

QAD Business Intelligence Release Notes

March 2015

These release notes include information about the latest QAD Business Intelligence (QAD BI) fixes and changes. These changes may affect the way you implement and use QAD Business Intelligence.

Review this document before proceeding with any phase of QAD Business Intelligence implementation.

These release notes are cumulative, with the most recent changes displayed first. Review the notes for all releases after your currently installed release. Installation and configuration changes may have occurred in those intermediate releases, and unless otherwise noted, apply to the release where they were announced, as well as subsequent releases.

QAD highly recommends that you implement the latest QAD Business Intelligence release available. Check the QAD Online Support Center to make sure that you have the latest QAD Business Intelligence release notes, installation guide, and installation media.

<http://support.qad.com>

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Release Notes for Current Release

QAD Business Intelligence Version: 3.11

Date: March 2015

Summary

The QAD BI 3.11 release introduces the following improvements and fixes:

- LDAP authentication
- Active Directory User Sync

Performance Enhancements

The performance of many stages of the ETL process are improved. Among the many improvements are:

- Eliminating time-consuming SET + CURSOR usage in stage tables
- Eliminating some permsup tables
- Ensuring that functions are not called for every row processed

Space-Saving Enhancements

The History load now cleans up stage tables that are no longer needed, thus saving space during initial data load.

You can choose to not load all of your gltr_hist table in SE Financials.

You can choose to not load all of your tr_hist data in Order Management.

Multi-source Staging

The Daily jobs typically process one source at a time before moving on to the next source. You can now choose to have the data loaded from the ERP application for each source, then have that data processed together in a single processing run.

Active Directory Authentication for BI Portal

BI Portal users can now be authenticated against an Active Directory instance. The information from the Active Directory can be added to the BI Portal using a new Admin function: AD User Sync.

E-mail Login for BI Portal

You can now log in to the BI Portal using either your ID or e-mail address.

Upgrade Instructions

See the *QAD BI 3.11 Installation Guide* for the instructions to upgrade to QAD BI 3.11, and for a list of tables changed or added for this release.

Enhancements and Fixes

Table 1 BI 3.11 Enhancements and Fixes (1 of 10)

Component	QAD Issue	Description
Cubes, Metadata – Order Management, Portal Standard Objects – OM	QBI-4111	The OLAP Sales cube has been updated to include a measure for Order Performance. Also, the Order Line Order Type dimension has been added, and Domain has been added to the Entity dimension. The measures for existing tables also have been updated. New measures have been added and some of the more detailed cost measures have been removed. This update replaces the existing cube. If you have customized the Sales cube directly rather than making a copy and customizing that copy, you should make a copy of your Sales cube before loading the Order Management update application. The upgrade requires you to delete the Cube in Analytical Services and re-create and repopulate it in the BI DWD.
Cubes	QBI-4603	The single Sales OLAP cube has been split into five different cubes, one for each of the following fact tables: - fact_om_order - fact_om_booking - fact_om_shipment - fact_om_invoice - fact_om_performance The “old-style” cubes in the DWD have been deprecated and are no longer shipped or supported. The measures included in each cube have been streamlined to improve processing time and reduce size, but you can customize the cubes to add additional measures if required. Copy the cube to a new, custom name before modifying it to avoid having your changes overwritten when future updates are made to the standard objects.
Design Evaluation – OM, Metadata – Order Management	QBI-4364	This issue has been resolved. The invoice_number has been added to fact_om_shipment.
Design Evaluation – Operations	QBI-3214	To handle the occasional work orders that have a blank or null work order number, BI now assigns a value of NONE to those records. That value is found in both the perm_wo_ and perm_wr_ tables and in the subsequent fact tables. As work order number is part of the business key, it is critical that this not be a null value. Also, analytic tools do not have anything on which to drill down if the value is null. This also prevents issues in the perm tables where “null != null” would cause duplicates in the tables.
Design Evaluation – Operations	QBI-4428	This addresses issues with duplicate key failures during daily loads of fact_po_order_history that typically arise when there are two versions of a PO in the staging tables. The code has been changed in fact_po_order_history to properly handle the issue that was causing BI po_order_history_load to fail with duplicate key error. Typically the issue surfaces if multiple versions of a PO order/line are in the fact table and then another multiple version of the PO order/line comes in from the prior stage table.
Documentation	QBI-4426	For customers attempting to manually install BI on a split system, the BI Manual Installation instructions have been updated with a more detailed explanation about how to do this. See the appendix to <i>QAD Business Intelligence Installation Guide</i> for further details, but this is primarily meant for the people doing implementations.
Documentation	QBI-4533	Text was corrected in the Source Strategy (Column Description) for fact_om_invoice and fact_om_shipment tables' gross margin columns.
EAM	QBI-4829	The BI EAM Module now accommodates the ERP table name changes necessary for integrating EAM and EE. (For example: employee becomes employee_eam.) The scheduled jobs in BI detect which table name is in the EAM source without the need of a manually updated version number.
ETL Performance	QBI-3971	Extra jobs have been added to the historic load job chain that clean up all of the stage tables for each module before proceeding to the next module. This ensures that the database does not grow unnecessarily large with populated stage tables that are no longer needed for the next module being loaded. These jobs are labeled cleanup_<module>_tables. They are set up as part of the historic job chain parameter list by the initial_job_setup job.

Table 1 BI 3.11 Enhancements and Fixes (2 of 10)

Component	QAD Issue	Description
ETL Performance	QBI-4756	An index was added to stage_om_order to improve performance and ensure that fact_om_order_history runs faster.
ETL Performance	QBI-4758	The code for stage_om_scheduled_order_perfl was rewritten to perform more efficiently.
ETL Performance	QBI-4764	To reduce the amount of space required for a history load, some large Inventory stage tables in the hist_op_inv_process_chained job are now truncated immediately after the data is used in subsequent stages.
Metadata – Capacity Plan	QBI-4342	The dim_release_date dimension view has been corrected to have more useful, distinguishable Business Display Names, which appear in the Portal Query Designer. Previously, the column names in the table were identical to the underlying dim_date_qad dimensions from which they were derived, which made it difficult to tell different date dimensions apart when their columns were used in Portal queries.
Metadata – Capacity Plan	QBI-4344	The Routing Operation and PO Line Number attributes of the OP Work Order Routing Transaction Fact table now appear properly in the Portal Query Designer as attributes under the OP Work Order Routing dimension rather than as measures. Previously these were appearing as measures, along with the process_batch_id and extract_row_id columns. To accomplish this, the metadata flags for “Additive” were removed and “Attribute” was added for the following columns in the fact_wo_routing_transaction table: • routing_operation • po_line_number • extract_row_id • process_batch_id The extract_row_id and process_batch_id also had their End User Layer flag cleared to prevent them from being visible in the Portal because they are not generally used in Portal queries.
Metadata – Capacity Plan	QBI-4605 QBI-4665	The order of the columns in the perm_work_center_master table is now source_system_code, domain_code. Previously it was domain_code, source_system_code, which caused the index to work inefficiently and caused stages that use the perm_work_center_master table to be slower than necessary.
Metadata – Capacity Plan	QBI-5066	dim_production_line now replaces a NULL value for the production line code (the value of the ln_mstr.ln_line field) with the word NONE so the record can be handled properly. Null values in a field that is part of the business key cause duplicate errors. Previously, a null value in ln_mstr.ln_line caused a duplicate error when the record was processed in dim_production_line.
Metadata – Financials EE	QBI-3406	Set + Cursor updates were removed from Financials EE staging. This has no impact on the customer because FIN EE did not use these cursors to create new dimension keys. Any unknown fields like project or sub_account have always been set to the zero dimension key. This change improves performance and has no impact on the data.
Metadata – Financials EE	QBI-3848	Financials EE is now using the parameter defaults for cost center, project, account, and so on, that have been used in SE accounting. Unknown or empty codes are changed to the default values you selected during the installation process.
Metadata – Financials EE	QBI-4258	Set+Cursor updates removed from Financials EE staging. This has no impact on the customer as FIN EE did not use these cursors to create new dimension keys. Any unknown fields, such as project and sub_account, have always been set to the zero dimension key. This improves performance and has no impact on the data.
Metadata – Financials EE	QBI-4352	The Common Module now supports multi-source staging.
Metadata – Financials EE	QBI-4440	The Financials EE Module now supports multi-source staging.
Metadata – Financials EE	QBI-4534	The SSM Module now supports multi-source staging.
Metadata – Financials EE	QBI-4542	The Operations (OP, Purchasing and Inventory) Module now supports multi-source staging.

Table 1 BI 3.11 Enhancements and Fixes (3 of 10)

Component	QAD Issue	Description
Metadata – Financials EE	QBI-4550	The Order Management Module now supports multi-source staging.
Metadata – Financials EE	QBI-4783	Overlapping Financial Periods in fact_ee_gl_balance (PostingHist in ERP) are now caught at the load table level instead of staging all the way to the fact table and receiving duplicate primary key errors. Installers have a difficult time cleaning up the data warehouse once the data gets through. This typically happens after an SE-to-EE upgrade, but every case has involved the Progress data being directly altered by an administrator and not as a result of an ERP code issue. The new error checking is part of the load itself so the only data that has to be deleted from BI is the load table data for that source. The only time you do not clear the whole table is on a daily run when using multi-source staging and this is not the first source loaded. Once the load table is clean and the ERP is cleaned up, the failed job can be restarted in the Scheduler without having to change any staged data in the BI data warehouse. Post Load Procedure post_load_ee_PostingHist was added to help catch errors in ERP FIN EE GL data.
Metadata – Financials EE	QBI-4832	Three items were fixed. The initial problems were: • The ar_aging_history_date column, which was set as the getdate() in the prior staging table, was introducing time stamps into the dss_history_start and dss_history_end_dates of the fact table. It should have stripped out the time stamp. • The time stamp issue was causing some updates to the table to not properly end_date records and left the future end date, plus on occasion it was setting the new start date to 3000-01-01, which was the day after the future end_date of the prior record. • In some cases, the dss_current_flag was not properly reset after a run, leaving no current record active, although the most recent version of the record still had the future end date. This update fixes all three issues.
Metadata – Financials EE	QBI-4850	Column widths were widened to handle columns where data frequently exceeded the default widths in the ERP. This should eliminate unnecessary reworking of columns sizes in BI.
Metadata Financials SE	QBI-3405	Set+Cursor updates removed from Financials SE staging. All fact tables now use “Unknown” zero-key dimension record when the dimension cannot be identified in the ERP master data. For example, if an invoice contains an item that does not appear in item master, a dim_item record is not created to simulate it. The order instead reflects the generic unknown item. This is a minor loss in functionality that creates a major performance benefit during each DAILY scheduled job run.
Metadata Financials SE	QBI-4196	Set+Cursor updates removed from Financials SE staging. All fact tables now use “Unknown” zero-key dimension record when the dimension cannot be identified in the ERP master data. For example, if a general ledger posting contains a cost center that does not appear in the master table, a dim_cost_center record is not created to simulate it. The posting instead reflects the generic unknown cost center. This is a minor loss in functionality that creates a major performance benefit during each DAILY scheduled job run.
Metadata Financials SE	QBI-4360	This issue only affects BI 3.10 with a FIN SE source fact_ap_voucher_history and fact_ap_voucher_snapshot that were incorrectly deleting the final version of some vouchers, which left a voucher in an unpaid, aged status instead of closing out as paid. This issue has been repaired and any user upgrading from BI 3.10 to BI 3.11 needs to rebuild these two tables using the upgrade job and a DAILY run afterward. New installs of BI 3.11 are already fixed.
Metadata Financials SE	QBI-4432	The Financials SE Module now supports multi-source staging.

Table 1 BI 3.11 Enhancements and Fixes (4 of 10)

Component	QAD Issue	Description
Metadata Financials SE	QBI-4531	A new parameter of <code>gltr_hist_lookback_days</code> was added. This parameter limits the hist job load of <code>load_gltr_hist_history</code> by the number of days prior to the date of the hist run, which impacts <code>perm_gl_transaction_hist</code>. Default: 500000 (huge) Example: 1095 (3 years of data from date of the history load) Set this parameter before the initial history job load to limit the amount of information in: • <code>load_gltr_hist_history</code> • <code>perm_gl_transaction_hist</code> • <code>fact_gl_transaction</code>
Metadata Financials SE	QBI-4558	This procedure catches a small bug that occasionally generates duplicates in the <code>fact_ar_invoice_history</code> table. A time stamp was being added to a date instead of just the date being recorded in a <code>dss_history_start_date</code> record. The time stamp sometimes caused run failures because the date and datetime values did not match. This fix cleans up any records with the time stamp and prevents the time stamp from being introduced into the <code>dss_history_start_date</code> records on future daily runs. Important for upgrades: This change to the modified update procedure for <code>stage_are_inv_hist_age_recalc</code> requires additional changes after implementation if you have any custom columns on this table. Those custom columns need to be reintroduced to the procedure after the upgrade. This fix makes no changes to the table, just to the update procedure.
Metadata – Inventory	QBI-4107	The default value for the <code>INV_BALANCE_HIST_START_DATE</code> is now set to <customer defined. Format YYYY-MM-DD>. This needs to be set before an initial data load and is included in <i>QAD Business Intelligence Installation Guide</i>. (See the “Reference” chapter, Parameter Values that Need to be Set Before History Load table.) Previously this parameter defaulted to 2008-01-01 and it was not obvious that it should be changed to meet the customer’s needs for the amount of inventory history required in BI balanced against the size of the fact table.
Metadata – Inventory	QBI-4604	<code>INV_LAST_IN_MSTR_EXTRACT</code> has been eliminated. The parameter was used to keep <code>in_mstr</code> in sync with transaction history to get a precise snapshot of inventory. This in sync datetime is by source and would not work in the multi-source staging environment so it has been replaced with a direct query on <code>in_mstr</code>’s extract timestamp as needed.
Metadata – Inventory	QBI-4675	This issue improved Inventory performance. • <code>stage_inv_mth_balance_hist_calc</code> now runs in roughly half the time as before due to new supporting stage tables • <code>stage_inv_mth_balance_hist_fiscal_period</code> and <code>stage_inv_mth_balance_hist_periods</code> run a few dozen calculations to replace one calculation per inventory balance
Metadata – Inventory	QBI-4694	This issue improved Inventory performance. • <code>custom_fact_inv_mth_balance</code> runs in about one-third the time it did prior to applying the new supporting stage tables • <code>stage_inv_mth_balance_hist_fiscal_period</code> and <code>stage_inv_mth_balance_hist_periods</code> run a few dozen calculations to replace one calculation per inventory balance These changes also were applied to <code>stage_mrp_calculations</code> and <code>stage_mrp_calculations1</code>, but the test data is too small to show performance improvement.
Metadata – Inventory	QBI-4744	Inventory processing is now more efficient. There were no changes to data.
Metadata – Inventory	QBI-4904	In earlier versions of the code, many instances of stage tables joined to the dimension <code>dim_item</code> to get important information. All of that information is now grabbed in one join upfront so that less processing is required in the stage tables

