

# Custodial Integrator

## Release Notes

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Version 3.19  
(APX)

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## RELEASE NOTES

### Release Notes for V3.19.001

You may upgrade your existing installation of Custodial Integrator V2.0 (or later) to this release by running the new Custodial Integrator installation. If you are upgrading, please review the release notes between the version you currently run and the most recent version to understand changes and actions you may need to take to complete the upgrade.

#### Enhancement

- Custodial Integrator will retry additional transient errors when making DataConnect API calls to retrieve data. [BAPP-10497]

#### Fix

- A calculation correction was made to bond prices. [BAPP-10609]

### Documentation update

The SQL Server requirements have been updated in the installation guide.

### Release Notes for V3.18.001

You may upgrade your existing installation of Custodial Integrator V2.0 (or later) to this release by running the new Custodial Integrator installation. If you are upgrading, please review the release notes between the version you currently run and the most recent version to understand changes and actions you may need to take to complete the upgrade.

**Note:** These are internal changes to improve reliability and performance. The changes do not affect the user interface or the output files.

#### Enhancements

- Internally, the source column of the price table can now handle up to six characters. [BAPP- 8573]
- In multiple internal tables, some column types have changed to improve application performance. [BAPP-9457]

#### Fixes

- In multiple internal tables, the size limit of some columns has increased to handle larger numbers to prevent errors. [BAPP-8982]

### Release Notes for V3.17.001

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. If you are upgrading, please review the release notes between the version you currently run and the most recent version to understand changes and actions you may need to take to complete the upgrade.

## Enhancements

- Juneteenth is now properly handled as a market holiday. [BAPP-7586]
- A new, optional .ini file parameter (`cashDivCalculateQuantity`) has been added to control whether or not calculate units for cash dividend transactions. It is off by default. [BAPP-9202]

## Fixes

- If a user attempted to make an account-specific security translation for an account that had an account number longer than 64 characters, an “Account number is invalid” error would result and the user would be unable to create the security translation. This issue has been fixed. [BAPP-9157]
- The time zone offset has been adjusted for daylight savings time. [BAPP-9083]

## Release Notes for V3.16.001

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. If you are upgrading, please review the release notes between the version you currently run and the most recent version to understand changes and actions you may need to take to complete the upgrade.

**Important notes for those upgrading to CI 3.16.001:** If you are upgrading an existing CI installation:

- Any script that runs CI must be changed as shown in the new `runci.bat` located in CI installation folder. The following lines show how a script would be edited, with changes shown in bold. Note that your script for your installation may have a different tool at the end.

Before:

- `java -Djava.library.path=. \extlib -cp CI.jar;extlib\sqljdbc4.jar;extlib\gnu-regexp.jar com.baa.aci.Cache tool:CSV`

After:

- `java -Djava.library.path=. \extlib -cp CI.jar;extlib\* com.baa.aci.Cache tool:CSV`

where the asterisk (\*) is a wildcard used to include all jar files in the extlib library folder.

- During the upgrade, before the new script is installed, your current `runci.bat` file will be automatically renamed to `runci_copy.bat`.

Depending on how you run CI, you may be required to edit your new `runci.bat` script after the upgrade completes. There are three possible scenarios:

1. You only use `runci.bat` as it has been provided in the original CI installation or in subsequent updates. In this case you do not need to edit the new `runci.bat` script that the 3.16 upgrade provides for you .
2. You use a script named `runci.bat` but the content of the script has been modified and is different from the one provided by the original installation or subsequent updates. For example, you may have specified additional parameters in the command line. In this case you must edit your custom `runci.bat` (now renamed to `runci_copy.bat`) and change the text in the command line as specified above in bold. Then rename the file back to `runci.bat`.

3. You are using a script other than `run_ci.bat` or you use more than one script. For example you may use a different script when you run CI in automation mode, or for each CI instance when you have multiple instances. In these cases you need to edit each script and make the required changes as described above.
- The JRE version used in CI has been upgraded to JRE 1.8 update 261. If JRE 1.8 is installed on your CI machine with a lower update, the installation will not change it. If you have a JRE version lower than 1.8, then the CI installer will automatically install JRE 1.8 update 261 before installing CI.
  - The clear text CI credentials have been removed from CI database. If you are upgrading from CI version 3.5.001 or lower, you will be asked to reenter the CI login and password in CI Configuration dialog on the first CI run after the upgrade.

## Enhancements

- The JDBC version used in CI has been upgraded to the latest version 7.4 for Java 8.
- For full TLS 1.2 support the minimum required SQL Server versions are 2012 SP4 or 2014 SP3. Later SQL Server versions (2016 and 2019) all support TLS 1.2.

