

# Custodial Integrator

## Release Notes

---

Version 3.16 (Universal)

---

©2023 Morningstar. All Rights Reserved.

Custodial Integrator Product Version:	V3.16.001
Document Version:	39
Document Issue Date:	August 8, 2023

Technical Support:	(866) 856-4951
Telephone:	(781) 376-0801
Fax:	(781) 376-8040
Web:	<a href="http://byallaccounts.morningstar.com">byallaccounts.morningstar.com</a>

## RELEASE NOTES

### Documentation update

- The documentation has been corrected to include `FI_SUPPLIED_CUSTODIAN_CODE` and `FI_SUPPLIED_CUSTODIAN_NAME` columns in the `POSITION` file.

### Documentation update

- The documentation has been corrected to show that maximum length for `FI_SUPPLIED_ACCOUNT_TYPE` is `CHAR64`.

### 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 `runci.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

---

## Custodial Integrator Release Notes

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.
- BAPP-3737/Case: 03247731 – In the Untranslated and Custom tabs of the Security Translation dialog the maximum text length for the Account Number has increased from 64 to 128.

## Release Notes for V3.15.001

IMPORTANT NOTE: If you are running Custodial Integrator (CI) Universal 2.x, please read the section [Release Notes for V3.0](#) prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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.
  - `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.  
Setting this parameter will also affect the position export for failed accounts at FIs designated as "feeds". Positions will NOT be exported for feed accounts that failed aggregation. The setting for failed accounts in the "advanced" positions-export dialog will not be used in this case, but will still apply to non-feed accounts and the setting for Stale accounts will still apply to both feed and non-feed accounts. Note that setting this parameter will affect export of positions for feed accounts in both automation and interactive mode. Conversely, the first feed transaction date specified with the parameter will be used for translation of feed accounts only in CI automation.
  - `identifierAllowedCharacters` - specifies which special (non-alphanumeric) characters are allowed in the account identifier when requesting automatic account translations. Can be set to allow specified non-alphanumeric characters, all, or none. Applies to both `autorun` and interactive mode. When in interactive mode, removal of non-allowed characters is enforced only when multiple accounts are selected in bulk for automatic translation. Any characters are allowed when the user manually types the identifier for a single account. For more details see the *Installation Guide*.

---

## Custodial Integrator Release Notes

- `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.
- The User Guide was corrected to include optional account file fields that were introduced in release 3.13: `FI_SUPPLIED_CUSTODIAN_CODE` and `FI_SUPPLIED_CUSTODIAN_NAME`.

## Release Notes for V3.13.001

**IMPORTANT NOTE:** If you are running Custodial Integrator (CI) Universal 2.x, please read the section [Release Notes for V3.0](#) prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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) CI Universal 2.x, please read the section [Release Notes for V3.0](#) prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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.
  - KSKeysetPass, 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) CI Universal 2.x, please read the section [Release Notes for V3.0](#) prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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 as of December 2019.** The name of the account type BANKING\_CASHMANAGEMENT has changed to INVESTMENT\_CASHMANAGEMENT and the name of account type BANKING\_COVERDELL has changed to INVESTMENT\_COVERDELL.
- **New as of November 2019.** As a revision to the 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.
- **New as of December 2018** The optional field ASSET\_LIABILITY\_INDICATOR is now available for the positions output file (BAAREC\_YYYYMMDD.csv) for CI Universal. The possible values are Asset or Liability. To set this field to be included in the positions file use the *Advanced* button in the Output Configuration section of the Configuration tab.

---

## Custodial Integrator Release Notes

- The documentation has been updated to include the following transaction types that are produced during translations. These additions are to the table that lists valid values for the **TX\_TYPE** and **ORIG\_TX\_TYPE** columns.

TX_TYPE VALUE	DESCRIPTION
<b>COVER</b>	Occurs when a BUY's position has negative units
<b>SHORT</b>	Occurs when a SELL's position has negative units

## Release Notes for V3.10.001

**IMPORTANT NOTE:** If you are running CI Universal 2.x, please read the section [Release Notes for V3.0](#) prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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 both of the following are true:
  - the autorun parameter is also specified (so that CI runs in autorun mode).
  - the CI Configuration option "Select for import only up-to-date and offline accounts that have not yet been exported today" is not checked.