Table 1 BI 3.11 Enhancements and Fixes (5 of 10)

Component	QAD Issue	Description
Metadata – Inventory	QBI-4990	The logic for finding the end of month last cost needs to be different for AVG cost records vs. regular records. BI now filters out the use of CST-ADJ records for AVG cost method records. Although CST-ADJ records reflect the most recent cost for a correlating transaction, the effective period for the cost adjustment can be different than the effective period for the CST-ADJ record. The last non-CST-ADJ record for the fiscal period is used to calculate the last cost of the month. For regular orders, CST-ADJ records can be used.
Metadata – Multi-Module	QBI-3865	Data loads are now successful when SQL Server Native Client 11.0 is chosen as the ODBC driver for the Data Warehouse. This requires upgrading to QAD Data Warehouse Designer 6.7.4.
Metadata – Multi-Module	QBI-4106	A longstanding, minor problem with the calendar’s moving financial quarter has been fixed. dim_date_qad.moving_fin_quarter was not properly handling the year rollover. This attribute should equal “Current” for the last three financial periods. For example, on Aug. 28, the attribute is set to current for every date in June, July, and August up to and including Aug. 28. The setting of this attribute in the DAILY scheduled jobs (daily_date_roll_qad()) would only set Current back to January 1. This has been corrected.
Metadata – Multi-Module	QBI-4174	The default value for the corp_currency_code parameter is now set to <Enter 3-letter corporate currency code>. This needs to be set before an initial data load and is included in <i>QAD Business Intelligence Installation Guide</i> . (See the “Reference” chapter, Parameter Values that Need to be Set Before History Load table.). Previously this parameter defaulted to USD and it was not obvious that it could or should be changed to meet the customer’s needs. Incorrectly leaving it as USD if the customer mostly uses other currencies can result in slower processing due to excessive currency conversions.
Metadata – Multi-Module	QBI-4274	Two indexes have been added to dim_date_qad on current_fin_month to improve the performance of the queries used in the Portal’s CFO Dashboard. The new indexes are fin_month and dim_date_qad_key.
Metadata – Multi-Module	QBI-4361	Multi-Source Staging Structural Portion (Step 1) The INITIAL_JOB_SETUP that creates the Scheduled job list in parameters (HIST_JOB_LIST% and DAILY_JOB_LIST%) has been modified in anticipation of the full multi-source staging project in BI 3.11. This first step includes: • Moving all EAM source types to the end of the job list. • Adding CONFIRM_CONNECTION_XXXXXXXXX job to the end of each PREPROCESS_[sourcename]_LOAD list. • Adding load_source_list and the functionality to manage which sources are being loaded during the DAILY load. • Making sure the TRUNCATE jobs cover all installed modules regardless of which source is loading and which modules are loading for that single source. • Making sure customized jobs added by the customer allow the maximum number of jobs to be in the daily load job list during the rebuild process in INITIAL JOB SETUP.
Metadata – Multi-Module	QBI-4485	load_ld_det now only loads if the Operations Module OP is installed. load_ld_det is a table used in Operations only. As a result, tr_hist loading has been removed from hist_op_perm_chained and daily_op_perm_chained because it is no longer needed in the OP Module. No upgrade script is associated with this change.
Metadata – Multi-Module	QBI-4493	setup_job_chain_master() has been modified to make the cleanup jobs in the hist_load_job parameter list optional. The job parameter:com_add_cleanup_jobs was added to control this option with Y/N.
Metadata – Multi-Module	QBI-4559	This fixes an update process that was updating a perm_transaction_hist table record unnecessarily in an effort to capture any changes to invoices, fsm_type, and svc_type. This change ensures that the update of the perm_transaction_table by the procedure is only for the instances where there was a change to that record. No update scripts need to be run for this fix.
Metadata – Multi-Module	QBI-4671	permsup_transaction_hist deprecated. All references to the table were replaced with new fields in perm_transaction_hist. An upgrade script was added for the Common Module. This reduces database size and reduces usage of TempDB during DAILY run.

Table 1 BI 3.11 Enhancements and Fixes (6 of 10)

Component	QAD Issue	Description
Metadata – Multi-Module	QBI-4830	Corrected parameter default values to not include spaces after commas and updated comments in parameters to indicate that lists should not have spaces.
Metadata – Multi-Module	QBI-4831	FindModuleExists has been enhanced to handle spaces within the list of modules. Previously it would not recognize modules if there were spaces between the module designations, which could result in tables such as op_hist or tr_hist not being loaded as expected.
Metadata – Multi-Module	QBI-4905	Some duplicate tasks were cleaned up out of Scheduled Jobs. These changes have no impact to the data or run time.
Metadata – Multi-Module	QBI-4976	tr_date is now the only criteria used to search for lookback days instead of using both tr_hist and ih_hist. This change improves performance times considerably.
Metadata – Multi-Module	QBI-4991	New pre-build sql catches errors in dependent simultaneous tasks. Severed scheduled jobs were repaired and all modified jobs were put in the host script for the BI 3.11 upgrade script. Only the job task order changed in each case.
Metadata – Multi-Module	QBI-5001	Procedure admin_auto_restart_failed_jobs is now in MASTER_311.
Metadata – Multi-Module	QBI-5002	cost_method has been added from the cs_mstr.cs_mthd to dim_item table to distinguish between Standard and Average costing methods for item/site combinations. The average costed item/sites are labeled with AVG. Depending on how you have your data set up, standard may be blank or it may say “standard.” This change was especially important for the Inventory Module.
Metadata – Order Management	QBI-2214	This change ensures that commonly problematic bad dates in certain table columns get handled properly to prevent load table load failures. For example, if 07-07-0011 is tr_expire, this normally would cause the load table to get no data or cause a load failure. Now the bad date is fed into the data warehouse but converted into the DATE_EARLIEST_POSSIBLE parameter value.
Metadata – Order Management	QBI-4109	Logic in prior releases considered an order_line closed if the shipped amount was equal to or greater than the ordered amount. This did not account for the fact that an order line should not be considered closed until fully invoiced. The new logic considers a non-scheduled order to be closed in only three situations: • If the shipped amount and the invoiced amount exceed the ordered amount. • If, regardless of the invoiced or shipped amount, the record is generated only from an invoice and there is no correlating sod_det record. • If, regardless of the invoiced or shipped amount, the record is generated from an invoice and the sod_det record that exists has the column complete_state=01. In all other cases the records are considered open.
Metadata – Order Management	QBI-4169	The BI system adds to the dim_site dimension any site codes that are referenced by item-site data, even if the site is no longer in the si_mstr table. In earlier BI versions, prior to BI 3.10, any various code values found in transactional data that were not already in the appropriate dimension (account codes, site codes, project codes), were automatically added to the dimension. This type of processing was resource-intensive and was removed from BI 3.10. However, this meant old item data that may have referenced site codes that were not longer in si_mstr would have a valid site_code but link to the “Unknown” dim_site record. This fix ensures the dim_site is updated with site codes that are referenced by any item data, even if the site_code no longer exists in the si_mstr table (the primary source for dim_site).
Metadata – Order Management	QBI-4351	The Customer Sold-To Code in fact_om_shipment table records value usually comes from the Sales Order record (so_mstr.so_cust field). However, BI sometimes gets shipment information from the Transaction Table (tr_hist) for which the corresponding sales order has been deleted. In this case, the fact_om_shipment table now displays the Customer Sold-To Code that is in the Transaction Table’s Address field (tr_hist.tr_addr). In previous releases, if the sales order was missing, the shipment record showed “Unknown” for the Customer Sold-To Code.

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Component	QAD Issue	Description
Metadata – Order Management	QBI-4364	The fact_om_shipment table now includes the Invoice Number associated with the Sales Order Line, if one exists in the tr_rmks field of the tr_hist record for this order line.
Metadata – Order Management	QBI-4491	Sales Account information from the invoice or sales order line tables has replaced accounting codes from invoice or sales order headers in the OM fact tables. There is an accompanying upgrade script for OM but if the account codes in OM are unimportant, the upgrade script does not need to be run.
Metadata – Order Management	QBI-4492	Scheduled orders in prior releases would extract all versions of an order on every daily run, meaning an order number that has been scheduled for 10 years would have all of its lines extracted for all of the prior 10 years of records on each DAILY extract from perm. The changes made here ensure that only the scheduled order records that have had any changes are extracted.
Metadata – Order Management	QBI-4560	Perm (as well as correlating work and extract) tables were added for the OM Module to capture the absr_det and schd_det information. The inclusion of perm_tables ensures that on the daily extract BI limits the amount of data being extracted to just changed records, not all the records in the table. This should ensure much faster daily runs for customers with scheduled orders because only relevant information is being gathered.
Metadata – Order Management	QBI-4620	This change only impacts scheduled orders in OM and should result in improved performance. The original code was doing multiple passes through the perm_transaction_history table, which contains all transactions that have ever occurred, instead of the extract_om_transaction_history table, which only contains the most recent changes. Fact tables should be populated with the same results.
Metadata – Order Management	QBI-4621	This change affects scheduled orders in OM and should result in improved performance. The original code did two select-within-a-select statements, which run inefficiently. One of these was recoded to follow normal coding standards. OM fact tables should still populate with the same results.
Metadata – Order Management	QBI-4664	permsup_om_invoice_header and permsup_om_invoice_line deprecated. All references to permsup fields have been replaced with new fields in perm tables. An upgrade script was added for the OM Module. This reduces database size and reduces usage of TempDB during DAILY run. NOTE: When upgrading from BI 3.10 to BI 3.11, it is critical that INITIAL_JOB_SETUP is run again so that new CONFIRM_CONNECTION_% jobs are created and added to the DAILY job chain. This is part of the new Multi-Source Staging management system and the new jobs are required whether you are single or multi-source staging. This should be done prior to running the upgrade jobs as they also use CONFIRM_CONNECTION_%.
Metadata – Order Management	QBI-4695	The stage_om_price_list no longer fails if a non-integer value exists in the pc_mstr.pc_min_qty field. The error was due to a comparison in the ZipNumbers function that was implicitly converting a value to integer to make a comparison to zero. By quoting the 0, BI now does a string comparison that does not attempt to convert the pc_min_qty value.
Metadata – Order Management	QBI-4699	In order to constrain the amount of data in the fact tables to a certain date, for example a 2-year look back for fact tables, set HIST_FIRST_DATE_PERM parameter to a date 3 years before and HIST_FIRST_DATE_FACT to 2 years before. The perm tables should be populated with 3 years of data and the fact tables should have data starting at the 2-year date from the _FACT parameter.
Metadata – Order Management	QBI-4707	In the past, Financials EE has suffered from NULL or blank numeric fields. All known cases can be traced to conversions of SE to EE or other administrative manipulations of ERP data. BI now has several safeguards in place to turn the null/blank values to 0 or 1 depending on the situation so that calculations can be made on all existing data.
Metadata – Order Management	QBI-4741	To improve performance on stage_om_order_transaction4, where the customer has many scheduled orders, indexes were added to: • extract_om_invoice_header • extract_om_invoice_line • stage_om_order_transaction1

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Component	QAD Issue	Description
Metadata – Order Management	QBI-4760	POSTPROCESS_OM_SUMMARY during the DAILY job runs now takes 10-15 minutes less time than before. stage_om_order_snap2 now correctly uses the SQL Server index to make it faster.
Metadata – Order Management	QBI-4788	fact_om_order_history now runs faster and uses less temporary disk space with performance improvements that do not change the data results.
Metadata – Order Management	QBI-4811	The changes made to accommodate scheduled orders in OM ended up creating problems with regular orders in the fact_om_shipment table because there were multiple extra columns included as the business key. A change of due_date in 3.9 and 3.10 is causing the original record to remain in the table and a new record to be created, essentially creating duplicates. For non-scheduled orders, a change of due_date should change the due_date on the record, not create a new record and leave the old one. The solution was to create a composite key of the values relevant to scheduled orders and to set the composite key value for regular orders to NONE. The upgrade simply checks for the scheduled order flag = Y and builds the composite key from existing records. Otherwise if not a scheduled order it populates the new column with NONE.
Metadata – Order Management	QBI-4925	The business key for scheduled orders is different than for regular orders. This was causing problems for non-scheduled orders if things like due_date changed. (due_date is part of the scheduled_order business key but should not be for regular orders.) A new column, scheduled_order_composite_key, was added to these tables to ensure that parts needed for a scheduled order that were extras to a regular order business key, could all be in one place. For regular orders, the value in the composite key column is NONE.
Metadata – Order Management	QBI-4974	Invoice number was removed from the business key on perm_customer_consignment because that column can start out null and be populated later, creating duplicate records. That also means that two order/lines can be in the table with two different invoices and can cause duplicates when records are matched to the perm_table to find consigned orders, so the references to the perm table also do a distinct on the records to ensure that only one record is returned.
Metadata – Order Management	QBI-4978	In instances where tr_hist records have shipments for one item and the idh_hist records have a different item, the records were not going through to fact_om_shipment. This has been resolved, by not matching on item number. An extra column, discrepancy_notes, was added all the way up through to the fact table that displays the tr item and idh item if they do not match.
Metadata – Purchasing	QBI-3414	NULL values from Progress fields wo_mstr.wo_nbr and wo_mstr.wo_lot are now being filtered out of load_wo_mstr/load_wo_mstr_hist. These records are considered invalid and can cause duplicate primary keys in fact_wo_order. Users experiencing duplicate key errors in scheduled jobs DAILY_OP_WO_PROCESS_CHAINED or HIST_OP_WO_PROCESS_CHAINED may need this fix to change the “where” clause in two load tables.
Metadata – Purchasing	QBI-4348	Added additional column quantity_ordered_final to fact_po_order_history and populated it with data from the cum_quantity_received+cum_quantity_required columns from the extract_po_receipts table. Receipts take priority over POs and tr_hist data. This ensures that BI has the actual final quantity ordered in an instance when an order is partially fulfilled and the customer accepts that as the full amount. Fact PO order history now reflects both the original amount ordered and the final amount ordered (or accepted).
Metadata – Purchasing	QBI-4430	An extract join was added to query for extract_po_receipt_hist. It has been shown to boost performance on this one extract in one instance.