## Fixes

- BAPP-3067/Case 02835538 – When a non-cash TRANSFER transaction has an empty TOTAL\_AMOUNT, CI now leaves the exported FLOW\_AMOUNT field empty.

## Release Notes for V3.15.001

IMPORTANT NOTE: If you are running Custodial Integrator (CI) 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

## Enhancements

- New, optional ci.ini parameters were added and one was modified. They all support CI Automation (`autorun`) and more fully described in the *Custodial Integrator Automation Guide* found at [http://www.byallaccounts.net/Manuals/Custodial\\_Integrator/CI\\_Automation.pdf](http://www.byallaccounts.net/Manuals/Custodial_Integrator/CI_Automation.pdf). Some of these parameters also apply to CI interactive, as noted and described here and in the installation guide.
  - `translateAccountValidationStatus` - This parameter has been enhanced to include a setting to translate only untranslated accounts that are both validated and aggregating today. Requires the `autorun` and `translateUntranslatedAccounts` parameters. Additionally requires `defaultAccountIdentifier` be set to `WPAccountNumber` or `WPAccountName`.
  - `translateFeedEarliestTxDate` – specifies the transaction date to be used for the initial import data for accounts at FIs designated as “feeds”. Accounts at FIs that are not designated as feeds will continue to use the `translateEarliestTxDate` for first import. For automation requires the `autorun` and `translateUntranslatedAccounts` parameters.
  - `ignorePositionalExtServLevelAccounts` – specifies whether accounts that have the value “Positional” in the `EXTERNAL_SERVICE_LEVEL` field should be ignored in CI. When the parameter is set to ‘y’, such accounts will not appear in the list of untranslated accounts and will not be

translated in CI Autorun. Therefore, these accounts will never show in CI exported files. Effective both in CI interactive and in CI autorun modes.

**Important note for those upgrading to CI 3.15:** If you are upgrading an existing CI installation and your database contains translated accounts with `EXTERNAL_SERVICE_LEVEL = Positional`, setting `ignorePositionalExtServLevelAccounts` to 'y' (or '1'), CI will behave as described here:

- For CI Automation (with autorun)
  - New accounts having `EXTERNAL_SERVICE_LEVEL=Positional` will be ignored, not translated, and not included in import and export of financial data.
  - If the CI database contains existing (from before the upgrade) translations for accounts with `EXTERNAL_SERVICE_LEVEL=Positional`, CI will log the following message when validating these translations before the Import step: *"Error: Found invalid account translations. Info: Invalid translations have been disabled."* The translations are invalid because they refer to accounts that are no longer stored in the CI database. CI Autorun will then proceed with importing data only for the valid account translations.
- For CI interactive:
  - New accounts having `EXTERNAL_SERVICE_LEVEL=Positional` will no longer appear in the list of untranslated accounts when running CI in interactive mode. Therefore, it will not be possible to translate these accounts and import their financial data. Simply put, these accounts do not exist for CI.
  - If CI database contains existing (from before the upgrade) translations of accounts with `EXTERNAL_SERVICE_LEVEL=Positional`, then when you press the Import button a dialog will pop-up showing the error message *"Error validating account translation table"*. At this point, you will not be able to run Import until you first delete the invalid translations (displayed in bold blue) in the Account Translation dialog.

## Fixes

- Accounts belonging to FI Requests no longer show in the list of untranslated accounts. Likewise, FI-request accounts are no longer translated in CI Automation (autorun). Therefore, these accounts will never show in CI exported files.
- The documentation has been corrected where needed to reflect that account number has data type CHAR128.

## Release Notes for V3.13.001

IMPORTANT NOTE: If you are running Custodial Integrator (CI) 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

## Enhancements and Fixes

- The storage size for Tax Lot and Transaction internal identifiers has been increased to allow for growing ID numbers.

- BAPP-2755/Case 02722053 – There are two new fields by which transactions can be matched and translated: FI Supplied Description and FI Supplied Transaction Type Code.

## Release Notes for V3.12.001

IMPORTANT NOTE: If you are running Custodial Integrator (CI) 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

### Enhancements

- Two new fixed mandatory parameters are set in the *CI.ini* file during CI installation or CI upgrade from versions earlier than 3.12.
  - `PBEKeysetPass`, provides a password used in the encryption of select sensitive data stored in the CI database.
  - `KSSetPass`, provides a password used in the encryption of select sensitive data stored in the CI database. Your *CI Installation Guide* contains information about these parameters.