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]

- The documentation has been updated to include a parameter that was added in CI 3.7. The optional CI.ini/runci.bat parameter `AccountIdentifierMaxLen` can be used to specify the desired maximum length of the account identifier. This parameter applies to CI GUI and CI Autorun. Please refer to your *CI Installation Guide* for more information about the parameter. Also see Case 111364 below in Release Notes for V3.7.001, regarding the `defaultAccountIdentifier` parameter.

## Release Notes for V3.9.001

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

### 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 Universal 2.x, please read the section [Release Notes for V3.0](#) prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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

- Case 43256, 32552. The following field was added to the Price and Position files.

PAYDOWN_FACTOR		NUMBER	The paydown factor, when available, comes from the financial institution.
----------------	--	--------	---

- The following fields were added to the Account file

ACCOUNT_TYPE		CHAR64	Account type as determined by the system from information available from the custodian.
CREATION_DATE		DATE	Date the account was created.

- The following field was added to the Account, Positions, Position Lots, and Transactions files:

ACCOUNT_ID		CHAR50	The internal account identifier for the account.
------------	--	--------	--

- 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 Universal 2.x, please read the section [Release Notes for V3.0](#) prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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 changes

- SEDOLs are only delivered when they are enabled for the firm. Firms must be licensed by the London Stock Exchange in order to have SEDOLs enabled in the service.
- 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 kmdir 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 kmdir parameter defined** (ciksfiler 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 ciksfiler is no longer needed.
  - If you want to **eliminate the keystore file requirement and you *do* have a kmdir parameter defined** you have two options. 1) Copy the ciksfiler to a working folder of a CI instance (if it is not already there). Remove the kmdir 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 ciksfiler will be no longer needed for any CI instance. 2) Remove the kmdir parameter from all places it is defined. Run each CI instance and re-enter the login and password (they will be missing). The ciksfiler will be no longer needed.
  - If you want to **keep the enhanced model with the keystore file mechanism and you *do* have a kmdir 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 kmdir parameter defined** (ciksfiler is in working directory), before running any CI instance add the kmdir 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 kmdir 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 kmdir parameter defined in each CI instance, then follow this procedure for each instance of CI. Before running an instance, copy the ciksfiler from the kmdir folder to the CI working folder for the instance (if it is not already there). Remove the kmdir parameter from the runci<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.
- The ACCOUNT\_IDENTIFIER field now has a maximum length of 128.

## Fixes

The following bugs were fixed in this release:

- Case 111368 – A SSN\_TIN field has been added to the account file BAAACT\_yyyymmdd.csv file for the social security number (SSN) or tax identification number (TIN) associated with the account.
- Case 111364 - There is a new option when creating account translations. If the defaultAccountIdentifier parameter is set to WebPortfolio account number or WebPortfolio account name, when CI detects duplicate translations the user will be given the option of having the internal account ID appended to the end of any new non-unique translations to ensure that each ACCOUNT\_IDENTIFIER is then unique. Note that if the total length exceeds the maximum account identifier length, then the WebPortfolio account number or WebPortfolio account name (depending on the defaultAccountIdentifier setting) will be truncated to make it fit into the account identifier length.
- Case 111364 – For CI Automation (autoRun), when translateUntranslatedAccounts is set to yes and the defaultAccountIdentifier parameter is set to WebPortfolio account number or WebPortfolio account name, then when automation is translating untranslated securities it automatically appends the internal account ID to new duplicate account identifiers to make

---

## Custodial Integrator Release Notes

them unique. Note that if the total length exceeds the maximum account identifier length, then the WebPortfolio account number or WebPortfolio account name (depending on the `defaultAccountIdentifier` setting) will be truncated to make it fit into the account identifier length.

## 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 Universal 2.x, please read the section [Release Notes for V3.0](#) prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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

The following columns were added to the Transaction file. The fields provide information that was formerly only available combined in the COMMISSIONS\_FEES field.

Col #	Column Header	Required	Data Type	Description
101	COMMISSIONS		NUMBER	Commission associated with this transaction.
102	FEES		NUMBER	Non-commission fees associated with this transaction.

