
7. Tap New and then Create Function.



- 8. Tap Yes.
- 9. For Function Name, enter zipPay.
- 10. For **Function Group**, click the search icon \P and tap **Tender**.
- 11. Tap Done.
- 12. For Caption for Buttons, enter zipPay.
- 13. If desired, adjust the Resource ID.

The Resource ID sets the permission level required to use the button. The default is 2 for sales associates and cashiers. Manager-level access is 9070.

- 14. For Message, enter #NetSuite.Retail.POS.Business.TenderProcess
- 15. For Parameter, enter Tender: CCEM Provider: 0 AuthorizationOption: ZIPPAY
 - **Tip:** You can copy and paste these values from the PDF or Help Center topic.



- 16. Tap Done.
- 17. Choose a color from the **Style** list.
- 18. Set the placement for your button by changing the **Column** and **Row** fields.
- 19. If you want to make your button smaller or larger, adjust the Width and Height.





Tip: Because you tapped Activate earlier, you can see the changes behind the edit form.

20. Close the **Button Edit** form when your setup is complete.



Important: Repeat all steps for one register in each Workstation Group.

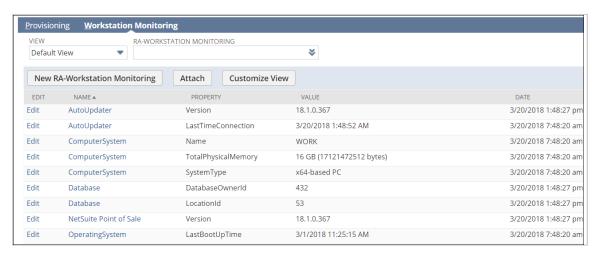
Enhanced Workstation Hardware Monitoring

We have increased the number of statistics reported on the NSPOS Workstation Monitoring tab. This tab is available on each register's RA-Workstation record. You can use these statistics to track the overall health of each register and provide information for troubleshooting. The monitoring statistics are updated once every 24 hours.

Included of note is the AutoUpdater last connection date. Use this date prior to a new release to ensure the AutoUpdater application is functioning and can load new releases and fixes to your registers.

To view monitoring for a workstation:

- 1. Log in to NetSuite as an administrator.
- 2. Go to Customization > Lists, Records, & Fields > Record Types.
- 3. Locate the RA-Workstation row and click List.
- 4. Click View for the desired workstation.
- In the Monitoring section, view the Last Connected to Server timestamp and the Offline status.
 These values can verify if a register is running and synchronizing to receive database updates from your server.
- 6. Open the Workstation Monitoring subtab and review the statistics.



Monitoring Statistics

For release 2018.1, workstation monitoring provides the following statistics about each register.



Name	Value
Last Connected to Server	Last date / time register connected with the cloud server for synchronization.



Offline

Register network connection status. Selected means register is offline.

<u>P</u>rovisioning Workstation Monitoring

Name	Property	Value
AutoUpdater	Version	AutoUpdater version installed on the register.
AutoUpdater* — The AutoUpdater provides automatic upgrades of major NSPOS components.	LastTimeConnection	Last time AutoUpdater connected to the register. Can be used prior to a new release to ensure AutoUpdater is running and can load the upgrade to the register. The date displayed should be the current date or, if reviewed early in the morning, yesterday's date.
ComputerSystem	Name	Should match the register terminal's Computer Name that can be seen in the system information.
ComputerSystem*	TotalPhysicalMemory	Size of physical memory. Should meet or exceed the minimum hardware specifications listed in the NSPOS Administrator Guide > NSPOS System Requirements.
ComputerSystem*	SystemType	Terminal hardware type, such as x64-based PC or X86-based PC.
Database	DatabaseOwnerId	ID of database used by the NSPOS register. For standalone or Server with POS registers, value is the database ID of the register. For POSClient registers, value is the database ID of the connected Server with POS register database.
Database*	LocationId	ID of the location in which the register is running. Use to verify that the register is assigned to the correct location.
NetSuite Point of Sale	Version	NSPOS release installed on register. Important for customizing registers, making upgrades and performing troubleshooting.
OperatingSystem*	LastBootUpTime	Date and time the operating system was last restarted.
OperatingSystem*	Caption	Name of the system, such as Microsoft Windows 8.1 Enterprise. Should match one of the systems supported in the PA-DSS guide corresponding to the register's NSPOS release.
OperatingSystem*	Version	Version number of the register's operating system.