### Fixes

The following bugs were fixed in this release:

- BAPP-1930/Case 02306041 – CI was not saving the Money Market symbol and Sweep symbol if they were specified during account creation. These symbols are now saved to CI database
- BAPP-1492/Case 01962216 – In the rare case where the 3<sup>rd</sup> party security price and the holding price were both unavailable or stale and the calculated price was available and current, the security price was incorrectly exported to the Missing Price file. This error has been corrected and now the calculated price is exported to the Price file.

## Release Notes for V3.11.001

IMPORTANT NOTE: If you are running Custodial Integrator (CI) 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the New CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

- **New as of November 2019.** As a revision to current released version, CI's InstallShield was updated. The minimum requirement for SQL Server is now 2012 or later, including Express versions. For full TLS 1.2 support SQL Server 2012 SP4 is the recommended minimum. Earlier 2012 versions may require additional updates to support TLS 1.2. A new SQL Server Native Client that is compatible with TLS 1.2 is required on the CI machine. If missing, it will be automatically installed during CI installation or upgrade.
- The documentation version and date have been revised to keep mention changes to the InstallShield and SQL Server minimums. There are no changes to the CI code.

## Release Notes for V3.10.001

IMPORTANT NOTE: If you are running CI 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

### Enhancements

- For CI Automation (autorun) a new, optional ci.ini parameter `minUpdatedAccountsPerc` specifies the minimum percentage (0-100) of updated accounts required for CI to proceed with import and subsequent steps. This parameter is processed only if the `autorun` parameter is also specified (so that CI runs in autorun mode).  
A valid value for the parameter is any number 0 to 100. If the parameter is not specified or the value is 0, CI will run its cycle independently of the updated accounts percentage. If the percentage of updated accounts is below the specified minimum, CI Autorun will exit without importing. [BAPP-596]

## Release Notes for V3.9.001

IMPORTANT NOTE: If you are running CI 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

### Enhancements

This release includes the following changes:

- The minimum required Java version for the CI computer is now 1.8 or later. If the CI computer has version is 1.8 or later, the installation will leave it as is. If it is not at least version 1.8, the installation will upgrade it to 1.8 update 111. Therefore, you must determine if this Java upgrade is acceptable on the CI computer. If another application on the CI computer depends on your current version of JRE and cannot tolerate a later version, you will have to determine whether to move this other application or to install CI on an alternate computer.
- Microsoft SQL Server 2008 is now the minimum version supported.

## Release Notes for V3.8.001

IMPORTANT NOTE: If you are running CI 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

### Enhancements

This release includes the following enhancement.

- Case 11326 - A new, optional ci.ini parameter `defaultNumPriceDays=<n days>` specifies the number of days of historical price data that CI should import and export to the Price and Security files. The valid range of values is



1-6 where 1 indicates only the previous business day. CI will use either the number of days from the parameter (if specified), or the number of days since last CI export, whichever is greater. If not specified, the default is the number of days since the last CI export, with a maximum of 6 days. This parameter is effective in the CI as well as for CI Automation (autoRun). Within the CI user interface, the user can override the import/export date range that appears in the main screen. When set there, that setting overrides the parameter value or the default setting.

## Release Notes for V3.7.001

IMPORTANT NOTE: If you are running CI 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

## Enhancements

This release includes the following enhancement.

- As of version 3.7, CI supports two models for managing encrypted user logins and passwords: default and enhanced. The new, default model stores the encrypted login/password combinations in the database. The enhanced model uses the on-disk keystore model previously described in the *Custodial Integrator Installation Guide*.  
The use of a keystore file is still supported but only if the location of the keystore file is specifically defined using the `ksdir` parameter. If that parameter does not exist when CI is run, the new encryption mechanism is used.
  - **For new installations OR upgrades from CI 3.4 (or earlier):** By default, no keystore file will be generated. User login and password will use the default encryption model with the encrypted login/password combinations in the database.
  - **For upgrades from CI 3.5 and 3.6 (single instances or multiple instances on same database):**
    - If you want to **eliminate the keystore file requirement and you *do not* have a `ksdir` parameter defined** (`ciksf` is in working directory), as is the case for most single installations, proceed with the upgrade. The system will automatically switch to the new, default model for logins and on the first run of CI after the upgrade. The `ciksf` is no longer needed.
    - If you want to **eliminate the keystore file requirement and you *do* have a `ksdir` parameter defined** you have two options. 1) Copy the `ciksf` to a working folder of a CI instance (if it is not already there). Remove the `ksdir` parameter from **all** places it is defined, meaning for all CI instances. Run one CI instance. The system will automatically switch to using the new, default model for encrypting logins and passwords. The `ciksf` will be no longer needed for any CI instance. 2) Remove the `ksdir` parameter from all places it is defined. Run each CI instance and re-enter the login and password (they will be missing). The `ciksf` will be no longer needed.
    - If you want to **keep the enhanced model with the keystore file mechanism and you *do* have a `ksdir` parameter defined** in all the right places, proceed with the upgrade. The system will keep using the keystore file, and there is nothing extra to do.
    - If you want to **keep the keystore requirements and *do not* have a `ksdir` parameter defined** (`ciksf` is in working directory), before running any CI instance add the `ksdir` parameter to the `runCI.bat` (or `CI.ini`

depending on where the database name is set) for every instance and have the parameter point to ciksfiler. The system will keep using the keystore file.