Table 1 BI 3.11 Enhancements and Fixes (9 of 10)

Component	QAD Issue	Description
Metadata – Purchasing	QBI-4669	permsup_op_order_header, permsup_op_order_line, and permsup_om_receipt_hist deprecated. All references to permsup fields have been replaced with new fields in perm tables. An upgrade script was added for the OP Module. This reduces database size and reduces usage of TempDB during DAILY run. NOTE: When upgrading from BI 3.10 to BI 3.11, it is critical that INITIAL_JOB_SETUP is run again so that new CONFIRM_CONNECTION_% jobs are created and added to the DAILY job chain. This is part of the new Multi-Source Staging management system, and the new jobs are required whether you are single or multi-source staging. This should be done prior to running the upgrade jobs as they also use CONFIRM_CONNECTION_%.
Metadata – Purchasing	QBI-4745	Two Purchasing stage tables used in the DAILY load were incorrectly referencing some fields from the History load tables. stage_po_order_hist_daily3 and stage_po_order_hist_daily6 have been corrected to source the tables that contain daily load data.
Metadata – Purchasing	QBI-4810	This issue was caused by multiple versions of records in a staging table being joined to even more versions in the fact table. The system was not looking for just the dss_current_flag in ('P','Y') records and as a result, ended up with a Cartesian join on the insert. Adding the line: AND vers.dss_current_flag in ('P', 'Y') at the end of the existing vers join resolves the issue.
Metadata – SSM	QBI-4787	The load_ca_mstr table loads the ca_opn_time and ca_cls_time values into nvarchar fields. In stage_ssm_call_master the values are implicitly converted to numeric values in order to calculate the Open or Close time. These calculations are now embedded in a cas. statement to ensure that the values are actually numeric prior to attempting the calculation, because it is possible that one of these fields could contain a non- numeric character. Previously the calculation failed if a non- numeric character was encountered; now any non-numeric character is treated as 0.
Portal	QBI-3112	Some of the standard dashboards have visual items that are minimized by default. This is done to minimize system overhead when the dashboard is initially displayed. Previously, when the user restored one of these minimized visual items, the restore action did not show the visual item. However, if the user clicked the “Restore” button on a linked parameter bar, the visual item displayed correctly. This problem is now resolved. Visual items display correctly when they are restored.
Portal	QBI-3937	In QAD BI Portal reports that require a date input, there is a noticeable and significant delay between when digits for a date are entered and when they appear on screen. The fix for this is addressed in three ways: • Best practice for Report date parameters is to use lookup queries. This is now articulated in Knowledge Base AA-8643 and will be included in an update to the <i>BI Portal User Guide</i>. • New Validation reports use lookup queries for dates. This addresses the specific issue with GL Validation reports. • Additional indexes have been added to dim_date_qad DW, specifically in support of the CFO Dashboard. Customers can also add their own indexes, if they have specialized date lookup requirements.
Portal	QBI-3944	In the BI Portal, the indicator in the left window frame now shows as “Busy” until the report has been generated in the right window frame.
Portal	QBI-4021	In BI Portal reports, subtotals and totals could display different rounding formats than the column numbers. This happened when there were many columns on a report. This has been corrected.
Portal	QBI-4104	BI charts can be added to a dashboard within the ERP. From those BI charts, you can drill out to the BI dashboard that contains the chart. In the past, this functionality did not display the correct BI dashboard.
Portal	QBI-4270	If BI Portal version 3.10 is installed on a server that does not have the DejaVu Sans true-type font installed, when you try to run a report you get the error: Font ‘DejaVu Sans’ is not available to the JVM. See the Javadoc for more details This was resolved for the maintenance release BI 3.10A. The DejaVuSans.ttf file was added to the BI Portal package and the fonts definition file was modified to reference the file.

Table 1 BI 3.11 Enhancements and Fixes (10 of 10)

Component	QAD Issue	Description
Portal	QBI-4275	BI 3.10.0 includes new functionality in support of Single Sign On (SSO). With SSO, the BI Portal uses SAML to authenticate users of the BI Portal Client. For users who access the BI Portal from the ERP, using the ERP Dashboards, LDAP authentication is used.
Portal	QBI-4489	ResetPassword function now works as expected; a random password is generated and the correct encrypted value is stored in the database. Previously the incorrect encrypted value was being stored in the database, so the random password sent to the user did not actually allow the user to log in.
Portal	QBI-4805	The BI Portal has been modified to allow users to log in using an e-mail address. This affects both the BI Portal client and the API used by the .NetUI application. In conjunction with this modification, the BI Portal user maintenance screen now enforces unique e-mail addresses. If a customer wants to remove this constraint, this is done by setting <userEmail userEmailUnique="false"/> in the server-config.xml file.
Portal	QBI-4982	The BI Portal can now perform user authentication against an Active Directory or other LDAP server. When LDAP authentication is enabled and the user has been configured for external authentication, the user is authenticated against the LDAP Server. No password is stored or used in the BI Portal database. This functionality requires additional setup components. See <i>QAD Business Intelligence Portal User Guide</i> for more information related to system setup. The User Maintenance function has also been updated to allow system administrators to maintain the data that is required for Active Directory authentication. See <i>QAD Business Intelligence Portal User Guide</i> for details on these columns.
Portal	QBI-5053	New functionality has been added to the BI Portal to add/update/disable users based on information in an Active Directory server. This functionality can be executed via a script or from a new Administration screen. The users to be modified are specified by Active Directory search filters. Refer to <i>QAD Business Intelligence Installation Guide</i> and <i>QAD Business Intelligence Portal User Guide</i> for detailed installation and usage information.
Portal Standard Objects – Financials SE	QBI-4254	Removed SE CFO Dashboard from Financial module's portal standard objects. The SE CFO Dashboard was redundant; there is a CFO Dashboard that is applicable to either SE or EE Financials. In addition, the SE CFO Dashboard lacked a parameter bar but included a visual item, the Income Statement chart, that required a parameter for the Entity, resulting in a confusing display of all entities in a single chart.

Release Notes for Release 3.10

QAD Business Intelligence Version: 3.10

Date: March 2014

Summary

The QAD BI 3.10 release introduces the following improvements and fixes:

- Onsite data validation reports, which are used to validate the target QAD BI fact table data against the source QAD Enterprise Applications data. This validation is recommended at initial installation and upgrades for business users to confirm that the ETL jobs have completed and are operating as expected. See the *QAD BI 3.10 Installation Guide* for more information.
- Performance improvements
- Fixes to portal and metadata defects

Upgrade Instructions

See the *QAD BI 3.10 Installation Guide* for the instructions to upgrade to QAD BI 3.10.

Data Warehouse Tables Changed

The following section lists the Data Warehouse tables that have been changed, added, or deleted.

Note The tables on the Modified list may have been changed structurally. For example:

- Columns added or deleted
- Indexes added or deleted
- Changes made to business display names
- Changes to visibility of particular columns in the BI Portal
- Any combination of these modifications
- The procedure that populates the table has changed

List of New and Modified Tables

Common Module - New and Modified Tables

Note Some of these tables have moved from the Operations module to the Common module since they are shared by the new SSM module; for example, the tables related to the processing of op_hist and wo_mstr.

- | | | |
|------------------------|------------------------------|-------------------------------|
| • dim_item | • load_wr_route | • stage_item_list1 |
| • dim_site | • load_wr_route_hist | • stage_item_master |
| • load_op_hist | • perm_op_hist | • stage_op_hist |
| • load_pt_mstr | • perm_site_working_calendar | • stage_site |
| • load_tr_hist | • perm_transaction_hist | • stage_site_working_calendar |
| • load_tr_hist_history | • perm_work_order_detail | • stage_site1 |
| • load_tr_hist_list | • perm_work_order_master | • stage_transaction_hist |
| • load_tr_hist_remarks | • perm_work_order_routing | • stage_unit_of_measure |
| • load_wo_mstr | • stage_customer | • stage_unit_of_measure4 |

- load_wo_mstr_hist
- load_wod_det
- load_wod_det_hist
- stage_eam_site
- stage_item
- stage_item_call_list
- stage_wo_mstr
- stage_wod_det
- stage_wr_route

Financials Module - New and Modified Tables

- fact_ap_invoice_snapshot
- fact_ap_voucher_history
- fact_ar_invoice_history
- fact_ar_invoice_snapshot
- fact_ee_ap_supplier_invoice_snapshot
- fact_ee_ar_customer_invoice_snapshot
- stage_ee_ap_supplier_invoice_snap1
- stage_ee_ap_supplier_invoice_snap2
- stage_ee_ap_supplier_invoice_snap3
- stage_ee_ap_supplier_invoice_snap4
- stage_ee_ar_customer_invoice_snap1
- stage_ee_ar_customer_invoice_snap2
- stage_ee_ar_customer_invoice_snap3
- stage_ee_ar_customer_invoice_snap4
- stage_ee_ar_customer_invoice1
- stage_se_ap_invoice_snapshot
- stage_se_ap_snap1
- stage_se_ar_invoice_snapshot
- stage_se_ar_snap1

Operations Module - New and Modified Tables

- stage_inv_bal_item_list
- stage_inv_bal_mth_current4
- stage_inv_bal_mth_date1
- stage_inv_bal_mth_trans1
- stage_inv_mth_end_cst
- stage_inv_mth_end_cst1
- stage_inv_trx_chg_mths
- stage_po_order_snap1

Order Management Module - New and Modified Tables

- fact_om_booking
- fact_om_invoice
- fact_om_order
- fact_om_order_history
- fact_om_order_performance
- fact_om_shipment

EAM Module - New and Modified Tables

- load_eam_domain
- fact_eam_wo_order_history

TM Module - New and Modified Tables

There are no TM module changes for this release.

List of Tables Deleted

For the BI 3.10 release, there were no tables deleted.

Enhancements

Table 2 BI 3.10 Enhancements (1 of 2)

Component	QAD Issue	Description
Metadata (Common)	QBI-3656	Additions were made to the common module's dim_item dimension to support the new SSM functionality; but all existing customers should know that dim_item changed, whether they are planning on adding SSM or not, as they get new columns.
	QBI-3722	perm_work_order_routing, perm_work_order_master, and their supporting objects have been moved to the Common module so they can be shared between modules OM and SSM. Users with OM installed will not notice any difference. These objects have been moved to Common scheduled jobs. Users upgrading to BI 3.10 or higher without OM or SSM will now receive these objects. There are ways to disable them in the scheduled job runs if there are no plans to install OM or SSM.
Metadata (Financials EE)	QBI-3777	The prior stage table delete in the procedure that updates the AR/AP snapshot tables has been modified so that it is only pulling the distinct source/domain/effective_date/snapshot frequency for deletion instead of matching up every single record in a Cartesian join that creates a lot of unnecessary processing overhead. This should improve performance on these tables during daily runs.
	QBI-3942	Column added and upgrade script provided. Includes changes to the snap1,2,3 table to ensure that when weekly and monthly is chosen, that on days an end of week day is the same as an end of month day, records for both will be created. Until now, a monthly record would be created, but the weekly record would be skipped.
	QBI-3943	Column added and upgrade script provided. Includes changes to the snap1,2,3 table to ensure that when weekly and monthly is chosen, that on days an end of week day is the same as an end of month day, records for both will be created. Until now, a monthly record would be created, but the weekly record would be skipped.
Metadata (Financials EE and SE)	QBI-3628	Business key sequence has been reordered to take advantage of the business key during the deletion process. Key sequence for both AR/AP snapshots in both SE and EE environments is now source_system_code, domain_code, effective_date and snapshot_frequency, then the rest of the business key columns.
Metadata (Financials SE)	QBI-3653	Changed the logic that was improperly flagging records with a zero amount_open. The old logic had been setting the dss_current_flag to N and leaving the dss_history_end_date with its future end date. The new logic leaves the dss_current_flag as Y and sets the dss_history_end_date to the dss_history_begin_date for that row. This ensures that the record appears in the snapshot table for only one period and does not keep reappearing period after period.
	QBI-3771	The prior stage table delete in the procedure that updates the AR/AP snapshot tables has been modified so that it is only pulling the distinct source/domain/effective_date/snapshot frequency for deletion instead of matching up every single record in a Cartesian join that creates a lot of unnecessary processing overhead. This should improve performance on these tables during daily runs.
Metadata (Multimodule)	QBI-3679	perm_op_hist and all supporting tables have been moved to the Common module. A new auto test has been written to ensure that this table is available in the SSM module.
	QBI-720	The Daily load of tr_hist data will now pick up data from any domain, including new domains. Previously the load_tr_hist table included in its Where clause a list of previously loaded domains for each source, so it would only load new records that were from previously known domains. That clause has been removed, so new records from new domains will also be loaded in daily loads.
Metadata (Order Management)	QBI-3407	Set+Cursor updates removed from Order Management staging. All fact tables will now use "Unknown" zero-key dimension record when the dimension cannot be identified in the ERP master data. For example, if an order contains an item that does not appear in item master, a dim_item record will not be created to simulate it. The order will instead reflect the generic unknown item. This is a minor loss in functionality that will create a major performance benefit during each DAILY scheduled job run.