OperatingSystem*	CurrentTimeZone	The time zone used by the register, displayed as an offset in minutes from Greenwich Mean Time (GMT). GMT is also called Coordinated Universal Time (UTC). The number can be positive, negative, or zero.
Processor*	Name	Register's processor type.
RaposDb The Rapos database contains the register's basic NSPOS information, including location, customer, promotion and transaction data.	RowSize	Current space reserved for the application using this database. Can not exceed 10 GB. See RowSize and DbSize.
RaposDb	Version	Rapos database application version on register.
RaposDb*	DbSize	Amount of data saved to the database. Should be monitored to ensure value is below 10 GB maximum. See RowSize and DbSize.
RaposInventoryDb* — Also called the "Item" database, the RaposInventory database handles all item-related data, including item name, description, UPC, price, price level, and location-specific selling points.	RowSize	Current space reserved for the application using this database. Can not exceed 10 GB.
RaposInventoryDb*	Version	RaposInventory database application version on register.
RaposInventoryDb*	DbSize	Amount of data saved to the database. Should be monitored to ensure value is below 10 GB maximum.
RaposReplicationDb* — Rapos Replication database handles the synchronization process (upsync and downsync) between the register and NetSuite ERP.	DbSize	Amount of data saved to the item database. Should be monitored to ensure value stays below the 10 GB maximum.
RaposReplicationDb	RowSize	Current space reserved for the application using this database. Can not exceed 10 GB.
RaposReplicationDb	Version	RaposReplication database application version on register.
Replication Push Agent — Application performing synchronization tasks for the RaposReplicationDb.	Version	Version of push agent used to perform synchronization tasks.
ReplicationStatistics*	XmlFilterToProcess	Amount of data to be processed from or to the register. Should be zero.
ReplicationStatistics*	XmlInboxConflicts	Number of conflicts on the register. For example, if a price update for an item fails, it will show as a conflict. Should be zero.



ReplicationStatistics*	XmlInboxToApply	Number of unprocessed records downloaded and waiting to be processed. Should be zero.
ReplicationStatistics*	UnsentTransactions	Number of transactions being held on the register prior to sending. Should be zero, although total might be skewed by "control" transactions.
* New in NSPOS 2018.1.0		,

RowSize and DbSize

You should review the RowSize and DbSize values for each database type to ensure volumes stay below the maximum limit of 10 GB.

- RowSize Is the space reserved by the database application to manage saved information. An empty database is allocated 1 GB (gigabyte) by default. When data exceeds 1 GB, it allocates another GB of space, changing the RowSize to 2 GB.
 - A database might contain 9.1 GB of data (DbSize), but the RowSize will show the reserved space as 10 GB. Because RowSize is a space-allocation indicator only, it should not be flagged as an immediate problem if it shows 10 GB.
- DbSize Represents the actual volume of data saved to the database. It should be monitored to ensure it stays below the 10 GB maximum. Problems can occur when data is close to 10 GB, and will occur if data requirements exceed the 10 GB maximum reserved by the RowSize.



Warning: Ensure each DbSize value stays below 10 GB.

Hardware Recommendations for NSPOS 2018.1

Due to complex changes in the NetSuite Point of Sale (NSPOS) application, we have increased the recommended minimum hardware requirements. This increase will maintain or improve the overall performance when using our product.

If your current hardware meets the minimums recommended previously, you can continue using NSPOS with release 2018.1. For the long term, we recommend updating your hardware to the new specifications.

Minimum Specifications

- Processor speed: 2.2 GHz (2.8 GHz recommended)
- Processor type: Intel Dual-Core / Core i3 (or AMD equivalent) or above
- RAM: At least 4 GB (6-8 GB recommended*)
- Hard disk drive (HDD): 30 GB free space or above
- * Addressing memory above 4 GB requires a 64-bit operating system.