- **For upgrades from CI 3.5 and 3.6 (multiple CI instances on same machine with different databases):**
  - If you want to **keep the keystore file mechanism** and have a ksdir parameter defined in each CI instance, then proceed with the upgrade. The system will keep using the keystore file and there is nothing extra to do.
  - If you want to **eliminate the keystore requirement** and have a ksdir parameter defined in each CI instance, then follow this procedure for each instance of CI. Before running an instance, copy the ciksfiler from the ksdir folder to the CI working folder for the instance (if it is not already there). Remove the ksdir parameter from the runcli<clientname>.bat file for the instance. Run the CI instance. The system will automatically switch to using the new, default model for password and login encryption. Remove the ciksfiler from the working folder. Repeat this procedure for each CI instance.

## Fixes

The following fixes were made in this release:

- Cases 106271, 111712 – In certain cases, users got a SQL exception when clicking on the Details button in the untranslated securities dialog. This error was caused by an incorrect column name. This issue has been fixed.

## Release Notes for V3.6.001

**IMPORTANT NOTE:** If you are upgrading CI from a version prior to 3.5.002, please read new important instructions in the *Installation Guide* regarding password encryption when multiple CI instances or multiple databases are used.

**IMPORTANT NOTE:** If you are running CI 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

## Enhancement

This release includes the following change.

- The value that was output in the Commission field in the trade blotter was a combination of the value of commissions and other fees. Now CI distinguishes between them so Commission has the broker commission and the Exchange Fee field has the additional fees (other than commission).

## Fix

The following bug was fixed in this release:

- Cases 88085 and 77265 – Under certain circumstances, the “trade date” field in the Position blotter had an incorrect stale date. This issue has been fixed. The field now has the latest close-of-business date. A stale date is output only if positions from stale accounts are configured to be exported and the stale positions outnumber the current ones.

## Release Notes for V3.5.002

IMPORTANT NOTE: If you are running CI 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the new CI installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

### Enhancement

This release includes the following change.

- CI Login and Password are now encrypted in the CI database.

### Fixes

The following bugs were fixed in this release:

- Case 83442 – CI Automation (autoRun) for PortfolioCenter, Axys, and APX now logs an error message and does not proceed to Export if there are untranslated securities and *requireSecTranslations* parameter is set to 'y' (default).
- Bonds with no listed symbol and no manual security translation were often not identified as Bonds and showed "Other" in the *security type* output field. Now many of the unlisted bonds are now correctly identified as bonds.

## Release Notes for V3.4.002

IMPORTANT NOTE: If you are running CI 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the CI V3.4 installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

The following bugs were fixed in this release:

- Cases 58654, 58675 – Some customers using APX versions 4.1 or later could not post positions from the positions blotter generated by CI. The problem was due to a new APX field that must be populated in the APX v4 position blotter, specifically the 'source type' field. In order for CI to support both APX 3.x and APX 4.x versions, two new CI parameters have been introduced. One sets the source type field for the position blotter, and the other sets the source type field for the position lot blotter (if used):
  - *apx4PositionType* – specifies the one character to be output for APX v4 in the 'source type' field of the position blotter. For example, *apx4PositionType=p*. Applies ONLY to APX versions 4.x and later. This parameter has no default value. If the parameter is not set or the value is empty, then CI assumes that the APX version is less than 4 and will not output the 'source type' field. Therefore if you use APX 4.x, you must set this parameter in CI.ini or runCI.bat. However, if you use a version prior to APX 4.x then DO NOT set this parameter, or the generated position blotter will be incorrect for that earlier APX version.
  - *apx4lottype* – specifies the one character to be output in the "source type" field of the position lots blotter. For example, *apx4LotType=l*. Applies ONLY to APX versions 4.x and later. The parameter is

optional and is ignored unless `apx4positiontype` is set and lots are enabled and exported. If `apx4PositionType` is set but no value is set for `apx4lotype`, then `apx4lotype` defaults to the letter 'l'.

## Release Notes for V3.4.001

IMPORTANT NOTE: If you are running CI 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the CI V3.4 installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

### Enhancements

This release includes the following changes.