Table 2 BI 3.10 Enhancements (2 of 2)

Component	QAD Issue	Description
Metadata (Purchasing)	QBI-3980	A job named UPGRADE_39_TO_310_PO_SNAPSHOT_FOR_B_TO_M has been included in the BI 3.10 Operations Module Upgrade Application. If you have been running the Purchasing Snapshot for both weekly and monthly periods (that is, PO_SNAPSHOT_FREQUENCY is set to B for Both), and you want to change that to just Monthly (M), you can change your parameter value. Then, run the UPGRADE_39_TO_310_PO_SNAPSHOT_FOR_B_TO_M job to remove the unwanted Weekly records from the snapshot table and therefore reduce both the amount of space being taken up by the Purchase Order Snapshot table and the time it takes to process the snapshot table each day.
Portal	QBI-3341 & QBI-3344	Previous versions of the BI Portal did not correctly pass parameter values when drilling from a report to another report. This has been fixed and the correct parameter values will be passed.
	QBI-3877	Unicode values in reports will now export properly to PDF and to Excel. Note that this requires the existence of Arial Unicode MS fonts on the BI Portal server. If this font is not available on the Tomcat server, a different Unicode font will need to be provided. In this case, the font-extensions file (in the Portal web application's WEB-INF\classes directory) should be modified to reference the preferred Unicode font.

Fixes

Table 3 BI 3.10 Fixes

Component	QAD Issue	Description
Cubes	QBI-2449	When viewing the OLAP cubes in Analysis Services, the correct dates should be seen when using moving_fin_year or moving_cal_year within a date dimension. This correction has been made to all OLAP date dimensions, and the three OLAP cubes—Inventory, Purchasing, and Sales—have all been refreshed with the corrected dimensions. Note that if you have customized any of these cubes in your own environment you will need to save a copy of your own cubes, as they will be overwritten when you install the BI 3.10 upgrade. Previously when using moving_fin_year or moving_cal_year some incorrect dates would be included in the "Current" or "Previous" year. This was due to dimension relationships that the BI DWD tools sets up automatically when OLAP date dimensions are created. Moving_fin_year and moving_cal_year were getting dimension relationships set up automatically that should not be there. These unwanted dimension attribute relationships have been removed for all OLAP date dimensions.
Metadata (Capacity Plan)	QBI-3849	Added a new stage and perm table to manage the site_working_calendar used for determining performance dates in the PO process. This should improve the processing time of the Purchasing Performance job. Previously, this determination of whether PO receipt was within the threshold for 'on-time' used a view, which was less efficient. The jobs HIST_COMMON_PERM_CHAINED and DAILY_COMMON_PERM_CHAINED have been modified to process the new stage and perm tables (this processing must happen after perm_shop_cal is processed).
Metadata (EAM Maint)	QBI-3526	EAM History loads no longer check history date for "last time ran".
	QBI-3670	When an EAM work order is in (C)losed status, fact_eam_wo_history.dss_history_end_date now reflects the last changed date of the work order instead of the default '2999-12-31'. The 3.9 to 3.10 upgrade script will update all the records in this fact table with the correct dss_history_end_date. Since the snapshot table and other related tables do not depend on the dss_history_end_date field, no other changes have to be applied for this fix.

Table 3 BI 3.10 Fixes

Component	QAD Issue	Description
	QBI-3706	Cross traffic between ERP and EAM calendar sources has been eliminated by adding truncates to these tables in these jobs: Truncate tables: stage_date_qad3 stage_eam_date_qad3 dim_date_qad processes in: DAILY_COMMON_PROCESS_CHAINED DAILY_EAM_PROCESS_CHAINED HIST_COMMON_PROCESS_CHAINED (twice process, once custom) HIST_EAM_PROCESS_CHAINED
	QBI-3873	The load_eam_domain task will now work properly for EAM applications running on Progress Open Edge v 11. One key change with Progress Open Edge v11 is that the word "domain" is now a Progress SQL Reserved Word; since "domain" is also the name of a table in EAM, whenever this table is referenced in a SQL query it now must be enclosed in double-quotes. Prior to this fix the load_eam_domain task would fail with SQL error 10713 Syntax error in SQL statement at or about ".domain".
Metadata (Financials EE)	QBI-3118	Starting in BI 3.10, all customers will be in the dim_customer_ship_to dimension view. This will ensure the best reporting data possible for Financials EE tables showing customers. Prior to this fix, some ship to customers were set to 'Unknown'. This change will prevent this from happening in the future when the customer record is anywhere in the table. For customers who historically loaded financials in BI 3.9 or earlier, unknown customers can only be corrected in the table by truncating the fact table and reloading from the perm.
Metadata (Financials SE)	QBI-3905	Have addressed a myriad of issues with the history tables and their subsequent snapshot tables. In the History table, records with a zero balance that are the last version of the record are now flagged as current and have their end date set to the begin date. As a result of this the snapshot tables picks up the closed order in only one period and not in subsequent periods (which previously had been appearing month after month and year after year, creating an ever growing number of records to process daily).
Metadata (Inventory)	QBI-2859	The fact_inv_mth_balance will now be populated with proper data in the total_unit_cost_base field when there is no tr_hist record available for a particular item.
	QBI-3898	This code was reworked to work more efficiently. Customers with large data sets that are finding slowness populating this table may benefit from implementing this changed code.
	QBI-3899	This logic was finding the appropriate transaction costs for all periods back to the beginning of the Inventory month balance start time on all daily runs even if it only needed to do so for one or two prior months. This code was re-written so that it would only go as far back as is appropriate for the periods necessary for the daily run. This ensures faster run time and less required space and processing power, especially if there is a large number of items in the system.
Metadata (Multimodule)	QBI-3775	Truncate of stage_date_qad3 added to DAILY/HIST_COMMON_PROCESS. Truncate of stage_eam_date_qad3 added to DAILY/HIST_EAM_PROCESS.
	QBI-3871	Changes made to any function that had a varchar or char data type instead of nvarchar. This ensures that Unicode characters can pass through functions and implicit data conversions that cause index usage to fail is avoided.

Table 3 BI 3.10 Fixes

Component	QAD Issue	Description
Metadata (Order Management)	QBI-3673	In BI 3.9, a few new fields in fact_om_order_history—the scheduled_order_flag, consignment_flag, and ssm_flag fields—are set as Attributes but the EUL flag is N so these are not visible in the Portal. In BI 3.10, this has been corrected; the EUL flag is Y for these three fields so that they will be visible in the BI Portal.
Metadata (Purchasing)	QBI-3328	Upgraded date processing logic now includes fact_po_order snapshot records from the current day as well as better managing crossovers between Weekly and Monthly snapshots when (B)oth is selected. Users upgrading to BI 3.10 can run the OP Upgrade script to wipe out the snapshot table and rebuild it from the history table to see changes.
	QBI-3576	Corrected the Divide by Zero error in stage_op_transaction1.material_cost_scrap by applying CAST(x AS FLOAT) to operands.
	QBI-3945	The default value for PO_SNAPSHOT_FREQUENCY is now "M" (for "Monthly"). In previous versions, the default value was "B" for "Both Monthly and Weekly" - if left as "B" when the customer did not really need weekly snapshots the customer could find their snapshot table (a) getting large rapidly and (b) taking longer to process due to the excess weekly snapshots. The default for new installations will now be Monthly so that a customer must make the explicit choice if they want both Weekly and Monthly snapshots (understanding that this will result in a larger table that takes longer to process).
Portal	QBI-3879	Prior versions of the BI Portal did not correctly handle numeric parameters on BI Reports. This has been resolved in BI 3.10.

Release Notes for Release 3.9

QAD Business Intelligence Version: 3.9

Date: September 2013

New Feature Summary

The QAD BI 3.9 release introduces the following new features:

- **Auto Installer.** BI 3.9 includes a new GUI-based installer that can be used to install the Data Warehouse Designer, create the Data Warehouse Database, and install the BI Portal. Additional GUI installers can then be used to install metadata modules into the Data Warehouse Database. This enhancement streamlines the installation process, thus reducing the need for manual configuration. For more information, see the *QAD BI 3.9 Installation Guide*.

Note The Auto Installation can only be used for new installations and not for upgrades.

- **Dashboards.** BI Portal objects, including charts and grids, can be included in the new QAD .NET UI Dashboards. BI Reports are not currently operational within the new Dashboard framework. The BI Portal webapp reference must be specified in the `client-session.xml` file. See QAD Dashboard documentation for more information.
- **Order Management Dashboard.** In BI 3.9, the OM Module has been redesigned to include three new OM Dashboards dedicated to Bookings, Shipments and Sales, which are the major steps in the sales order process flow. Previously, the OM Dashboards only contained a limited number of visual items and displayed information at the company level, which includes all domains, for the current financial month or year. In BI 3.9, the BI dashboards contain more visual items that display information at both the company level and for a specific domain. Previously, the OM Dashboards did not have input parameters. The user could not view information for a different month and year or drill down into a specific domain. In BI 3.9, the new OM Dashboards provide a Year and Domain parameter bar so that users can view information for the domain and financial year of their choice. In addition to these improvements in BI 3.9, the BI Order Management module now correctly supports customer scheduled orders by displaying scheduled and non-scheduled orders in all OM dashboards.

Upgrade Instructions

See the *QAD BI 3.9 Installation Guide* for the instructions to upgrade to QAD BI 3.9.

Data Warehouse Tables Changed

The following section lists the Data Warehouse tables that have been changed, added, or deleted.

Note The tables on the Modified list may have been changed structurally. For example:

- Columns added or deleted
- Indexes added or deleted
- Changes made to business display names
- Changes to visibility of particular columns in the BI Portal
- Any combination of these modifications
- The procedure that populates the table has changed

List of Tables Modified

Common Module Modified Tables

- dim_credit_term
- dim_ee_saf
- dim_item
- load_ad_mstr
- load_ar_mstr
- load_cm_mstr
- load_com_mstr
- load_comd_det
- load_ee_DInvoice
- load_ee_Saf
- load_ee_SafConcept
- load_exr_rate
- load_icc_ctrl
- load_pt_mstr
- load_tr_hist
- load_tr_hist_history
- load_vd_mstr
- perm_transaction_hist
- stage_ee_saf
- stage_gl_calendar_year
- stage_transaction_hist

Financials Module Modified Tables

- extract_ee_customer_invoice
- extract_ee_customer_invoice_stage
- extract_ee_posting_line
- extract_ee_posting_saf
- extract_ee_supplier_invoice
- extract_ee_supplier_invoice_stage
- extract_gl_trans_hist
- fact_gl_transaction
- load_ap_mstr
- load_ard_det
- load_ck_mstr
- load_ckd_det
- load_ee_ad_mstr
- load_ee_CInvoice
- load_ee_CInvoiceMovement
- load_ee_Posting
- load_ee_Posting_all
- load_ee_PostingLine_all
- load_ee_PostingSaf
- load_gl_transaction_type
- load_vo_mstr
- perm_ee_customer_invoice
- perm_ee_customer_invoice_stage
- perm_ee_posting_line
- perm_ee_supplier_invoice
- perm_ee_supplier_invoice_stage
- stage_ap_invoice_snaps
- stage_ap_voucher_chk_match
- stage_ar_invoice_snap
- stage_ee_ap_supplier_invoice
- stage_ee_ap_supplier_invoice_hist
- stage_ee_ap_supplier_invoice_hist1
- stage_ee_ap_supplier_invoice_history2
- stage_ee_ap_supplier_invoice_history3
- stage_ee_ap_supplier_invoice_history4
- stage_ee_ap_supplier_invoice_movement_hist
- stage_ee_ap_supplier_invoice1
- stage_ee_ap_supplier_invoice2
- stage_ee_ar_customer_invoice_hist
- stage_ee_ar_customer_invoice_hist1
- stage_ee_ar_customer_invoice_history
- stage_ee_ar_customer_invoice_history0
- stage_ee_ar_customer_invoice_history1
- stage_ee_ar_customer_invoice_history2
- stage_ee_ar_customer_invoice_history3
- stage_ee_ar_customer_invoice_movement_hist
- stage_ee_ar_customer_invoice_stage_hist
- stage_ee_ar_customer_invoice1
- stage_ee_customer_invoice_perm
- stage_ee_customer_invoice_stage_perm
- stage_ee_gl_transaction1
- stage_ee_posting_line_perm
- stage_ee_posting_saf
- stage_ee_supplier_invoice_perm
- stage_ee_supplier_invoice_stage_perm
- stage_gl_balance1
- stage_gl_transaction1
- stage_gl_transaction2
- stage_gl_transaction3
- stage_se_ap_inv_snap
- stage_se_ap_snap1
- stage_se_ap_snap2
- stage_se_ar_inv_snap
- stage_se_ar_snap1

- stage_ee_ap_supplier_invoice_history0
- stage_ee_ap_supplier_invoice_history1
- stage_se_ar_snap2
- stage_se_ar_snap3