## Release Notes for V3.5.002

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

- CI Login and Password are now encrypted in the CI database.
- The maximum length of the ACCOUNT\_NUMBER field has been increased to 128 characters.
- The maximum length of the FI\_SUPPLIED\_CUSIP field has been increased from 9 to 20 characters.
- CI Universal has new optional fields that are not exported by default. These fields can be selected for export from the data types tab of the Advanced configuration dialog. For column numbers refer to the *CI User Guide*.

The following field was added to the Account, Position, Transaction, and Position Lots files.

Column Header	Value Required	Data Type	Description
FI_SUPPLIED_REP_ID		CHAR32	The FI-supplied Advisor / REP identifier for this account. Only available for accounts at select FIs.

The following fields were added to the Security, Price, Position, and Transaction files.

Custodial Integrator Release Notes

Column Header	Value Required	Data Type	Description
FI_SUPPLIED_SEC_TYPE		CHAR64	Security type provided by the financial institution.
MORNINGSTAR_SECID		CHAR10	Morningstar security identifier (SECID) for this security.

The following fields were added to the Account, Position, and Transaction files.

Column Header	Value Required	Data Type	Description
FI_SUPPLIED_ACCOUNT_TAXID		CHAR32	FI-supplied TAX ID (SSN or TIN) associated with the account.
FI_SUPPLIED_ACCOUNT_NAME		CHAR128	FI-supplied name for the account.
FI_SUPPLIED_ACCOUNT_TITLE		CHAR128	FI-supplied title for the account.
FI_SUPPLIED_CLIENT_FIRST		CHAR64	FI-supplied first name for the account holder.
FI_SUPPLIED_CLIENT_MIDDLE		CHAR64	FI-supplied middle name for the account holder.
FI_SUPPLIED_CLIENT_LAST		CHAR64	FI-supplied last name for the account holder.
FI_SUPPLIED_CLIENT_DOB		CHAR12	Date of birth of the client who owns this account in standard date format YYYYMMDD.
FI_SUPPLIED_CLIENT_EMAIL		CHAR64	Email address of the client who owns this account.
FI_SUPPLIED_CLIENT_PHONE		CHAR32	Phone number of the client who owns this account, in the format provided by the custodian.
FI_SUPPLIED_ADDRESS_STREET		CHAR64	Street address of the client who owns this account.
FI_SUPPLIED_ADDRESS_LINE2		CHAR64	Additional street address of the client who owns this account.
FI_SUPPLIED_ADDRESS_LINE3		CHAR64	Additional street address of the client who owns this account.
FI_SUPPLIED_ADDRESS_LINE4		CHAR64	Additional street address of the client who owns this account.
FI_SUPPLIED_ADDRESS_LINE5		CHAR64	Additional street address of the client who owns this account.
FI_SUPPLIED_ADDRESS_LINE6		CHAR64	Additional street address of the client who owns this account.
FI_SUPPLIED_ADDRESS_CITY		CHAR32	City portion of the address of the client who owns this account.
FI_SUPPLIED_ADDRESS_STATE		CHAR32	State portion of the address of the client who owns this account.
FI_SUPPLIED_ADDRESS_ZIP_CODE		CHAR16	Zip code portion of the address of the client who owns this account.
FI_SUPPLIED_ACCOUNT_TYPE		CHAR32	Custodian reported account type for

---

## Custodial Integrator Release Notes

Column Header	Value Required	Data Type	Description
			this account.
FI_SUPPLIED_FIRM_ID		CHAR32	FI-supplied Firm ID (Advisor's firm) for the account.

- The data type definition was changed to CHAR20 for the Position, Transaction, and Position Lots files.

Column Header	Value Required	Data Type	Description
FI_SUPPLIED_CUSIP		CHAR20	Security's CUSIP as provided by the Financial Institution.