- Case 30827 – CI Automation (`autoRun`) now exports the *Untranslated Account* file as well as other requested local files independently of whether any financial data has been configured for export, or any has been received in the Import step.
- The functionality of the `debugAll` parameter has changed. When enabled, it enables all log levels including the Debug log level. Other settings and output formerly produced by `debugAll` are now controlled by other parameters.
- CI parameters that control output of secondary files have been reorganized and improved.
- New debug parameters have been added to allow for more granular control of logging details.
- Support for Microsoft SQL Server 2012 has been added.

### Fixes

The following bugs were fixed in this release:

- Case 54989 – Under certain conditions CI Automation (AutoRun) failed with fatal “Error Creating File” when exporting the account translations file. This problem has been fixed.
- Case 50273 – The symbol field in the Security Translation dialog allowed a maximum of only 50 characters, while the CI documentation said the maximum length is 512. The dialog now allows up to 512 characters.
- Case 53727 – Dividend transactions did not show the correct source/destination (Src/Dest) Alys code for long-term or short-term capital gain. Dividend transactions now show the correct code.

## Release Notes for V3.4

IMPORTANT NOTE: If you are running CI 2.x, please read section [Release Notes for V3.0](#) prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the CI V3.4 installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact Technical Support to receive instructions on how to proceed.

### Enhancements

CI V3.4 includes the following changes.

- Performance improvements have been made to the CI import process.

- Bulk Insert is available as an optional feature for customers who have a large number of positions, typically 10,000 or more. This option, when properly configured, can improve CI running time by 50% or more. There are specific SQL Server requirements as well as additional parameter settings for this feature. Contact Technical Support to obtain more information or to get this feature configured for your CI instance.
- SQL Server 2000 is no longer supported for CI.

## Fixes

The following bugs were fixed in this release:

- Case 40367– In cases where a calculated price was used for bonds, versus a price directly from the custodian or from IDC, CI was truncating the last two decimal digits of the price. This problem has been corrected. CI 3.4 will output up to the maximum number of decimal digits set for the firm, which is by default four. Upon request, Technical Support can set the number of decimal places for all security calculated prices to any number greater than one.
- Case 40968 – In the rare case that the calculated price was 0.0001 or less, CI would override the price according to the setting of the `overwriteposzerounits` parameter. In CI 3.4, when a security has no IDC price and no price from the custodian, the value output to the prices file will be calculated using the units and market value supplied in the position (if available). Note that the output price could be truncated to zero if the number of decimal zeros is equal or greater than the maximum configured precision for calculated prices (default = 4).

## Release Notes for V3.3.004

IMPORTANT NOTE: If you are running CI 2.x, please read section below entitled Release Notes for V3.0 prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the CI V3.3 installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact technical support to receive instructions on how to proceed.

## Enhancements

CI V3.3.004 is a minor release that includes the following changes.

- Case 29373 – When the user mapped an account translation in CI, the default earliest transaction trade date (“Tx Date”) was the start date set in the previous account mapping. The field now defaults to today’s date.
- Case 40367 – CI had a fixed maximum of four decimal places for security calculated prices. Upon request, Technical Support can set the number of decimal places to any number greater than one. The default is four.
- Case 38669, 41092 – After customers upgraded to APX Version 4, transactions in the CI-generated blotter (topost.trn) could not be posted when the Mark-to-Market field was empty. In APX Versions 1 through 3, the Mark-to-Market field in the transactions/positions blotter is required to have a value only when the position or transaction is in foreign currency; when that is the case Mark-to-Market value is determined by the `defMarkMarket` parameter setting as described in your *Installation Guide*.  
With the APX version 4, Mark-to-Market is always required to have a value (y/n) independently of the trade currency. If you are using APX version 4, you must set the new parameter `alwaysSetMarkMarket=y`. When this parameter is set to ‘y’, CI automatically determines Mark-to-Market value by assigning ‘n’ for deposit and withdrawal transactions and ‘y’ for all other transaction types and for all positions and lots. Note that when this

parameter is set to 'y' CI ignores the setting of *defMarkMarket*.

**Note:** If you are using any of APX versions 1 through 3, do not set the *alwaysSetMarkMarket* parameter or if you do, set it to 'n' so CI will keep the current behavior and determine Mark-to-Market value based on the currency (system/foreign) and on the value of parameter *defMarkMarket*.

## Fixes

The following bugs are fixed in this release:

- Case 41460, 41464 – In some cases historical transactions were exported again on the second CI export after the user mapped the account. Now each transaction is imported and exported only once after the user maps the account.

## Release Notes for V3.3.003

IMPORTANT NOTE: If you are running CI 2.x, please read section below entitled Release Notes for V3.0 prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the CI V3.3 installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact technical support to receive instructions on how to proceed.