Operations Module Modified Tables

- fact_po_order
- fact_inv_transaction
- fact_po_order_history
- fact_po_order_performance
- load_pod_det
- load_shft_det
- load_wod_det
- load_wod_det_hist
- stage_inv_mth_balance
- stage_inv_transaction1
- stage_inv_trx_chg_mth1
- stage_po_credit_term
- stage_po_credit_term1
- stage_po_ord_perf
- stage_po_order_hist
- stage_po_order_hist_initial
- stage_po_order_hist_initial1
- stage_po_order_hist_initial3
- stage_po_order_hist_initial6
- stage_po_order_hist_initial7
- stage_po_order_hist1
- stage_po_order_hist2
- stage_po_order_hist3
- stage_po_order_hist4
- stage_po_order_hist5

Order Management Module Modified Tables

- extract_om_invoice_line
- extract_om_transaction_hist
- fact_om_booking
- fact_om_invoice
- fact_om_order
- fact_om_order_history
- fact_om_order_performance
- fact_om_shipment
- load_cncu_mstr
- load_idh_hist
- load_idh_hist
- load_ih_hist
- load_sod_det
- perm_om_invoice_line
- stage_om_booking
- stage_om_booking_previous
- stage_om_booking_transaction
- stage_om_booking_transaction1
- stage_om_booking_transaction2
- stage_om_booking1
- stage_om_booking2
- stage_om_booking3
- stage_om_booking4
- stage_om_invoice
- stage_om_invoice_line
- stage_om_invoice_order_line
- stage_om_invoice_transaction
- stage_om_invoice1
- stage_om_invoice2
- stage_om_invoice3
- stage_om_ord_perf
- stage_om_ord_perf_full
- stage_om_ord_perf1
- stage_om_order
- stage_om_order_header
- stage_om_order_header_all
- stage_om_order_inv_header
- stage_om_order_inv_line
- stage_om_order_inv_line1
- stage_om_order_inv_line2
- stage_om_order_line
- stage_om_order_line_all
- stage_om_order_snap1
- stage_om_order_snap2
- stage_om_order_snap3
- stage_om_order_transaction
- stage_om_order_transaction4
- stage_om_order1
- stage_om_order2
- stage_om_order3
- stage_om_shipment
- stage_om_shipment_transaction
- stage_om_shipment1
- stage_om_shipment2
- stage_om_shipment3

EAM Module Modified Tables

- fact_eam_inv_transaction
- load_eam_account
- load_eam_domain
- load_eam_part_type
- load_eam_squawks
- perm_eam_inv_transaction
- stage_eam_inv_trans_perm
- stage_eam_inv_transaction

Tables Added to Existing Modules

For the BI 3.9 release, there were no tables added to the Common and Financial Modules.

Order Management Module Added Tables

- load_abs_mstr
- load_absr_det
- load_idh_hist_cust_ref
- load_idh_hist_pr_list
- load_idh_hist_rlse_id
- load_pc_mstr
- load_sch_mstr
- load_schd_det
- load_tr_hist_ref
- load_tr_hist_ship_id
- perm_customer_consignment
- stage_om_booking_transaction_all
- stage_om_invoice_scheduled_transaction
- stage_om_ord_perf_all
- stage_om_order_transaction7
- stage_om_price_list
- stage_om_schedule_detail
- stage_om_schedule_detail1
- stage_om_schedule_detail2
- stage_om_scheduled_order_perf
- stage_om_scheduled_order_perf1
- stage_om_scheduled_order_transaction
- stage_om_scheduled_order_transaction1
- stage_om_shipment_requirement
- stage_om_shipment_requirement1
- stage_om_shipment_requirement2

Operations Module Added Tables

- dim_liability_date
- stage_po_order_hist_daily2
- stage_po_order_hist_daily5
- stage_po_order_hist_daily
- stage_po_order_hist_daily3
- stage_po_order_hist_daily6
- stage_po_order_hist_daily1
- stage_po_order_hist_daily4
- stage_po_order_hist_daily7

List of Tables Deleted

For the BI 3.9 release, there were no tables deleted.

Enhancements

Table 4 BI 3.9 Enhancements

Component	QAD Issue	Description
Metadata (Multi-Module)	QBI-3437	The dimension formerly called the Item dimension was renamed to the Site-Item dimension in BI 3.8.1. This was done to avoid confusion over the dimension. It was not clear from the name that the business key of the dimension was actually on the combination of the Item and the Site. However, the new name of Site-Item also caused some confusion in the Portal because users were looking for the Item dimension to be in a certain place alphabetically. Because Site-Item appeared much further down in the alphabetical list of dimensions, Portal display name for this dimension has been changed to Item-Site.
Portal Standard Objects (OM)	QBI-3593	The BI Portal Standard Objects for the Order Management module have been replaced. The new objects are installed for any new BI Portal installation. For current Order Management BI Portal customers, an upgrade script is provided that renames the current Order Management standard Portal objects as "deprecated". This script should be run prior to importing the new QAD Standard portal objects for Order Management.

Fixes

Table 5 BI 3.9 Fixes

Component	Qad Issue	Description
Metadata (Order Management)	QBI-2949	The source for 2 columns in fact_om_shipment file has been modified. The unit_cost_trans and unit_cost_base columns are now sourced from the sales order line. Specifically, the new source is sod_det.sod_std_cost (or idh_hist.idh_std_cost) column. The base cost is based on the trans cost, converted to the base currency, as needed. Previously, they were sourced from the individual cost components of the shipment transaction. Additional logic was also added so that in the event that the transaction records exist and the invoices do not, which results in the base currency cost having a value and the trans value currency having a cost of 0, the transaction uses the base currency to calculate a trans currency cost.
	QBI-3084	The fact_om_order snapshot table listed the current month's date as the prior day always. While it makes sense to display yesterday's date if the daily run ran between midnight and 8am, it does not make sense for a daily run that is run at any other time to display the prior date for the current day. It should display the current day. This has been corrected now so that any run between just after 8am and midnight presents the current month's end of day as the current day. The runs between midnight and 8am display data from the prior day.
	QBI-3173	In order to ensure that stage_om_order_line_all is functioning properly for fact_om_order_history (picks last version of order per day) and fact_om_shipment and fact_om_booking, the logic leading up to this table was revamped to ensure that all invoice lines for a given order/line/item combination get through to stage_om_order_line_all. That way, the history table can link up on the last record of the day, but a shipment or booking record can link to any record from that day. Changes were also made to better handle consigned orders, including ensuring the CN-SHIP records are getting through to fact_om_shipment, but not their correlating ISS-SO records. This was achieved in part by adding a perm_customer_consignment table that is fed from cncu_mstr.
	QBI-3199	The creation of faked transaction records in stage_om_order_transaction4 was producing too many records because it was recreating records that had been filtered out in stage_om_order_transaction3. A ranking system was put in place on 4 and a new table, 7 was created to only pick the last invoice of each day for faked transaction records to ensure that only useful records are being created to be fed to stage_om_order1. Otherwise, multiple records are created for a day that immediately get filtered out. For serialized items where there are many invoices per day, this removes enormous overhead from the logic.
	QBI-3308	In prior releases, when a Sales Order (sod_det) record was deleted and no invoices had been created against it, the record would be end_dated on the day that it was found. Because the logic that set that end date did not have filtering on it, it did not look for the already DELETED order_status records, causing the next daily run, the dss_history_end_date, to get set again to the new day. The result was that every day would be the new end date for the DELETED record. Filters have now been put in place in the logic for fact_om_order_history so that once a record has a status of DELETED with an end date, the record does not keep resetting the end date every run. The only deleted records getting a current end_date are new ones.
	QBI-3325	When you use the new perm_customer_consignment table, which is sourced from cncu_mstr, links are made as the data is pulled into extract_om_order_line and extract_om_transaction_hist so that a consignment_flag column can be populated for quick and easy reference of consigned orders. This logic is contingent on the ERP properly populating the consignment information in the cncu_mstr table. This sets the stage for more work down the road if anybody needs to determine if an extracted invoice (idh_hist) or transaction (tr_hist) record is of type consignment.
	QBI-3331	dim_snapshot_period_type_key is now included in fact_om_order so that when an end of week lands on an end of month, both values appear in the table.

Table 5 BI 3.9 Fixes

Component	Qad Issue	Description
	QBI-3368	ISS-SO transactions for consigned orders should not be getting through to the fact_om_shipment table. Instead the CN-SHIP records are the ones that should be sent through. Filters were added to ensure that records are properly flagged consigned and then the ISS-SO transactions are filtered out from getting to fact_om_shipment.
Metadata (Purchasing)	QBI-2959	The historical load of PO History Fact table has been modified to correctly transform the ship to code from the PO Header.
	QBI-3021	In prior releases, if the end of week and end of month happened to fall on the same day, the snapshot table fact_po_order would only display either the end of week or end of month value for the business key. To fix this problem, there should be one row of data for each. Adding the rows was achieved by changing the business key to include the dim_period_snapshot_ty_key and changing the fact_po_order update logic to also look at the dim_period info when doing updates. The table now provides a row for each snapshot type when the date falls on the same day.
	QBI-3035	The logic for Due Date was correct. A new Liability Date column was added, as well as a correlating dimension. Existing logic for PO Payment Due Date was corrected by creating a function that mimics the logic in the ERP with regard to setting the date based on various credit terms information and liability date. For detailed technical look at the logic, see the procedure GetPOPaymentDueDate.
	QBI-3043	Daily Purchase Order Processing has been modified. In previous versions, multiple runs for the DAILY BI updated jobs could cause duplicate key errors during PO processing. Also, if the DAILY BI process was not run on a given day, all PO activity for that day was combined with activity for subsequent days. This logic has been modified. Multiple DAILY runs no longer result in duplicate key errors. Also, if the DAILY run is skipped for any reason, the purchasing activity is correctly recorded on the day it took place.
	QBI-3100	In fact_po_order_history, the order_amount columns should display the PRE-discount cost, while all other amount columns reflect the cost after discounts have been applied. This now works properly. For records with no discount, the ordered_amount and extended_amount columns are essentially the same. The difference between the two is only shown when discounts have been applied.
	QBI-3104	PO Order History table (fact_po_order_history) now handles deleted purchase orders as follows: • The current row of the table (dss_current_flag = Y) is "expired". That is, the dss_history_end_date is set to the current processing date. • The quantity open is set to 0. • The PO Line Status is set to "Unknown".
	QBI-3108	PO Order History table (fact_po_order_history) now handles deleted purchase orders as follows: • The current row of the table (dss_current_flag = Y) is "expired". That is, the dss_history_end_date is set to the current processing date. • The quantity open is set to 0. • The PO Line Status is set to "Unknown".

Table 5 BI 3.9 Fixes

Component	Qad Issue	Description
Metadata (Financials EE)	QBI-3052	QBI-2817 Release Notes Financials EE History and Snapshot fact tables had some HIST load calculation errors prior to BI 3.9. Invoices with payments spread over multiple dates could have double counted payments or missing payments on some history and snapshot records. BI 3.9 fixes these calculations. Customers upgrading to BI 3.9 should run the FIN EE upgrade script, which truncates all AP and AR fact tables and does a fresh historical reload from source data. Due to QBI-3180 (Rewrite of perm tables resolving _ID/_code dimension fields) and QBI-3123 (Calculation problems fixed in AP/AR history and snapshot tables) there is no upgrade path to BI 3.8.2/3.9 for FIN EE other than erasing all BI data and reloading from Progress. Tables impacted: - fact_ee_ap_supplier_invoice_history - fact_ee_ap_supplier_invoice_snapshot - fact_ee_ar_customer_invoice_history - fact_ee_ar_customer_invoice_snapshot
	QBI-3162	Financials EE History and Snapshot fact tables had some HIST load calculation errors prior to BI 3.8.2/3.9. Invoices with payments spread over multiple dates could have double counted payments or missing payments on some history and snapshot records. BI 3.8.2/3.9 fixes these calculations. Customers upgrading to BI 3.9 should run the FIN EE upgrade script, which truncates all AP and AR fact tables and perm tables and does a fresh historical reload from source data. Due to QBI-3180 (Rewrite of perm tables resolving _ID/_code dimension fields) and QBI-3123 (Calculation problems fixed in AP/AR history and snapshot tables) there is no upgrade path to BI 3.8.2/3.9 for FIN EE other than erasing all BI data and reloading from Progress. Tables impacted: - fact_ee_ap_supplier_invoice_history - fact_ee_ap_supplier_invoice_snapshot - fact_ee_ar_customer_invoice_history - fact_ee_ar_customer_invoice_snapshot
	QBI-3467	The Currency Conversion procedure now allows for 10 significant digits. Previously it was using the SQL Server standard for division of non-floating decimals and giving 6 significant digits. This obviously changes the measure slightly if they go through currency conversion.
Metadata (Financials SE)	QBI-3394	In fact_gl_transaction (FIN SE GL), the General Ledger transactions associated with Accounts Receivable have a valid customer dimension. Most GL transactions do not have a customer. Prior to this version, these blank customers were assigned to a 'NOT APPLICABLE' dimension row created for each source/domain combination. These are now being assigned to the zero key dimension of unknown, which should improve performance.
	QBI-3432	In very rare instances (only 1 occurrence in 4 years), the loading of stage_ap_voucher_chk_match gets stuck in an infinite loop as it toggles back and forth between records as it keeps correcting to 0 but by so it sets a matching record not to zero. This fix resolves that very rare issue.
Design Evaluation (Financials SE)	QBI-3459	Snapshot tables should contain the dim_snapshot_period_type_key so it can be determined if the records are for a Monthly or Weekly snapshot. In certain instances, both fall on the same day. The changes for this ticket ensure that the dim_snapshot_period_type_key is included in the AR and AP snapshot tables and that the calculations for the date values follow established snapshot logic. This ensures that when month end and week_end are on the same day, both values are properly displayed.