### Fixes

The following bugs were fixed in this release:

- Case 88882 – In the past, the Security file could contain the same security in more than one row of the file. Now all securities in the Security file are unique.
- 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 V3.4.003

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

### Fixes

- Case 70106 – When CI is configured to generate sweep transactions, a sweep transaction was always generated in the main transaction file, including the case where the original transaction had been filtered out (exported to a 'filtered' file). This has been corrected. CI now creates a sweep transaction only when the original transaction is exported to the main transaction file. When the original transaction is exported to one of the filtered files, no sweep transaction is generated.
- The symbol type "TICKER" has been corrected to show "Ticker" in all user interface dialogs and output files.

### Release Notes for V3.4.001

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

- 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.
- Cases 26655, 29752, 30002, 24661, 3002 – In some case the sign of flow units and flow amount was incorrect for transaction reversals. The sign of flow units and flow amount has been corrected for transaction reversals. The correction applies also to reversals of Sweep transactions.
- Case 36742 – Flow unit signage was incorrectly positive for Return-of-Capital transactions. This error has been fixed. Return-of-Capital transactions now have negative flow units.
- In some cases the signage of flow units and flow amount did not take in account the transactions subtype (IN or OUT). CI now takes in account the transaction subtype IN or OUT to determine flow amount and flow units for Transfer, Journal, Point of Sale, Income, Interest, and ATM transactions.

## Release Notes for V3.4

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

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

---

## Custodial Integrator Release Notes

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 Universal 2.x, please read the section below entitled Release Notes for V3.0 prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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.

### Fixes

The following bug was 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 Universal 2.x, please read the section below entitled Release Notes for V3.0 prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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 bug is 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.

## Release Notes for V3.3.002

**IMPORTANT NOTE:** If you are running CI Universal 2.x, please read the section below entitled Release Notes for V3.0 prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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 has a new option called *Include position lots* which controls the creation of a new position lot file (BAALOT<yyyyMMdd>.csv).
- To customize which columns to include in the position lot output file, use the new Position Lots tab accessed using the *Advanced* button in the Output Configuration section of the Configuration tab in CI.
- The transactions output file now optionally can contain fields that are related to position lots. To customize which of the new columns to include in the transactions output file, select them for inclusion on the Transactions tab accessed using the *Advanced* button in the Output Configuration section of the Configuration tab in CI. If you select those fields for inclusion they will be empty unless CI is set to include position lots in the Import step.
- When position lots are imported, the details pane for Untranslated Securities includes a table of untranslated securities referenced by position lots. The table can be printed or saved to a file.

### Fixes

The following bugs are 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.
- Case 33656 – CI occasionally produced an internal error during transaction export when creating a sweep transaction if the original transaction type was not valid. This problem has been resolved.

## Release Notes for V3.2.004

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

---

## Custodial Integrator Release Notes

- 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 Universal 2.x, please read the section below entitled Release Notes for V3.0 prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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 overrode 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 and in the untranslated securities output file (`BAAUNDEFSEC_yyyymmdd.csv`) are now in the following order: WP Name, Institution, Account Name, Account #, Market Value, Units, Price, Price Date.
- Added the following new optional output columns to the Reconciliation (Positions) file:
  - `ADVISOR_IDENTIFIER` – The unique internal identifier for the WebPortfolio Advisor user associated with the account containing this transaction.
  - `SECURITY_TYPE` – The position's security type. Possible values: BOND, CASH, STOCK, MUTUALFUND, OPTION, OTHER.
- Added the following new optional output column to the Transaction file:
  - `ADVISOR_IDENTIFIER` – The unique internal identifier for the WebPortfolio Advisor user associated with the account containing this transaction account.
- Added the following new optional output column to the Price file:
  - `SECURITY_TYPE` – The position's security type. Possible values: BOND, CASH, STOCK, MUTUALFUND, OPTION, OTHER.
- 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 `BAAUNDEFSEC_yyyymmdd.csv`. The button is next to the Untranslated WebPortfolio securities table.
  - Undefined Securities Referenced from Positions, default file name `BAAUNDEFSECPOSREF_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 `BAAUNDEFSECTXREF_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 `BAAUNTRANSLATEDACCT_yyyymmdd.csv`. The button is next to the Untranslated WebPortfolio (WP) accounts table.