## Enhancements

CI V3.3.003 is a minor release that includes the following changes.

- CI automation changes – A new optional parameter has been added to request lots for import/export when running CI Automation. This new parameter works only for CI Automation, and only if lots are enabled. (See the *Custodial Integrator Automation* guide for details.)

## Fixes

The following bugs are fixed in this release:

- Case 33657, 35009 – Occasional network failures caused CI to abort or hang during the import process. When a known network failure occurs, CI now resends the request for data to the server until a response is received or until the maximum number of retries is reached. In most failure cases the response is successfully received after the first retry.
- Case 30558, 35270 – CI did not correctly truncate the Transaction blotter's comment string when it was longer than the maximum comment length allowed, causing Advent to reject the transaction. CI now includes the quotes around the comment string when determining the comment length.

## Release Notes for V3.3.002

IMPORTANT NOTE: If you are running CI 2.x, please read section below entitled Release Notes for V3.0 prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the CI V3.3 installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact technical support to receive instructions on how to proceed.

## Enhancements

CI V3.3.002 is a minor release that includes the following changes.

- CI now can be configured to import position lot (tax lot) data, along with positions and transactions data, and automatically export it. When a firm is licensed for position lot data, ByAllAccounts Technical Support will enable position lot gathering for individual accounts within WebPortfolio, and set a parameter to enable it in Custodial Integrator. When lot functionality is enabled:
  - The Import WebPortfolio data section on the main view of CI will have an option called *Include Position Lots*. When it is selected, position lots will be imported. The new exported lot file will include lot data for positions that contain lots. In the case of cash/money market positions, or if the position does not include any lot, then position data will be output to the file.
  - When position lots are imported, the details pane for Untranslated Securities will include a table of untranslated securities referenced by position lots. The table can be printed or saved to a file.
  - The Configuration screen will have an option for naming the Lots blotter.
  - The IMEX Logs will include a tab for apxixPositionLots.log.

## Fixes

The following bug was fixed in this release:

- Case 33257 – CI produced an internal error when importing a transaction that contained a single quote character at the very beginning or end of a text string. This problem has been corrected and CI will now import the transaction correctly.

## Release Notes for V3.2.004

IMPORTANT NOTE: If you are running CI 2.x, please read section below entitled Release Notes for V3.0 prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the CI V3.2 installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact technical support to receive instructions on how to proceed.

## Enhancements

CI V3.2.004 is a minor release that includes the following changes.

- This release has been tested on Java 1.7.
- The minimum required Java version for the CI computer is 1.6.0\_03 or later. If the CI computer has version 1.6.0\_03 or later, the installation will leave it as is. If it is not at least version 1.6.0\_03, the installation for this release will upgrade it to 1.6.0\_32. You must determine if it is acceptable to upgrade Java on this computer to 1.6.0\_32. If another application on this computer depends on your current version of Java and cannot tolerate a later version, you will have to determine whether to move this other application or to install CI on an alternate computer.

## Fixes

The following bugs are fixed in this release:

- Case 22782 – CI did not set transactions date to 'latest' when newly added accounts were stale. In very specific situations, CI was not properly transitioning an account out of the “first time retrieval” state into a state of retrieving only newly posted transactions. This failure to transition could result in CI retrieving and delivering transactions it had previously delivered. CI now properly handles the transition thus eliminating these instances where transactions are delivered to the CI output files on more than one occasion.
- Case 26670 – CI upgrade failed on upgrades of versions earlier than 2.2.003. CI has been fixed to properly handle conversion from specific earlier versions of CI.
- Case 22143 – CI incorrectly output a price of \$1 in certain cases where price was calculated and units and/or market value were reported as negative by the source. CI has been fixed to correctly calculate price in these cases.

## Release Notes for V3.2.003

IMPORTANT NOTE: If you are running CI 2.x, please read section below entitled Release Notes for V3.0 prior to upgrading as CI 3.x is not backwardly compatible with CI 2.x.

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the CI V3.2 installation. You cannot directly upgrade to it from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact technical support to receive instructions on how to proceed.

## Enhancements

CI V3.2.003 is a minor release that includes the following changes:

- CI now includes new advanced settings to control whether to exclude or include in the positions file the positions for stale or failed accounts.
  - On the Configuration tab in CI, the *Include positions for export option* now has an Advanced button that gives access to two new options. The first option enables you to exclude positions from the position file for all accounts where the accounts were successfully updated from the institution but that contain one or more positions that are not as of prior market close. The second option enables you to exclude all positions from the position file for accounts that failed to update for any reason. This feature affects the Account Translation file and the Stale Accounts file. If either of these options is selected, the Account Translation output file has an additional column, Export positions if stale, which contains a Yes or No for each account to indicate whether or not CI is set to export positions if that account is stale. The Stale Accounts file has a new column, Export Positions, which contains a Yes or No for each account to indicate whether or not CI is set to export positions for it.
  - An additional control is provided on each Account Translation that allows you to designate an account as an exception to the general exclusion settings that are in place in the CI Configuration tab. It enables you to set the account so that its positions are exported even if the account is stale.
- The threshold for determining if an account is stale has changed.