Table 5 BI 3.9 Fixes

Component	Qad Issue	Description
Metadata (Multi-Module)	QBI-3077	dim_credit_terms is a slowly changing dimension and for columns driving a slow change, the prior version of the record should be end dated and a new version of the record should be created with a current start date and flagged as current. There are a handful of exceptions for columns that should not cause a slow change or change any column at all. The following are the rules for column changes, which is now working in the 3.9 release: • Changes to credit_term_description, credit_term_modified_date, staged_credit_term_code should only warrant an update to the existing records. • Changes to dss_extract_timestamp, dss_process_batch_id, credit_term_percent_due (the first two change every run) should not ever change data in dim_credit_term. • Changes to any other columns should warrant slowly changing dimension type changes to the record, end dating the last one and start dating the new one and flagging it as current.
	QBI-3436	Sometimes, the project_code field was not populated properly in the dim_project dimension due to the order of tasks in the DAILY_COMMON_PROCESS_CHAINED job causing the stage_ee_project task to possibly run before the preceding stages that it required. This is now fixed so that stage_ee_project does not run until after its preliminary stages are complete.
	QBI-3438	The GL Transaction Types XC (GL Consolidation) and PC (Periodic Costing) have been added to the dim_gl_transaction_type dimension. Any GL records with these transaction types are now linked to the matching record in dim_gl_transaction_type instead of the Unknown value.
	QBI-3522	In the case where one domain might have a different number of financial periods in a year than other domains, the dim_date_qad corporate date fields might be incorrect for some domains. The stage_gl_calendar_year stage was correct to include the domain in the where clause, thus correctly capturing the end-of-period date properly for each domain.
Metadata (Inventory)	QBI-3534	As an example, a customer doesn't have their 201308 (August) fiscal period open. 201307 fiscal period ends on July 31st. On July 31st, customer enters transactions with an effective_date of August 1st. Those transactions then get picked up and an attempt is made to match them to a fiscal_period. When no match is found, the fiscal period is set to 0, which gets into the fact_inv_mth_balance table and then later causes subsequent staging tasks to fail. Even if the next daily run has the requisite fiscal_period, it does not correct the previously created 0 fiscal_period, which would need to be deleted manually. Any fiscal periods set to 0 should be filtered out prior to getting to fact_inv_mth_balance. This is filtered out at stage_inv_mth_balances. Extract from fact_inv_transaction in stage_inv_trx_chg_mths1 should not only look for dss_history_date > downloadtime-process_days, but also look for effective_date > downloadtime-process days as well. The result is that if they future-date an effective date, it is still picked up at the appropriate time. Index placed on fact_inv_transaction of effective_date and item to ensure quicker retrieval for the stage_inv_trx_chg_mths1 data grabs.
Portal	QBI-3067	In previous versions, the BI Portal did not correctly handle new (custom) columns defined with key type 2, but referencing a non-dimensional table. This is an invalid combination. When a BI Portal designer attempted to build a query against the affected table (using any columns), an empty error message was displayed. The application now correctly processes the query, and an error message is written to the BI Portal log file.

Table 5 BI 3.9 Fixes

Component	Qad Issue	Description
	QBI-3256	Prior to the BI 3.9 release, there were issues related to parameter passing between Dashboard elements and reports. Specifically, when a parameter bar on a Dashboard was used to pass selection values to a visual item (Grid, Chart, etc) and then those parameters were passed to a report, the resulting report parameter bar did not reflect the selected values. In addition, if the user modified the parameter selection and the report parameter area and then re-ran the report, the updated parameter values were not used. Both of these issues have been fixed in the current release.
	QBI-3278	The functionality for drill-in reports has been enhanced for this release. When a user drills in to a report from another report, the drill-in report now has a fully functional parameter bar. This provides the user the opportunity to change parameter values and re-run the report. This enhancement also allows the user to export the drill-in report to either an Excel or .pdf.

Release Notes for Release 3.8.2

QAD Business Intelligence Version: 3.8.2

Date: July 2013

New Feature Summary

The QAD BI 3.8.2 maintenance release resolves issues with the Common and Financial modules.

Upgrade Instructions

Contact QAD Services for upgrade information.

Data Warehouse Tables Changed

The following section lists the Data Warehouse tables that have been changed, added, or deleted.

Note The tables on the Modified list may have been changed structurally. For example:

- Columns added or deleted
- Indexes added or deleted
- Changes made to business display names
- Changes to visibility of particular columns in the BI Portal
- Any combination of these modifications
- The procedure that populates the table has changed

List of Tables Modified

Common Module Modified Tables

- dim_credit_term
- load_tr_hist
- load_tr_hist_history
- perm_transaction_hist
- stage_transaction_hist

Financials Module Modified Tables

- extract_ee_customer_invoice
- extract_ee_customer_invoice_stage
- extract_ee_posting_line
- extract_ee_supplier_invoice
- perm_ee_customer_invoice
- perm_ee_customer_invoice
- perm_ee_customer_invoice_movement
- perm_ee_customer_invoice_movement
- perm_ee_customer_invoice_opinfo
- perm_ee_customer_invoice_opinfo
- perm_ee_customer_invoice_stage
- perm_ee_customer_invoice_stage
- perm_ee_posting_saf
- perm_ee_posting_saf
- perm_ee_posting_saf_combined
- perm_ee_posting_saf_combined
- perm_ee_supplier_invoice
- perm_ee_supplier_invoice
- perm_ee_supplier_invoice_movement
- perm_ee_supplier_invoice_movement
- perm_ee_supplier_invoice_posting
- perm_ee_supplier_invoice_posting
- perm_ee_supplier_invoice_stage
- perm_ee_supplier_invoice_stage
- permsup_ee_posting_line
- permsup_ee_posting_saf
- permsup_ee_posting_saf
- stage_ee_ap_supplier_invoice
- stage_ee_ap_supplier_invoice
- stage_ee_ap_supplier_invoice1
- stage_ee_ar_customer_invoice_hist
- stage_ee_ar_customer_invoice1
- stage_ee_customer_invoice_perm
- stage_ee_gl_transaction1
- stage_ee_posting_line_perm
- stage_ee_supplier_invoice_perm

Tables Added to Existing Modules

Common Module Added Tables

For the 3.8.2 release, no tables were added to the Common Module.

Financials Module Added Tables

- stage_ee_ap_supplier_invoice_hist1
- stage_ee_ap_supplier_invoice_hist1
- stage_ee_ap_supplier_invoice_history0
- stage_ee_ap_supplier_invoice_history0
- stage_ee_ap_supplier_invoice_history1
- stage_ee_ap_supplier_invoice_history1
- stage_ee_ap_supplier_invoice_history2
- stage_ee_ap_supplier_invoice_history2
- stage_ee_ap_supplier_invoice_history3
- stage_ee_ap_supplier_invoice_history3
- stage_ee_ap_supplier_invoice_history4
- stage_ee_ap_supplier_invoice_history4
- stage_ee_ar_customer_invoice_hist1
- stage_ee_ar_customer_invoice_history
- stage_ee_ar_customer_invoice_history0
- stage_ee_ar_customer_invoice_history1
- stage_ee_ar_customer_invoice_history2
- stage_ee_ar_customer_invoice_history3

List of Tables Deleted

For the 3.8.2 release, no tables were deleted.

Fixes

Table 6 BI 3.8.2 Fixes

Component	QAD Issue	Description
Metadata (EE Financials)	QBI-2187	BI 3.8.2 fixes some calculation errors for the Financials EE History and Snapshot fact tables. Invoices with payments spread over multiple dates could have double-counted payments or missing payments on some history and snapshot records. The data that ends up in the fact tables is now correct. The actual changes are to several of the stage tables leading up to these fact tables. The following fact tables are affected: • fact_ee_ap_supplier_invoice_history • fact_ee_ap_supplier_invoice_snapshot • fact_ee_ar_customer_invoice_history • fact_ee_ar_customer_invoice_snapshot
	QBI-3352	BI 3.8.2 fixes a rare set of circumstances, where stage_ap_voucher_chk_match would go into an infinite loop but the audit log would reveal single record inserts. Sometimes it would reveal 2 and then 1 insert.
	QBI-2956	In BI 3.8.1, dim_credit_term ceased to function as a slowly changing dimension. There was no start and end effective dates for the credit terms records. BI 3.8.2 fixes this issue and dim_credit_term is again a slowly changing dimension, and the history of credit terms changes is preserved.
	QBI-2816 QBI-2817 QBI-3219 QBI-3227 QBI-3235	BI 3.8.2 makes various internal improvements to the EE Financials processing and should have no effect on the fact table results. This improvement: • Allows you to run upgrades in the future • Allows you to reload a fact table from the perm tables without requiring any re-running of data loads from the source • Improves performance of history loads

Release Notes for Release 3.8.1

QAD Business Intelligence Version: 3.8.1

Date: March 2013

New Feature Summary

For the QAD BI 3.8.1 release, the EE financial module has been redesigned and redeveloped. For more information regarding this module, see the *QAD BI Modules and Key Performance Indicators User Guide*.

Upgrade Instructions

See the *QAD BI 3.8.1 Installation Guide* for the instructions to upgrade to QAD BI 3.8.1.

Data Warehouse Tables Changed

The following section lists the Data Warehouse tables that have been changed, added, or deleted.

Note The tables on the Modified list may have been changed structurally. For example:

- Columns added or deleted
- Indexes added or deleted
- Changes made to business display names
- Changes to visibility of particular columns in the BI Portal
- Any combination of these modifications
- The procedure that populates the table has changed

List of Tables Modified

Common Module Modified Tables

- | | | |
|-------------------------|--------------------------------|--------------------------|
| • dim_business_relation | • load_tr_hist_history | • stage_daybook |
| • dim_credit_term | • load_tr_hist_list | • stage_eam_date_qad3 |
| • dim_customer | • load_transaction_type | • stage_item |
| • dim_date_qad | • perm_code_master | • stage_item_costs |
| • dim_daybook | • perm_item_master | • stage_item_list |
| • dim_ee_invoice_status | • perm_shop_cal | • stage_item_master |
| • dim_ee_saf | • perm_transaction_hist | • stage_item_site |
| • dim_item | • stage_ar_master | • stage_layer |
| • dim_layer | • stage_business_relation | • stage_project |
| • load_ar_mstr | • stage_calendar_interval_week | • stage_se_ar_master |
| • load_in_mstr | • stage_code_master | • stage_se_cost_center |
| • load_ld_det | • stage_credit_term | • stage_se_customer |
| • load_pt_mstr | • stage_customer | • stage_supplier |
| • load_tr_hist | • stage_date_qad | • stage_transaction_hist |

Financials Module Modified Tables

- dim_ap_transaction_type
- dim_ar_transaction_type
- extract_gl_balance
- load_acd_det
- load_bgd_det
- load_gen_led_report
- load_gen_led_report_line
- load_gen_led_report_line_calcs
- load_gen_led_report_line_range
- load_gltr_hist_history
- ods_gen_led_rep
- ods_gen_led_rep_line
- ods_gen_led_rep_line_calcs
- ods_gen_led_rep_line_range
- stage_gen_led_rep_code_comb
- stage_gen_led_rep_line_ran
- stage_gen_led_rep_line_ran1
- stage_gen_led_rep_line_ran2
- stage_gen_led_rep_line_range
- stage_gen_led_report_line
- stage_gen_led_report_line1
- stage_gen_led_report_line2
- stage_gen_led_report_line3
- stage_gen_led_report_line4
- stage_gen_led_report_line5
- stage_gen_led_report_line6
- stage_se_ap_snap1
- stage_se_ar_snap1
- work_ap_change_list
- work_ap_change_list1
- work_ap_change_list2
- work_ap_change_list3
- work_ap_change_list4
- work_ap_change_list5
- work_gl_trans_change_list

Operations Module Modified Tables

- dim_buyer
- fact_inv_mth_balance
- fact_inv_transaction
- fact_op_item_efficiency
- fact_po_order
- fact_po_order_history
- perm_mrp_detail
- permsup_mrp_detail
- stage_inv_bal_mth_date
- stage_inv_mth_balance_hist_calc
- stage_inv_trx_chg_mths
- stage_mrp_calculations
- stage_mrp_calculations1
- stage_mrp_calculations2
- stage_po_order_hist
- stage_po_order_hist1
- stage_po_order_hist5
- stage_po_receipt3

Order Management Module Modified Tables

- extract_om_transaction_hist
- fact_om_booking
- fact_om_invoice
- fact_om_order
- fact_om_order_history
- fact_om_order_performance
- fact_om_shipment
- perm_om_invoice_line
- stage_om_booking_orig_order
- stage_om_booking_transaction
- stage_om_booking_transaction1
- stage_om_booking_transaction2
- stage_om_booking1
- stage_om_invoice
- stage_om_invoice_line_list
- stage_om_invoice_line_ranged
- stage_om_invoice_order_line
- stage_om_invoice_order_list
- stage_om_invoice_transaction
- stage_om_invoice_transaction1
- stage_om_invoice2
- stage_om_invoice3
- stage_om_ord_perf
- stage_om_ord_perf_curr
- stage_om_ord_perf_curr1
- stage_om_ord_perf_date
- stage_om_ord_perf_date1
- stage_om_ord_perf_full
- stage_om_ord_perf_ship
- stage_om_ord_perf1
- stage_om_order
- stage_om_order_header
- stage_om_order_header_all
- stage_om_order_hist_end_date
- stage_om_order_hist_revalue
- stage_om_order_hist_revalue2
- stage_om_order_hist_revalue3
- stage_om_order_hist_revalue4
- stage_om_order_inv_header
- stage_om_order_inv_line
- stage_om_order_inv_line1
- stage_om_order_inv_line2
- stage_om_order_line_all
- stage_om_order_snap
- stage_om_order_snap1
- stage_om_order_snap2
- stage_om_order_snap3
- stage_om_order_transaction
- stage_om_order_transaction1
- stage_om_order_transaction2
- stage_om_order_transaction3
- stage_om_order_transaction4
- stage_om_order_transaction5
- stage_om_order1
- stage_om_order3
- stage_om_shipment
- stage_om_shipment_transaction
- stage_om_shipment1
- stage_om_shipment2
- stage_om_shipment3
- work_om_change_list1

Tables Added to Existing Modules

Common Module Added Tables

- load_com_mstr
- load_ee_pti_det
- stage_pti_det
- load_comd_det

For the 3.8.1 release, all EE financial-related tables and jobs have been deleted and replaced.