 Note: Configurations that only meet the minimum requirements might experience slower processing times during periods of high-volume traffic.

Fixes 2018.1

NSPOS 2018.1.0 includes the following fix and other, behind-the-scenes fixes.



DbSize vs. RowSize Corrected

In previous releases of NetSuite Point of Sale (NSPOS), our Workstation Monitoring tool available from each RA-Workstation record in NetSuite ERP provided database statistics for RowSize only. Previously applicable to the primary NSPOS database (RaposDb) and the replication database (RaposReplicationDb) only, RowSize displays the disk space allocated to hold NSPOS data. The DbSize used was not available.

As described in the RowSize and DbSize topic in these release notes, the RowSize can show 10 GB allocated for storage, even though only 9.1 GB was actually in use. The DbSize measurement provides the actual volume of data saved to each database. DbSize is the value that must be kept below the 10 GB limit.

With 2018.1, we updated our Workstation Monitoring tool to show both the RowSize allocated values and the DbSize values in use on each register.

Update the NetSuite Point of Sale Bundle to 2018.1

To use the functionality provided in the 2018.1 release, you must update your NetSuite Point of Sale (NSPOS) bundle. Follow the instructions below.



Important: Updating a bundle requires an Administrator role. If you need assistance performing this update and verifying settings, please contact NSPOS Support or Professional Services.

To update the NetSuite Point of Sale bundle:

- 1. Log in to NetSuite as an administrator.
- 2. Go to Customization > SuiteBundler > Search & Install Bundles > List.
- 3. On the Installed Bundles page, locate NetSuite Point of Sale Bundle with Bundle ID 27525. Under the version number, the blue \mathbf{m} icon indicates there is a newer version available. Placing your mouse over the icon displays more information. If you do not see this icon, your installed bundle is already up to date and no further action is required.
- 4. Place your mouse over the green 🚁 icon and click **Update**. Allow time for the page to load.
- 5. Review the updates to be installed.
 - NetSuite alerts you on-screen of any conflicts or issues that may occur with the installation. If in doubt, please stop and contact NetSuite Technical Support.
- 6. Click Update Bundle.
- 7. Click **OK** at the prompt.
 - The Updated Bundles page displays the install progress. When complete, if the bundle updated correctly, a green check mark displays in the Status column.



NetSuite POS Release Guidelines 2018.1

(i) Applies to: NetSuite Point of Sale (NSPOS)

This chapter provides resources, recommendations and additional verification points to ensure your NetSuite Point of Sale (POS or NSPOS) upgrade and day-to-day operations perform optimally and efficiently.

- Resources and Recommendations
- Areas to Verify prior to Upgrading



Warning: Do not update your bundle without discussion and approval from NetSuite Technical Support or Professional Services. Otherwise, the update could impact the functionality of your NetSuite POS registers.

Resources and Recommendations

Use the guidelines in this section to help ensure your NetSuite Point of Sale (NSPOS) upgrade and daily operations are a success.

- Payment Application Data Security Standards (PA-DSS)
- Third Party Software and Licenses
- Verify your Registers after the upgrade
- Recommendations about mass Item and Customer updates
- Planning efficient rollouts for new Stores and Registers
- Windows® Updates and Performance
- Register Time Synchronization via the Internet
- RAFS vs. File System folder

Payment Application Data Security Standards (PA-DSS)

NetSuite POS is a PA-DSS validated application. The Payment Application Data Security Standard (PA-DSS) guide describes the Payment Card Industry (PCI) initiative and lists recommendations for using NetSuite POS in a PCI DSS compliant environment.

The guide includes details about installing and configuring a compliant system, best practices for maintaining compliance, and a list of **operating systems (OS) validated for use on your NetSuite POS terminals**.



Important: See the Payment Application Data Security Standard (PA-DSS) guide appropriate to your NetSuite POS version in the NetSuite Help > User Guides. Log into NetSuite ERP first.