## Release Notes for V3.2.000

**IMPORTANT NOTE:** If you are running CI Universal 2.x, please read the section below entitled Release Notes for V3.0 prior to upgrading as CI Universal 3.x is not backwardly compatible with CI Universal 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 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.
- Added the following new optional output column to the Account file:
  - FI\_ID – Unique internal identifier for the financial institution where the account resides.
- Case 17505 –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 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 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.
- New dummy security symbol option – CI now provides an additional option for generation of a dummy security symbol when no symbol is available in the WebPortfolio data. The option enables the use of internal position identifier or transaction identifier in this situation. Please refer to the CI User Guide for more information.
- 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 (default), account name from WebPortfolio, or the internal account ID from WebPortfolio. Please refer to the CI 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 V3.1.023

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

You may upgrade your existing installation of CI V2.0 (or later) to the V3.1.023 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 V3.1.023 is a bug fix release that includes the following:

---

## Custodial Integrator Release Notes

- Case 17689: CI Universal can optionally synthesize sweep transactions, however, this capability is not currently supported for multicurrency accounts. If CI believes a transaction is multi-currency it will not try to output an offsetting sweep transaction. CI was incorrectly identifying a non-multi-currency transaction as a multi-currency transaction and was therefore not properly generating sweeps in certain non-multicurrency cases. This behavior has been corrected.

## Release Notes for V3.1.020

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

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:

- Reduce CI user permissions requirement if certain sensitive data (advisor name, client name) is not being requested for output.
- Case 15924 – Fix interpretation of “last exported” date in all time zones when used to determine if account has been exported today. The original behavior was correct only for the Eastern U.S. time zone and incorrect for most other time zones.
- Case 16253 – when CI is configured to output settlement-based data, transactions that had no reported settlement date were being incorrectly output on multiple dates. This behavior has been fixed to output these transactions only once.
- Case 14314 - use calculated holding price for securities that have no closing price and no holding price.
- Added the following new optional output columns for Transactions file:
  - PRINCIPAL\_OR\_INCOME indicator – single character indicator of the principal or income “nature” of the transaction. Defaults to ‘P’. Set to ‘I’ if the transaction has a non-zero and non-blank value in the INCOME\_TOTAL\_AMOUNT field.
  - POSITION\_ID - Unique numeric ID for the position with which this transaction is associated. This field may not be valued for all transactions as historical transactions may reference a position that no longer exists in the account. This is a BAA Internal ID and is unique across all positions within the WebPortfolio repository.
- Added the following new optional output columns for Reconciliation (Positions) file:
  - POSITION\_ID - Unique numeric ID for the Position. This is a BAA Internal ID and is unique across all positions within the WebPortfolio repository.
  - FI\_ID - Unique internal identifier for the financial institution that reported the transaction.
- 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

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

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.
- 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

**IMPORTANT NOTE:** CI Universal V3.0 is not backwardly compatible with CI Universal 2.x. Please review the information in section **Backwards Compatibility with CI V2** carefully to determine the changes you need to make to your integration with CI Universal for adapting to the V3 release. 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 version includes the following major feature enhancements:

- New Transaction columns: TX\_SUBTYPE, SECURITY\_TYPE, FI\_ID, TX\_COMPOSITE\_TYPE, CI\_SYNTHESIZED, REVERSAL, ACCRUED\_INCOME, ACCRUED\_INCOME\_BASE, ACCRUED\_INCOME\_LOCAL, FI\_SUPPLIED\_DESCRIPTION, INCOME\_TYPE. Additional detail on the new columns is provided below.
- Incorporates transaction translations that further normalize data for numerous financial institutions.
- Support for Position Filters
- Support for Transaction Filters
- Automatic generation of sweep transactions
- The format of the custom transaction translation file CiTxTranslationCust.xml has changed significantly. If you utilize this file with CI Universal please contact ByAllAccounts Technical Support for assistance with converting your file to the new format.
- Optionally combine Buy and associated Buy Accrued transactions into a single transaction. The same support is provided for Sell and Sell Accrued transaction pairs. A user interface option is provided to enable or disable this feature.
- Optionally combine Dividend and Buy or Dividend and Reinvestment transactions into a single transaction. A user interface option is provided to enable or disable this feature.

These new features are described in more detail in the *Custodial Integrator User Guide*.