Order Management Module Added Tables

- load_tr_hist_remarks
- stage_om_order_transaction6

Financials Module Added Tables

For the 3.8.1 release, all EE financial-related tables and jobs have been deleted and replaced.

Operations Module Added Tables

- dim_po_buyer
- stage_po_buyer_code_master
- stage_po_buyer_po_header
- stage_po_buyer

List of Tables Deleted

For the 3.8.1 release, all EE financial-related tables and jobs have been deleted and replaced.

Enhancements

Table 7 BI 3.8.1 Enhancements (1 of 2)

Component	QAD Issue	Description
Metadata (Multimodule)	QBI-744	Added logic to display commodity code and description by tying the part number back to the comd_det and com_mstr tables.
	QBI-1233	Adds five missing columns that previously were missing from dim_item. • promotion_group_description • supplier_description • buyer_description • abc_class • safety_time Also changes the logic when determining whether to display data. Prior logic was if there was a link to ptp_det and a particular column was null, then the pt_mstr equivalent column would be displayed. This has been corrected to display null if the ptp_det record had a null in a given column because the intent of ptp_det is to have its data override what is in pt_mstr. If the in_mstr column is null, a recent change to include data from in_mstr, however, is typically overridden by the pt_mstr data. For ABC code, which comes from pti_det, it displays the pt_mstr.pt_abc value if the item_site level join of pti_det to ptp_det or in_mstr produces a null for abc_code.
	QBI-1555	Added new column to dim_item for Pricing Break Category, from pt_mstr.pt_break_cat.
	QBI-2447	Business Display Name for the dim_item and the dim_location tables have been changed to reflect that those tables are site-item and site-location. The label of the table was misleading because people were not realizing that the grain of the table included site.

Table 7 BI 3.8.1 Enhancements (2 of 2)

Component	QAD Issue	Description
	QBI-2818	In BI, Order Management Invoices use financials records to get the effective date of the invoice. Before BI 3.8.1, there was not a complete solution for Enterprise Financials. Now that EE Financials is implemented, records from DInvoice go into our common BI table perm_ar_master in addition to records from ar_mstr. The effective date can come from either DInvoice.DInvoicePaymentDate or ar_mstr.ar_effdate depending on the source type. If no Financials records match, the effective date of the invoice is the invoice entered date.
Metadata (Order Management)	QBI-2305	This change historically populates any missing remarks columns in tr_hist for ISS-SO records as well as populating any missing remarks going forward on the daily runs. The need for this logic arises as shipped orders are not always invoiced on the day they are shipped and when the invoice finally is created the tr_hist record is updated with the invoice number in the remarks table. The system uses sales process days to check how far back it looks for new invoices. In order to catch those invoices in load_ih_hist, load_idh_hist, and load_tr_hist_remarks, the SALES_PROCESS_DAYS parameter should be set to a number that would be greater than the standard number of days an invoice may be back dated.
Metadata (EE Financials)	QBI-2858	Upgrade - BI3.7 to BI3.8.1 The upgrade process deletes all “EE” objects in the current Data Warehouse. Then, new EE Objects are added, as needed. Any customers currently running the Financials module against any EE source system cannot upgrade using the standard upgrade files. Contact your QAD Services group. Specifically, the following fact and perm tables are deleted: • fact_ee_ap_invoice • fact_ee_ap_invoice_history • fact_ee_ap_invoice_snapshot • fact_ee_ap_payment • fact_ee_ar_invoice • fact_ee_ar_invoice_history • fact_ee_ar_invoice_snapshot • fact_ee_ar_payment • fact_ee_gl_balance • fact_ee_gl_transaction • ods_ee_ap_balance • ods_ee_ar_balance • perm_ee_credit_invoice • perm_ee_credit_invoice_move • perm_ee_debit_invoice • perm_ee_debit_invoice_move • perm_ee_posting • perm_ee_posting_history • perm_ee_posting_line • permsup_ee_credit_invoice • permsup_ee_credit_invoice_move • permsup_ee_debit_invoice • permsup_ee_debit_invoice_move • permsup_ee_posting • permsup_ee_posting_line

Fixes

Table 8 BI 3.8.1 Fixes (1 of 4)

Component	QAD Issue	Description
Metadata (Financials EE)	QBI-2814	Table load_ee_unit modified. Custom fields removed from table.
Metadata (Financials SE)	QBI-792	The GL_LOAD_LOOKBACK_DAYS and GL_LOAD_DAYS parameters, which are set very high at startup and then shrunk to some much smaller value (like 50 & 52) before running the first DAILY run, are prone to misconfiguration when changing the values. It is critical that the GL_LOAD_DAYS parameter is greater than the GL_LOOKBACK_LOAD_DAYS parameter. If it is not, it is possible that the code may start a second load loop that it should not and create all sorts of weird load headaches. To ensure end users do not inadvertently set these parameters incorrectly, an extra check was put in place that checks the parameters at the beginning of each GL run. If the GL_LOAD_DAYS parameter is NOT greater than the GL_LOAD_LOOKBACK_DAYS parameter, the first task of the load will fail with an error message indicating such and the end user will have to correct the problem before they can successfully get past that first task in the job.
	QBI-2190	Parameters AP_SE_SNAPSHOT_HIST_START_DATE and AR_SE_SNAPSHOT_HIST_START_DATE are now used during the History load processing. These parameters should be set prior to running HIST_START for any source.
	QBI-2226	The logic to perform the daily update the fact_ap_voucher_history file has been modified to use the effective date on the voucher or check, instead of the current date. A new parameter has been added to replace the use of the current date function (GETDATE). This parameter is named AP_SE_HISTORY_PROCESS_DATE and by default is set to the current date at the beginning of the DAILY run. To use a different date for testing, the parameter DAILY_HISTORY_DATE_SET_CURRENT should be set to 'N' and the desired test date should be entered in the new parameter, AP_SE_HISTORY_PROCESS_DATE. The effective date on the voucher or check must be within the processing window, as defined as the AP_SE_HISTORY_PROCESS_DATE minus the AP_PROCESS_DAYS. Otherwise, the value in AP_SE_HISTORY_PROCESS_DATE is used. An upgrade script that truncates and rebuilds the fact_ap_voucher_history and fact_ap_invoice_snapshot tables has been provided. It is a series of four jobs. UPGRADE_BI37_TO_BI381_FIN_SE. This is an OPTIONAL step in an upgrade. If the customer has not experienced any issues related to AP Aging reporting, they do not need to run this job.
Metadata (Inventory)	QBI-642	Golden Boy says that our standard code for handling fact_inv_mth_balance.days_on_hand_projected does not work for their use of MRP. MRP schedules future orders for items consumed regularly. The BI report fact_inv_mth_balance takes an average of these proposed future orders and compares that with current inventory of an item to see how many "days left" there are in inventory. Golden Boy may have orders some two years or more in the future, but they taper off when projecting that far out. They believe that it is more realistic to average the next 180 days or so to get a more accurate picture. With that in mind, we are making an enhancement to narrow the future order search to 180 days. This requires a code change several staging tables back in the meta data track-back.
	QBI-2170	Before this release, if inventory transactions were entered for dates in the future, the DAILY_OP_INV_PROCESS_CHAINED job would fail. This has been resolved in BI 3.8.1. Future inventory transactions are included in the Inventory Transaction file (fact_inv_transaction file), but are not included in the Inventory Balances Fact Monthly Snapshot (fact_inv_mth_balance) table.
Metadata (Multimodule)	QBI-2521	Many measures in various fact tables in BI 3.7 do not appear in the BI Portal. This is a problem with the Additive Flag in the column metadata. In addition, attributes of both fact and dimension tables no longer appear. This is a problem with the Attribute Flag in the column metadata. When a user attempts to run a query that includes one of the affected columns, they receive an error message. These flags have been fixed for BI 3.8.1. A script is available from QAD Support that fixes this problem in a BI 3.7 database.

Table 8 BI 3.8.1 Fixes (2 of 4)

Component	QAD Issue	Description
	QBI-2578	DWD 6.6.2—Problem resolved with end-of-year processing. Arithmetic overflow error during DAILY_COMMON_PROCESS_CHAINED jobs, task = daily_date_roll - Process. New release of DWD modified row in dim_date with dim_date_key = 0. Calendar_date value for this row is now set to the oldest possible date value, 1/1/1753. This caused the daily_date_roll procedure to fail during year end processing. The procedure was modified to handle this date value.
	QBI-2708	This resolves the issue where a customer does not populate all their site/item combinations in the ptp_det table. ptp_det is used for planning and many customers instead only populate those combinations in in_mstr. So in_mstr has been added as a source for the dim_item table by feeding into stage_item_site. This ensures that we do not have missing item/site combinations when populating various fact tables, in particular for customers that have only the OP (operations) modules, but not OM (order management) as the OM module had an extra feature ensuring that dim_item was populated from transactional_data which likely ensures that the in_mstr records were getting picked up but with less detail. This also resolves the issue where transactional only site/item combinations were not displaying site description while the same site code for a different item would display site_description. Now if a site_code exists for transactional data, the site_description should exist as well (if there is one).
Metadata (Order Management)	QBI-1799	Parameter SALES_PROCESS_DAYS now defaults to 2. This allows the DAILY to avoid restaging orders over and over for more than two days, which is especially important during the days immediately after installation where all the history records are stamped with the same day. If the daily fails to run for one or more days, this parameter needs to be increased to cover all the missed days. DAILY_OM_PERM_CHAINED has a procedure setp_order_history_date() that verifies the current date against the parameter SALES_ORDER_HISTORY_DATE and fails/prompts the user to increase the number of days staged in SALES_PROCESS_DAYS. Once the history load is more than 10 or 20 days in the past, it is safe to leave this parameter at 10 or so and allow it to reprocess a few days worth of sales transactions every day. The SALES_ORDER_HISTORY_DATE is based on the system date of the server where BI scheduled jobs are located. The date is adjusted by -0.35 days to compensate for runs done between midnight and 8:20AM server time. Any time DAILY_OM_PERM_CHAINED is run before 8:20AM server time, the data is considered to be current as of yesterday's date. If ran after 8:20AM, possibly due to a connection/network error and retried, the data is considered valid as of the current date. Customers have expressed concern in the past regarding whether the BI report data is current as of yesterday or today, but as a rule BI does not contain the current day's transactions.

Table 8 BI 3.8.1 Fixes (3 of 4)

Component	QAD Issue	Description
	QBI-2162	Multiple changes were made to address issues around the following: - Existing logic was filtering out Invoices based on the Invoice rank in relation to a given source/domain/order/line combination on a given day. So if an order had multiple invoices for an order on a given day, such as the order got shipped and invoiced against twice, some of the order lines from earlier invoices in the day may not make it to the fact because the last invoice for the order of that day did not include those lines. The filter on rank was removed so that all invoices for a given day could feed to the next two subsequent staging tables at which point we rank the invoice by order AND line. If there are multiple invoices against that order in a given day, we are able to pick up every line associated with an order . - We also move the quantity_shipped value from the stage2 table where it was rolling up multiple shipped values from multiple invoices into one value (shipped is already cumulative), which was providing wrong shipped amounts to the stage1 table where we would only get the most recent shipped value for a given line instead. - We also added a conversion to data type of FLOAT for any division or multiplication that was necessary for UM conversion, prices, or costs so that we did not suffer the pervasive rounding errors that we have had in the past. See also QBI-2448. Final result—There should not exist in the perm_om_invoice_line or stage_om_order_line_tables, any instances of source/domain/order/line/item that do not also exist in fact_om_order_history. One other scenario (QBI-2830) involving the stage_om_order_transaction3-6 tables, in which a sales order or invoice exists but the tr_hist records related to it is archived, can cause the above-mentioned query to produce results not tied to this fix. See affiliated UnitTestDoc for this master Jira for script to test this result.
	QBI-2193	Due to the reuse of order number in OM, dim_item_key was added to the fact_om_order_history table as part of the business key in 3.7. Unfortunately, dim_item_key is made up of both item_number and site_code and site_codes change frequently. As a result, item_number was added as an additional column and the business key was changed to include item_number instead of dim_item_key. This fix ensures that if order numbers are being reused for different item_numbers, then the orders are recognized as two different orders. However, if an item_number is changed for an existing order, the fact_om_order_history table closes the original order number and open this order with a different item_number as a different order altogether. This should still be fairly trackable in the order history table, and ensures that an order number used two years ago is not being treated as though it was reopened if a new one with the same number (but different item) is created.
	QBI-2414	Parameter SALES_SNAPSHOT_HIST_START_DATE is now used during the History load processing. This parameter should be set before running HIST_START for any source.
	QBI-2448	This fix corrects a problem with the code in the instances where the total quantity invoiced for an source/domain/order/line combination is 0 and the system displays a 0 for price, cost, and unit of measure conversion fields. Those fields are now populated with the average of their source column so that those values are reflected properly at the fact_om_invoice table.