Third Party Software and Licenses

A NetSuite POS implementation can include software governed by licenses from third parties ("Third Party Software" and "Third Party License"). All third party software licensed for use with NetSuite POS



is subject to the terms and conditions of the corresponding Third Party License, notwithstanding anything to the contrary in the agreement governing the POS Software. NetSuite | Oracle makes no representation or warranty concerning Third Party Software and shall have no obligation or liability with respect to Third Party Software.

If you have questions about Third Party Software and Licenses used with NetSuite POS, we recommend logging into NetSuite ERP and reviewing the following PDF:



NetSuite Point of Sale (NSPOS) Third Party Software and Licenses - 17.2 thru 18.1

Verify your Registers after the upgrade

When your NSPOS upgrade is complete, we recommend testing at least one register in each store. You can find our Terminal Verification Checklist - NSPOS 2018.1 in the NetSuite Help Center > User Guides NetSuite Point of Sale section. Log into NetSuite ERP first.

Recommendations about mass Item and Customer updates

We recommend against performing mass item and customer updates during business hours when transactions are occurring on your registers. NetSuite POS integrates with NetSuite to provide Enterprise Resource Planning (ERP) tools for managing your items, customers and other aspects of your business. You can update items and customers in NetSuite manually or through CSV imports.

Updates in NetSuite periodically download to your POS registers to ensure all information is synchronized and current. NetSuite POS performs synchronization uploads to NetSuite of sales and other transactions that occur at the register. This is distributed to other registers in your store through the Amazon cloud server.



Important: Item and customer updates of **over 60,000 records per day** can impact synchronization across the network. If mass updates must occur during business hours, we recommend limiting each update to 60,000 records or less within a single 24-hour period.

Planning efficient rollouts for new Stores and Registers

When opening one or more new stores, it is important to consider the time needed to prepare the registers with current information from your NetSuite ERP setup. This consideration also applies to registers that were previously active but have been turned off for a long time.

When a register is staged, all information is fully loaded and up to date. After staging, registers receive only the information needed to keep them current. When a register is turned off, NetSuite holds all new transactions, price changes and customer information for download to the register later.

If a register is turned off for an extended period and then turned back on, the size of the update can be large and take a while to download. This might delay a register from being ready when you need it.



Important: Excessive download times can delay registers from being ready to accept sales transactions and can affect overall server performance. This delay can be critical in the event of a new store opening.

To ensure your new registers are ready for business, NetSuite recommends the following:



- 1. Stage registers **24-48** hours before first use. If no major changes to NetSuite ERP data will occur before using the register, the time between staging and first use can be longer without a significant impact on performance.
- 2. If a store rollout requires new item and customer information, if possible, be sure to add or import the information to NetSuite ERP **before** staging new registers. Then the new information will be included during the staging process.
- 3. To reduce the impact to existing registers, large item and customer changes in NetSuite ERP should be performed in small increments. A good guideline is **limiting changes to 60,000 records** or less **per day**, performed outside of business hours.
 - If you are not certain how to limit the number of records or if this guideline does not fit your rollout schedule, please contact NetSuite Technical Support for assistance.
- 4. For registers that have been turned off for a long time, **restaging a register can be the fastest method** for bringing it up to date. Staging is generally quicker than waiting for large downloads to complete.



Important: Before restaging a register workstation that was set to **Inactive** in NetSuite ERP, clear the **Inactive** box on the NetSuite RA-Workstation record, **Save** and then wait **15 minutes** for the active status to sync between the server and the workstation.

Windows® Updates and Performance

Applying a Windows update to registers during business hours can significantly affect performance. NetSuite recommends applying updates only when the location is closed.

Register Time Synchronization via the Internet

A register's clock can become out of sync with the internet time used by the Amazon Web Services (AWS) server. Clock variations of more than plus or minus five minutes can cause data replication functions to fail. Gift card functionality and other POS services are also dependent on keeping the time synchronized.