This version includes the following minor feature enhancements:

- Sets the price to \$1 for Cash type securities
- Compute transaction Units field if the source does not provide a value. If the transaction is against a bond then this computation is not done.
- Compute the transaction Total Amount if the source does not provide a value. If the Total Amount is zero or null after the computation and the COMMISSIONS\_FEES has a value then

## Custodial Integrator Release Notes

assume the transaction is "net of fees" and set the Total Amount to the COMMISSIONS\_FEES amount.

- Provide the absolute value option on these columns: COMMISSIONS\_FEES, TOTAL\_AMOUNT, UNIT\_PRICE, PRINCIPAL\_TOTAL\_AMOUNT, INCOME\_TOTAL\_AMOUNT, TOTAL\_AMOUNT\_BASE, UNIT\_PRICE\_BASE, PRINCIPAL\_TOTAL\_AMOUNT\_BASE, INCOME\_TOTAL\_AMOUNT\_BASE, TOTAL\_AMOUNT\_LOCAL, UNIT\_PRICE\_LOCAL, PRINCIPAL\_TOTAL\_AMOUNT\_LOCAL, INCOME\_TOTAL\_AMOUNT\_LOCAL.
- Change the source for the DESCRIPTION field. Previously this was taken from the WebPortfolio FI\_SUPPLIED\_DESCRIPTION field. Now the value comes from the WebPortfolio DESCRIPTION field. Both fields are provided as output columns.
- A Sell transaction against a position with negative units will be set to have a transaction subtype of SHORT.
- A Buy transaction against a position with negative units will be set to have a transaction subtype of COVER.
- Deposit transactions (typically 'contributions') can be converted to a Deposit to Cash and a Buy of the security referenced by the original transaction.
- Withdrawal transactions (typically 'distributions') can be converted to a Sell and a Withdrawal from Cash.
- Fee transactions that are not against CASH will be converted to a Sell and a Fee.
- Income and Interest transactions can have a translation defined that specifies "income is reinvested". In these cases, the transaction type is set to Reinvestment and the new INCOME\_TYPE field is set to the type code of the original transaction.
- The ID field in the transaction output file is no longer a unique field. This can occur when CI creates more than one transaction from a single source transaction (e.g. sweeps generation).
- FLOW\_AMOUNT and FLOW\_UNITS are adjusted for reversals and if the transaction type code is changed due to a translation (code or file-based translation). These fields are also adjusted to reflect any calculated Total Amount and Units.
- New CI.INI parameter COMMENTTYPE. CI translations can cause original transactions to be output as a 'comment' (no-op) effectively documenting the transaction to the target system but directing it to not "post" that transaction to the target system. CI Universal uses the transaction type OTHER in these situations. Use COMMENTTYPE to control the transaction type code for comment type transaction output. The syntax is COMMENTTYPE={sometype} and {sometype} can be any text that complies with the length of the TX\_TYPE column.

## New Transaction Output Columns

Col #	Column Header	Value required	Column Included in CI Output by Default	Data Type	Description
51	TX_SUBTYPE		√	CHAR20	The transaction's subtype as determined by CI. Possible subtype values are in bold followed by the transaction types to which they apply in parentheses: <b>ACCRUED</b> (BUY, SELL), <b>TAX</b> (DEBIT, CREDIT), <b>FOREIGNTAX</b> (DEBIT, CREDIT), <b>MATURITY</b> (SELL) <b>SHORTTERMGAIN</b> , <b>LONGTERMGAIN</b> , <b>UNCLASSIFIEDGAIN</b> , <b>MIDTERMGAIN</b>