CI now determines an account to be stale if at least one position in the account does not contain values for the prior business day. In earlier releases, the default was that 50% or more of the positions had to be stale for the account to be considered stale. The new default value applies both to new CI installations and to CI upgrades.

This change affects the `stalePositionPercentage` parameter. In prior releases the parameter value and associated rule was greater than or equal to 50%. The rule is now checking for a number of stale positions as a percentage greater than 0%, meaning CI will flag an account as stale if at least one position is stale. If you



override this, note that the new logic checks for greater than the parameter's value, not greater or equal to it. If you have questions, contact support at ByAllAccounts.

- Information displayed in the Untranslated Securities area has been enhanced:
  - CI now displays additional columns in the Untranslated Securities table when the account-specific securities checkbox is checked. This additional information will make it easier for the user to establish the correct security translation. The new columns are: Account Name, Market Value, Units, Price, and Price Date. Market Value, Units, Price, and Price Date fields in this view will have values from the corresponding position that generated the untranslated security. If the untranslated security is caused by a transaction then these columns will be empty.
  - In the Details screen for Untranslated WebPortfolio securities, the Untranslated securities referenced by positions table now has these additional columns: Price and Price Date.
  - When the account-specific securities checkbox is checked, the columns in the main Untranslated WebPortfolio Securities table are now in the following order: WP Name, WP Ticker, WP CUSIP, Institution, Account Name, Account #, Market Value, Units, Price, Price Date. In the untranslated securities output file (UNDEFSEC\_YYYYMMDD.csv) they are in the same order except that WP Ticker and WP CUSIP are the last two columns.
- Added File buttons to enable users to generate optional files from the user interface. In prior releases, users could only print these files. The files are:
  - Untranslated Securities, default file name UNDEFSEC\_YYYYMMDD.csv. The button is next to the Untranslated WebPortfolio securities table.
  - Undefined Securities Referenced from Positions, default file name UNDEFSECPOSREF\_YYYYMMDD.csv. The button is next to the Untranslated securities referenced by positions table found in the Security Details window.
  - Undefined Securities Referenced from Transactions, default file name UNDEFSECTXREF\_YYYYMMDD.csv. The button is next to the Untranslated securities referenced by transactions table found in the Security Details window.
  - Untranslated WebPortfolio accounts, default file name is UNTRANSLATEDACCT\_YYYYMMDD.csv. The button is next to the Untranslated WebPortfolio (WP) accounts table.
- Untranslated securities will now be exported if the outputUntranslatedSecurities parameter is set.

## Release Notes for V3.2.002

You may upgrade your existing installation of CI V2.0 (or later) to this release by running the CI V3.2 V3.2.002 installation. You cannot directly upgrade to CI V3.2.002 from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact technical support to receive instructions on how to proceed.

## Enhancements

CI V3.2.002 is a minor release that includes the following changes:

- If the CI Export step fails due to permission settings on Windows 7, CI produces an error message that enumerates the possible reasons for the export failure.
- Case 17505 - CI now supports a new parameter, inputFolder, that specifies the location of custom transaction translation files, holding filter files, and transaction filter files. The parameter can be set in the CI.ini file or in the command line. The default location for these files is the CI root installation folder (typically \Program Files\Custodial Integrator). If the specified input folder does not exist or the user does not have access to it, an

error message is displayed and the application exits. Please refer to the CI Installation Guide for more information.

- Case 19193 – CI now maintains the dates on which each security translation was created and last modified. The dates can be seen in the user interface and in the Security Translations file.
- Case 19293– Consolidated group references are now output with the prefix “@” instead of the prefix “+@”.
- Case 19550 – CI could sometimes encounter the error “java.net.SocketException: Connection reset java.net.SocketException” when transferring large amounts of data from ByAllAccounts to the local environment. The code responsible for the stream handling has been improved to prevent this situation and to include a reasonable number of additional retries when such an error does occur.
- Case 19532, 19552 – CI was reporting the error “CI communication error: The profile was not found” during the Import operation. This error was caused when CI issued any single data request where the number of profile objects queried exceeded 1000. This problem has been fixed and Imports containing requests of this type will now complete without error.
- Case 19593– Clicking the "View IMEX logs" button after exporting produced log files that were not in a readable format for some users. This problem has been fixed.
- New account identifier option – CI now supports a new parameter, defaultAccountIdentifier, that specifies the source to use for the default account identifier. The options for this parameter are: account number from WebPortfolio, account name from WebPortfolio, or the internal account ID from WebPortfolio. Please refer to the *Custodial Integrator Installation Guide* for more information.
- Additional automation capabilities – CI now provides the ability to automatically translate untranslated accounts when run in scripting mode. It also provides the ability to automatically export the security translation file to the CI output folder during the Export step. Please contact ByAllAccounts for more information on these capabilities.