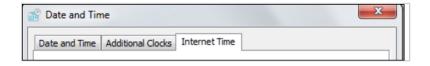
The Push Agent log can be used to determine if replication errors were caused by times being out of sync. Technical Support can help you make the determination.



Note: Some businesses restrict access to the Internet Time tab described in this procedure.

To resynchronize a register's clock:

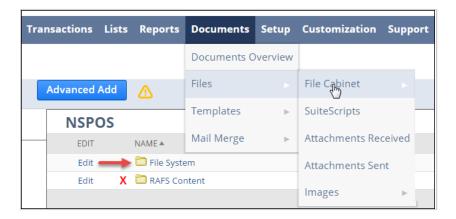
- Tap the Windows Start button and search for date and time.
 Or go to Control Panel > Date and Time.
- 2. Open the **Internet Time** tab.
- 3. Tap Change Settings.
- 4. Tap **Update now** and then **OK**.





RAFS vs. File System folder

We no longer use the RAFS Content storage location in NetSuite ERP to manage files. All storage should take place in the **File Cabinet** > **File System**. You can ignore the RAFS folder but, to avoid confusion, you can also remove it. You should back up any files still in the RAFS location if you choose to remove it.





Important: Back up any files remaining in the **RAFS Content** folder before removing the folder.

Contact NetSuite Technical Support if you have any questions.

Areas to Verify prior to Upgrading

We recommend verifying these areas before upgrading to NetSuite POS 2017.2.

- Verify MS SQL 2008 R2 SP 3 loaded on Workstations
- Verify Gift Card and Gift Certificate setup
- Verify RA-Location Type is set for all Location records

Verify MS SQL 2008 R2 SP 3 loaded on Workstations

You must have Microsoft® SQL Server 2008 R2 Service Pack 3 installed on each workstation. You can use either of the following methods to verify the pack installed. Note that the methods may vary across different versions of Windows.

- Run a T-SQL command. Enter the command SELECT @@VERSION.
- View installed updates. Go to Control Panel > Programs and Features > View installed updates.

Or you can use the following methods to obtain a version number you can combine with SQL Server 2008 for internet search criteria.

- Use the SQL Server Management Studio. Right-click on the instance name and select Properties.
- Review the SQL server file. Go to C:\Program Files\Microsoft SQL Server
 \MSSQL10_50.MSSQLSERVER\MSSQL\Binn. (Your file path may vary.) Right-click on sqlservr.exe and select Properties.

Please contact NetSuite Technical Support if you require assistance.



Verify Gift Card and Gift Certificate setup

Release 2016.2 and above requires that the **Location** record > **RA-Currency** field be set to the correct currency for **every** retail location selling a gift card or certificate. Otherwise, sales of gift cards or certificates may fail after upgrading to 2016.2 or greater.

See the help topic Set up Gift Cards/Certificates in NetSuite in the NetSuite POS Administrator Guide for the steps to verify and configure your Location records for use with gift cards and certificates. Log into NetSuite first.

This action binds gift cards and certificates sold in each updated Location to use that currency only. By default, the Location > RA-Currency field is blank.

Verify RA-Location Type is set for all Location records

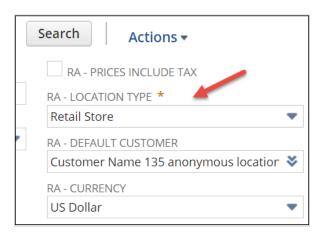
After updating the bundle to the latest version, you should ensure that the RA-Location Type is set on each of your NetSuite ERP Location records. This field is required, but it may not have been set for customers that were using NetSuite ERP prior to being implemented on NetSuite POS. This one-time task is critical to allowing multiple NetSuite POS features to function correctly.

The possible values include Headquarters, Retail Store, Distribution Center and others. Please choose the value that meets your business needs for each Location.

A single Location must be set to **Headquarters**.

To review or set the RA-Location Type:

- 1. Log in to NetSuite as an administrator.
- 2. Go to Setup > Company > Locations.
- 3. Click **View** for the first Location.
- 4. If the **RA-Location Type** is not set:
 - 1. Click Edit.
 - 2. Select the **RA-Location Type**.
 - 3. Click Save.
- 5. Repeat for the next Location record as needed.