---

Custodial Integrator Release Notes

					(DIVIDEND, REINVESTMENT), <b>IN, OUT</b> (ATM, INCOME, INTEREST, JOURNAL, POINT_OF_SALE, TRANSFER)
--	--	--	--	--	---

**New Transaction Output Columns (continued).**

Col #	Column Header	Value required	Column Included in CI Output by Default	Data Type	Description
52	SECURITY_TYPE	√	√	CHAR20	Transaction's security type. Possible values: BOND, CASH, STOCK, MUTUALFUND, OPTION, OTHER
53	FI_ID			CHAR64	Unique internal identifier for the financial institution that reported the transaction
54	TX_COMPOSITE_TYPE	√		CHAR128	Customizable transaction type composite field that is the concatenation of one or more of the following transaction fields: TX_TYPE, TX_SUBTYPE, SECURITY_TYPE, FI_ID. Default composition: TX_TYPE-TX_SUBTYPE-SECURITY_TYPE
55	CI_SYNTHESIZED	√	√	BOOLEAN	1 indicates the transaction was created by CI (sweeps). 0 indicates the transaction was not synthesized by CI. 0 is the default.
56	REVERSAL	√	√	BOOLEAN	1 indicates the transaction is a reversal. 0 indicates the transaction is not a reversal.
57	ACCRUED_INCOME		√	NUMBER	Amount of accrued interest
58	ACCRUED_INCOME_BASE			NUMBER	Amount of accrued interest in the account's base currency
59	ACCRUED_INCOME_LOCAL			NUMBER	Amount of accrued interest in the account's local currency
60	FI_SUPPLIED_DESCRIPTION			CHAR2000	Transaction description
61	INCOME_TYPE			CHAR20	Type of income for REINVESTMENT type only, Possible values: INCOME, INTEREST, DIVIDEND (default)

CI V3.0 includes the following technical enhancements:

- Support for Microsoft SQL Server 2008

## Backwards Compatibility with CI V2

CI V3 includes several changes that make its output incompatible with CI V2 and earlier. The output of CI V3 is different in significant ways and any existing integrations will need to be reworked to accommodate these changes. These changes were made to make output, transactions in particular, more consistent across financial institutions. Changes also enhance the output to provide options that control how certain types of transactions such as Reinvestments and Accrued Income purchases and sales are output. The changes are as follows:

- **Change:** There are new columns in the Transaction output file. The following subset of the new columns are included by default in CI output: TX\_SUBTYPE, SECURITY\_TYPE, CI\_SYNTHESIZED, REVERSAL, ACCRUED\_INCOME. SECURITY\_TYPE, CI\_SYNTHESIZED, and REVERSAL will all contain a value. Please refer to the section above for additional details on these new columns. You can use the CI Configuration Advanced setup to control which columns are output.

**What you need to do:** Adjust your integration to ignore or to incorporate the new columns.

- **Change:** Incorporates transaction translations that further normalize data for numerous financial institutions.

**What you need to do:** Review any custodian-specific transaction handling logic that you have in your integration. This logic may no longer be needed, and if not needed, having it in place could produce incorrect results in the target system. ByAllAccounts can provide you with the transaction translation file that is in place so that you can review it in conjunction with your integration business logic.

- **Change:** Two new fields are available for transaction type identification: TX\_SUBTYPE and a composite transaction type TX\_COMPOSITE\_TYPE. CI can be configured to include one or more of the following fields in the TX\_COMPOSITE\_TYPE, separated by a delimiter that you specify: TX\_TYPE, TX\_SUBTYPE, SECURITY\_TYPE, FI\_ID (unique internal id for a Financial Institution). TX\_COMPOSITE\_TYPE is not included in the output by default, but if you opt to include it, its default composition is TX\_TYPE-TX\_SUBTYPE-SECURITY\_TYPE.

**What you need to do:** Review the transaction type code fields that you use in your integration. We recommend that you not rely predominantly on values in the following fields for transaction type determination: FI\_SUPPLIED\_TX\_TYPE, FI\_SUPPLIED\_TX\_TYPE2, FI\_SUPPLIED\_TX\_TYPE\_CODE. The information provided in these fields by custodians is HIGHLY VARIABLE and not conducive to a maintainable integration.

Consider whether your integration could benefit from using the TX\_SUBTYPE or the TX\_COMPOSITE\_TYPE. The individual fields that comprise TX\_COMPOSITE\_TYPE are available to you directly as well should you prefer that approach.

- **Change:** The format of the custom transaction translation file CiTxTranslationCust.xml has changed significantly. If you utilize this file with CI Universal please contact ByAllAccounts Technical Support for assistance with converting your file to the new format.

**What you need to do:** Review your existing file to remove any translations that are no longer necessary for V3. Provide your updated file to ByAllAccounts. We will automatically convert the file for you to the new translation file format.