## Release Notes for V3.1.020

You may upgrade your existing installation of CI V2.0 (or later) to the V3.1.020 release by running the CI V3.1 installation. You cannot directly upgrade to CI V3.1 from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact technical support to receive instructions on how to proceed.

## Enhancements

CI V3.1.020 is a bug fix release that includes the following:

- New axyslotlocation parameter in CI.ini. This parameter specifies value to use for the lot location column in the transaction file output. The default value is 253.
- Case 15822 – “pd” type transactions require units. CI now uses the transaction total\_amount value as the units value if the units are not provided by the source custodian.
- Bug #19613 – null pointer exception when CI is not able to rename an output file. Fixed to provide an appropriate error message.
- Case 14314 - use calculated holding price for securities that have no closing price and no holding price.
- Product and custom transaction translations that utilize the OUTPUTNONE option to filter transactions will now have those filtered transactions written to the filtered transaction file. Prior behavior was to just discard these transactions and not record them in any file.
- CI automation changes (see CI\_Automation.doc for details):

- invalid account translations are automatically disabled during an autorun
- new control parameters are provided to coordinate CI output file delivery acceptance with the CI Accept step

## Release Notes for V3.1

You may upgrade your existing installation of CI V2.0 (or later) to the V3.1 release by running the CI V3.1 installation. You cannot directly upgrade to CI V3.1 from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact technical support to receive instructions on how to proceed.

### Enhancements

CI V3.1 is a minor release that includes the following enhancements:

- Support for editing of existing security translations. CI now provides a way for you to modify the “right-hand side”, or output side, of a security translation. The edit dialog also provides a clearer depiction of the existing translation. Please refer to the CI User Guide for more details on this new capability.
- Increase length of internal storage for Axy's security symbols to accommodate upcoming industry changes for options and futures symbols.
- Support for saving Security translations and Account translations to a file for reference, review, and technical support assistance.
- Support for Windows 2008 Server

## Release Notes for V3.0

You may upgrade your existing installation of CI V2.0 (or later) to the V3 release by running the CI V3 installation. You cannot directly upgrade to CI V3 from a version earlier than CI 2.0. If you have a version of CI prior to V2.0 please contact technical support to receive instructions on how to proceed.

### Enhancements

CI V3.0 is a major release of the core Custodial Integrator code base. In this release, all variants of CI now operate on a common code base for additional data normalization and translation. This code base incorporates more features for creating transaction translations.

This version includes the following feature enhancements:

- Ability to output “dv” with a negative amount to indicate a corrected dividend, where corrected means a partial reversal of a previously paid dividend.
- Ability to output “dp” (fee) transactions with a negative amount to indicate a corrected fee, where corrected means a partial refund.
- Improved ability to identify dividend reinvestment transaction pairs and correlate with using “dvwash”.
- Improved ability to refine dividends as short term gains, mid term gains, or long term gains.
- Ability for transaction translations to match to a transaction reversal.
- Improved handling of “Transfers” reported for retirement accounts that are really Buys and Sells (Exchanges).
- Improved handling of Contributions and Withdrawals in retirement accounts. Contributions are interpreted as a cash deposit and a buy. Withdrawals are interpreted as a sell and a cash withdrawal.

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## Custodial Integrator Release Notes

- Added the following new CI.ini parameters:
  - taxSymbol – defaults to taxwith. Refer to CI Installation Guide for more information.
  - foreignTaxSymbol – defaults to fortax. Refer to CI Installation Guide for more information.

CI V3.0 includes the following technical enhancements:

- Support for Microsoft SQL Server 2008

### **Bug Fixes**

The following bugs are fixed in CI V3.0:

- CI now computes units and price for transactions on cash equivalents when the custodian does not provide this information (Case 7655)
- If the CI option “use Financial Institution price for Bonds” was selected, CI was not utilizing the correct date for the bond to determine if the price was stale. CI has been fixed to use the correct date for determining bond price freshness. (Case 9742)
- CI now has an improved ability to customize transactions that are marked as a Reversal by the custodian.