Note: Only one Location can be set as Headquarters.



NetSuite POS Documentation Resources 2018.1

(i) Applies to: NetSuite Point of Sale (NSPOS)

This topic provides descriptions and links to NetSuite Point of Sale (NSPOS) documentation resources. Use these resources to learn about using NSPOS, configuring NSPOS to meet the needs of your retail business, and troubleshooting NSPOS to solve common problems.

Documentation Updates in 2018.1

We made the following updates to support NSPOS release 2018.1:

NetSuite Point of Sale Administrator Guide

- Set up a Register: Backward Compatibility for Phased Releases
- Payment Gateways: zipPay Integration through PC-EFTPOS
- Basic Setups and Customization in NetSuite ERP: Item Restrictions by Subsidiary or Location
- Basic Setups and Customization in NetSuite ERP: Price Distribution by Currency and Location
- Workstation Monitoring: New chapter for the register hardware monitoring tool. Moved from the Troubleshooting chapter

Documentation Resources

Use the links in this topic to access a guide or video. You can review materials online or download a PDF to your computer or register.



Tip: Log into NetSuite ERP before clicking a link.

Documentation Resource	What it provides
NetSuite POS Release Notes Release 2018.1 Release 2017.2	NSPOS release notes list the customer-facing updates included in each release. We modify these release notes on occasion to provide our customers with additional information.
NetSuite POS Administrator Guide	 This document is a guide to configuring and maintaining NSPOS. It includes: Overviews and steps for basic tasks, such as setting up employees and running reports.
	 Steps for modifying the buttons and related security settings for your registers.
	Steps to work with promotions.
	 How to stage and re-stage registers, either individually or as a scheduled mass update.
	Setting up credit card payment providers.



	 Configuring process options for promotions, sales orders, and other features vital to your business.
NetSuite POS User Guide	 The NSPOS user guide provides how-to steps for cashiers and store managers. It includes: An overview of NSPOS. Instructions for handling transactions at the register, including sales, sales orders, returns and gift card/certificate tasks. How to work with customer information. Start and end of day tasks performed by store managers.
PA-DSS Implementation Guide PA-DSS 3.2 Implementation Guide - NSPOS 2018.1 PA-DSS 3.2 Implementation Guide - NSPOS 2017.1	NetSuite POS is a PA-DSS validated application. The Payment Application Data Security Standard (PADSS) guide describes the Payment Card Industry (PCI) initiative and lists recommendations for using NetSuite POS in a PCI DSS compliant environment. The guide includes: Details about installing and configuring a compliant system. Best practices for maintaining compliance. A list of operating systems (OS) validated for use on your NetSuite POS terminals.
 Terminal Verification Checklist Terminal Verification Checklist: NSPOS 2018.1.X Terminal Verification Checklist: NSPOS 2017.1 – 2017.2.X 	 This document lists steps for verifying the basic functionality of NSPOS terminals/registers in stores or other locations. Customers or other representatives should perform verifications as part of the user acceptance testing (UAT) process and after deployment of an upgrade. Each section will help to identify issues prior to a store recommencing customer transactions. Important: We recommend testing at least one terminal (register) in every store.
NetSuite POS Help Center Videos NetSuite SuiteCommerce NSPOS Overview NetSuite SuiteCommerce: Customizing the NSPOS User Interface NetSuite SuiteCommerce: NSPOS Documentation Resources NetSuite SuiteCommerce: NSPOS Cancel and Void	Our videos deliver a convenient method for understanding and using NSPOS. Housed on the Oracle Learning Library, each video is brief and concise. Watch our videos to get the information you require in a relaxed learning environment.
Also available from the NetSuite ERP application: Help Center SuiteAnswers	Some NPSOS-related tasks are common across different NetSuite Oracle applications. Use the Help Center and SuiteAnswers links to research NetSuite ERP topics that cover: Your general ledger. Item and price updates. Other areas not specific to working with your registers.