- **Change:** Compute transaction Units field if the source does not provide a value. If the transaction is against a bond or the transaction is a Reinvestment then this computation is not done.

**What you need to do:** Determine if this change affects your integration's treatment of transactions.

- **Change:** Compute the transaction Total Amount if the source does not provide a value. If the Total Amount is zero or null after the computation and the COMMISSIONS\_FEES has a value then assume the transaction is "net of fees" and set the Total Amount to the COMMISSIONS\_FEES amount.

**What you need to do:** Determine if this change affects your integration's treatment of transactions.



- **Change:** CI now provides an option, enabled by default, to combine Buy and associated Buy Accrued transactions into a single transaction. The same support is provided for Sell and Sell Accrued transaction pairs. A user interface option is provided to enable or disable this feature. Note that CI may not be able to recognize 100% of cases where this combination should occur. The combining is also done only if the transactions arrive together in the same download batch.  
**What you need to do:** Change your integration to handle a single Buy transaction that reports the purchase of accrued income in the ACCRUED\_INCOME column. Do the same for a Sell transaction that has an ACCRUED\_INCOME value.
- **Change:** CI now provides an option, enabled by default, to combine Dividend and Buy or Dividend and Reinvestment transactions into a single transaction. A user interface option is provided to enable or disable this feature. Note that CI may not be able to recognize 100% of cases where this combination should occur. The combining is also done only if the transactions arrive together in the same download batch.  
**What you need to do:** Dividend, Income, and Interest transactions provided by CI should always be interpreted as Cash Dividends only. The absence or presence of units on these types of transactions DOES NOT INDICATE REINVESTMENT and is simply reflecting what the custodian reported in the units column for that transaction. If income is reinvested, CI will provide you with a single Reinvestment transaction OR a separate Buy transaction (for those cases where the transactions could not be combined). The new INCOME\_TYPE column will indicate if the income was from Dividend, Income, or Interest. If you encounter situations where CI reports a reinvested dividend as just a Dividend transaction, this is considered a bug and should be reported by ByAllAccounts Technical Support.
- **Change:** Change the source for the DESCRIPTION field. Previously this was taken from the WebPortfolio FI\_SUPPLIED\_DESCRIPTION field. Now the value comes from the WebPortfolio DESCRIPTION field. Both fields are provided as output columns.  
**What you need to do:** Continue to use the DESCRIPTION field that is delivered but recognize that in a small number of cases you might be receiving different values in this field for certain custodians. The value delivered to you will not change in most cases. You also have the option to switch to using the FI\_SUPPLIED\_DESCRIPTION column.
- **Change:** Deposit transactions (typically `contributions`) can be converted to a Deposit to Cash and a Buy of the security referenced by the original transaction.  
**What you need to do:** These types of transactions are typical of retirement accounts. If you have business logic that performs a similar conversion, remove it. You can now rely on CI to provide this logic for you.
- **Change:** Withdrawal transactions (typically `distributions`) can be converted to a Sell and a Withdrawal from Cash.  
**What you need to do:** These types of transactions are typical of retirement accounts. If you have business logic that performs a similar conversion, remove it. You can now rely on CI to provide this logic for you.
- **Change:** Fee transactions that are not against CASH will be converted to a Sell and a Fee.  
**What you need to do:** These types of transactions are typical of retirement accounts. If you have business logic that performs a similar conversion, remove it. You can now rely on CI to provide this logic for you.
- **Change:** The ID field in the transaction output file is no longer a unique field. This can occur when CI creates more than one transaction from a single source transaction (e.g. sweeps generation).  
**What you need to do:** Convert your integration to recognize that ID is no longer unique. If this is not possible, please contact your ByAllAccounts engineering contact for this release.
- **Change:** FLOW\_AMOUNT and FLOW\_UNITS are adjusted for reversals and if the transaction type code is changed due to a translation (code or file-based translation). These fields are also adjusted to reflect any calculated Total Amount and Units.  
**What you need to do:** Review any existing logic you have for adjusting FLOW\_AMOUNT and FLOW\_UNITS column values. If you were correcting these values in certain cases you may no longer have to do that.