Table 8 BI 3.8.1 Fixes (4 of 4)

Component	QAD Issue	Description
	QBI-2830	1. Prior releases had been setting the sales_order_history_date based on the SALES_ORDER_HISTORY_DATE parameter for any records that were created when tr_hist records did not exist for either sales orders or invoices. This was incorrect as the sales_order_history_date would change every day. Changes were made to pick up the invoice date or order date for those faked tr_hist records in the stage_om_order_transaction4-6 tables. 2. There was no easy way to link which order number/line combination, which was picked from the various transaction, directly to a given invoice. To handle this, stage_om_order_transaction tables had the invoice_date and invoice_number columns added so that they could be linked to any invoices that have existed. Previously it would guess based on source/domain/order/line/item. The invoice number comes from tr_hist.tr_remarks. 3. Stage_om_order1 custom code was changed to properly link records to invoices using the new invoice and invoice date columns. Also, the sources for various GL accounting codes were changed to match the default parameter sources from the regular daily job for stage_om_order1. 4. Stage_om_order3 and stage_om_order were changed from SET to CURSOR SET so that any unknown dimension values are added to their respective dimension tables. 5. If same records as historic load are coming into the fact, changes were made to fact_om_order_history, both regular and custom code, to ensure that daily loads work right. These changes also ensure the dss_current_flags were being set properly. This fix includes logic to pick up only the most recent version of an order on a daily load. For example, if a person has not run the daily load in some time and during that time they made three discernable changes to an order, only the most recent version of the order is added to the fact table. If the changes happened over a number of days and the daily load ran each day, each change would be reflected in the fact. However, the fact should still reflect the correct values as of the current date after the daily has been run. 6. We are now letting invoice transaction_type records of ISS-COR, correcting invoices. 7. If the data comes from an invoice record, stage_om_order_header_all now includes invoice_number (see #2) and line_number. If it comes from a sales_order, then it sets a special "no invoice" value for the invoice number and sets the line number to 0. We include this information at the header level because without it, we could potentially link an invoice line from one invoice to the invoice header from another invoice, especially if there were multiple invoices in one day. Previously, we were ranking invoice headers based on the date and time they were generated, thus causing us to orphan invoice lines that were not part of the last invoice of a given day. Because of this, the grain of the table changed. If there has not been an invoice for a given line, it does not match on line and invoice. It just matches on the header info from the sales order, presuming that exists. 8. The changes we made in #7 to the logic that allows us to match on invoice in stage_om_order1, also forced changes to the joining logic for stage_om_shipment1, which uses the invoice number and line number (if it exists), and stage_om_booking1, which joins on item_number to fix the grain match. This also included adding invoice_number to the stage_om_ship_transactions table to be fed up from the perm tables. Booking orders only use transaction record (tr_hist) records, which have ORD-SO transaction types, so we can never match on the invoice as it does not exist in those records.
Metadata (Purchasing)	QBI-2417	Parameter PO_SNAPSHOT_HIST_START_DATE is now used during the History load processing. These parameters should be set before running HIST_START for any source.
	QBI-2442	fact_po_order_history update for both Historical and Daily loads now uses the parameter PO_ORDER_HISTORY_DATE for assignment of values to the dss_history_start_date and dss_history_end_date columns. Prior BI Versions used the current date (GETDATE).

Release Notes for Release 3.8

BI 3.8 was an off-cycle release for early adopters of the new EE Financials module.

Release Notes for Release 3.7

QAD Business Intelligence Version: 3.7

Date: September 2012

New Feature Summary

QAD BI 3.7 introduces the following new features:

- Adds the Plant Maintenance sub-module for the Enterprise Asset Management (EAM) module (Early Adopter version)
- Adds the Transportation Management (TM) module
- Upgrades the Data Warehouse Designer to version 6.6.2
- Extends the technical documentation for metadata across all modules in DWD
- Improves loading of additional modules
- Improves loading of additional sources
- Adds Enterprise Financials data to common dimensions
- Adds Throughput KPI to Capacity Planning and Control sub-module
- Includes BI 3.6.1/3.5.1 and BI 3.6.2/3.5.2 maintenance releases

Upgrade Instructions

See the *QAD BI 3.7 Installation Guide* for the instructions to upgrade to QAD BI 3.7.

Data Warehouse Tables Changed

The following section lists the Data Warehouse tables that have been changed, added, or deleted.

Note The tables on the Modified list may have been changed structurally. For example:

- Columns added or deleted
- Indexes added or deleted
- Changes made to business display names
- Changes to visibility of particular columns in the BI Portal
- Any combination of these modifications

List of Tables Modified

Common Module Modified Tables

- | | | |
|--------------------------|----------------------------|---------------------------|
| • dim_account | • dim_shipment_date | • stage_credit_term |
| • dim_account_currency | • dim_site | • stage_currency |
| • dim_approver | • dim_sub_account | • stage_customer |
| • dim_base_currency | • dim_supplier | • stage_customer_ar_list |
| • dim_buyer | • dim_transaction_currency | • stage_customer_bill |
| • dim_channel | • dim_transaction_type | • stage_customer_bill1 |
| • dim_corporate_currency | • dim_unit_of_measure | • stage_customer_dim_bill |
| • dim_cost_center | • load_ct_mstr | • stage_customer_dim_ship |

- dim_credit_term
- dim_currency
- dim_customer
- dim_customer_bill_to
- dim_customer_ship_to
- dim_customer_sold_to
- dim_discount_cost_center
- dim_discount_sub_account
- dim_due_date
- dim_effective_date
- dim_entered_date
- dim_entity
- dim_item
- dim_last_receipt_date
- dim_location
- dim_order_date
- dim_payment_due_date
- dim_performance_date
- dim_project
- dim_receipt_date
- dim_requestor
- dim_required_date
- dim_service_type
- dim_ship_to_address
- load_ctd_det
- load_cu_mstr
- load_ee_Address
- load_ee_BudgetGroup
- load_ee_Company
- load_ee_CostCentre
- load_ee_Creditor
- load_ee_Currency
- load_ee_Debtor
- load_ee_Division
- load_ee_DomainProperty
- load_ee_Domains
- load_ee_DomainSharedSet
- load_ee_PaymentCondition
- load_ee_PaymentGroup
- load_ee_Project
- load_ee_SharedSet
- load_en_mstr
- load_pj_mstr
- load_tr_hist
- perm_transaction_hist
- permsup_transaction_hist
- stage_business_relation
- stage_cost_center
- stage_customer_dim_sold
- stage_customer_invoice_list
- stage_customer_master
- stage_customer_sales_list
- stage_customer_ship
- stage_customer_ship1
- stage_customer_sold
- stage_customer_sold1
- stage_date_qad
- stage_domain
- stage_eam_entity
- stage_ee_account
- stage_ee_address
- stage_ee_ic_creditor
- stage_ee_ic_debtor
- stage_ee_project_status
- stage_entity
- stage_project
- stage_site
- stage_sub_account
- stage_supplier
- stage_tr_hist_list
- stage_unit_of_measure1

Financials Module Modified Tables

- dim_ap_transaction_type
- dim_ar_transaction_type
- dim_daybook
- dim_layer
- extract_ap_master
- extract_ap_voucher_master
- fact_ap_invoice_snapshot
- fact_ap_voucher
- fact_ap_voucher_history
- fact_ar_invoice
- fact_ar_invoice_history
- fact_ar_invoice_snapshot
- fact_ar_payment
- fact_gl_balance
- fact_gl_transaction
- load_ap_transaction_type
- load_ar_transaction_type
- load_ee_CompanySharedSet
- load_ee_Journal
- load_ee_Layer
- load_ee_Period
- load_vo_mstr
- perm_ap_master
- perm_ee_posting
- perm_ee_posting_line
- stage_ap_transaction_type
- stage_ar_transaction_type
- stage_ee_credit_invoice
- stage_ee_credit_invoice_move
- stage_ee_posting
- stage_gl_balance_close03
- stage_gl_balance_close04
- stage_gl_balance_ptd
- stage_gl_balance_qtd
- stage_gl_balance_ytd
- stage_gl_balance2
- stage_gl_transaction_budget
- stage_gl_transaction1
- stage_layer
- stage_se_ap_snap4
- work_ap_change_list1

Operations Module Modified Tables

- dim_po_line_status
- dim_po_line_type
- extract_inv_trans_hist_cons
- stage_inv_bal_mth_trans1
- stage_inv_bal_mth_trans2
- stage_inv_bal_revalue2
- stage_op_transaction2
- stage_po_order_hist
- stage_po_order_hist_initial

- extract_inv_transaction_hist
- extract_op_transaction_hist
- extract_po_transaction_hist
- fact_inv_mth_balance
- fact_inv_transaction
- fact_op_transaction
- fact_po_order_history
- load_prh_hist
- load_wr_route
- perm_op_hist
- stage_inv_bal_item_list
- stage_inv_bal_mth_current
- stage_inv_bal_mth_current4
- stage_inv_bal_mth_date
- stage_inv_bal_mth_date1
- stage_inv_bal_mth_date2
- stage_inv_bal_mth_list
- stage_inv_bal_mth_trans
- stage_inv_mth_balance
- stage_inv_mth_balance_hist_calc
- stage_inv_mth_balance1
- stage_inv_mth_end_cst
- stage_inv_mth_end_cst1
- stage_inv_transaction_con_cus3
- stage_inv_transaction_con_cus4
- stage_inv_transaction1
- stage_inv_trx_chg_mths
- stage_inv_trx_chg_mths1
- stage_op_tr_hist_rjct_wo
- stage_op_tr_hist_rjct_wo1
- stage_op_trans_scrapi
- stage_op_transaction
- stage_op_transaction_merge
- stage_op_transaction0
- stage_op_transaction1
- stage_po_order_hist_initial1
- stage_po_order_hist_initial3
- stage_po_order_hist_initial4
- stage_po_order_hist_initial5
- stage_po_order_hist_initial6
- stage_po_order_hist_initial7
- stage_po_order_hist1
- stage_po_order_hist2
- stage_po_order_hist3
- stage_po_order_hist4
- stage_po_order_hist5
- stage_po_order_snap1
- stage_po_order_snap3
- stage_po_order_snapshot
- work_inv_change_hist_list
- work_inv_change_list
- work_inv_change_list1

Order Management Module Modified Tables

- extract_om_transaction_hist
- fact_om_booking
- fact_om_shipment
- load_idh_hist
- load_ih_hist
- stage_om_ar_master_extract
- stage_om_booking
- stage_om_booking_previous
- stage_om_booking_transaction
- stage_om_booking_transaction1
- stage_om_booking1
- stage_om_invoice_line_list
- stage_om_invoice_line_ranged
- stage_om_invoice_transaction
- stage_om_invoice_transaction1
- stage_om_invoice1
- stage_om_order
- stage_om_order_inv_line
- stage_om_order_inv_line1
- stage_om_order_line
- stage_om_order_line_all
- stage_om_order_snap
- stage_om_order_snap1
- stage_om_order_snap3
- stage_om_order1
- stage_om_order2
- stage_om_order3
- stage_om_shipment1

Tables Added to Existing Modules

Common Module Added Tables

- dim_cal_int_end_date
- dim_cal_int_start_date
- dim_calendar_interval
- dim_statutory_currency
- load_ee_Address
- load_ee_AddressType
- load_ee_CompanyProperty
- load_ee_Contact
- load_ee_CorporateGroup
- load_ee_Country
- load_ee_County
- stage_business_relation
- stage_calendar_interval
- stage_calendar_interval_financial
- stage_calendar_interval_month
- stage_calendar_interval_week
- stage_date_qad5
- stage_eam_date_qad4
- stage_eam_domain
- stage_eam_entity
- stage_eam_site
- stage_ee_address
- stage_ee_payment_group
- stage_ee_project
- stage_ee_project_group
- stage_ee_project_status
- stage_ee_purchase_type
- stage_ee_sub_account
- stage_ee_supplier
- stage_ee_supplier_type
- stage_entity1
- stage_se_cost_center
- stage_se_credit_term

- load_ee_CreditorType
- load_ee_DebtorCreditRating
- load_ee_DebtorType
- load_ee_Lng
- load_ee_PaymentConditionStaged
- load_ee_ProjectGroup
- load_ee_ProjectStatus
- load_ee_PurchaseType
- load_ee_Reason
- load_ee_State
- load_ee_Usr
- stage_ee_budget_group
- stage_ee_contact
- stage_ee_cost_center
- stage_ee_credit_term
- stage_ee_currency
- stage_ee_customer
- stage_ee_customer_credit_rating
- stage_ee_customer_type
- stage_ee_entity
- stage_ee_invoice_status
- stage_se_currency
- stage_se_customer
- stage_se_ee_cost_center
- stage_se_ee_entity
- stage_se_ee_sub_account
- stage_se_entity
- stage_se_project
- stage_se_sub_account
- stage_se_supplier
- stage_site1

Financials Module Added Tables

- dim_accounting_period
- dim_ee_invoice_status
- load_ee_JournalGroup
- stage_accounting_period
- stage_ee_accounting_period

Operations Module Added Tables

- stage_inv_mth_end_cst
- stage_inv_mth_end_cst1
- stage_inv_trx_chg_mths
- stage_inv_trx_chg_mths1

Enhancements

Table 9 BI 3.7 Enhancements

Component	QAD Issue	Description
Metadata (Multi-Module)	QBI-800	As part of running INITIAL_JOB_SETUP, the very last step in that procedure should be to back up the parameter table with a copy of the parameters as they were set for the initial setup.
	QBI-987	The setup_initial_job() does not correctly chain jobs when the source parameter accidentally begins with a space, and it gives you no errors/warnings.
	QBI-1600	The setup_initial_job() should not delete jobs for not-installed modules; but it should have the option to not include them in the DAILY/HIST Job Chain parameters.
	QBI-2066	Load tables not in any PREPROCESS_TRUNCATE job (latest build - build 342).
Metadata (Order Management)	QBI-768	Remove SALES_LOAD_DAYS and SALES_LOAD_LOOKBACK_DAYS parameters.
Portal	QBI-517	Dimension "folder" not discernible from query definition.
	QBI-604	Internationalization—add support for export/import of translations when objects are exported/imported.
	QBI-802	Added some more currency symbols in Report Designer.
	QBI-1766	Added a scroll bar to Link for Reports and Actions Visual Items so that you can manage content that is below visible display in window.
Portal Standard Objects (Inventory, Purchasing)	QBI-628	Std items need to be created for purchasing and inventory modules.
Portal Standard Objects (Purchasing)	QBI-579	Purchasing Gap task—Create Visualizations for PO performance and add to dashboard.

Fixes

Table 10 BI 3.7 Fixes (1 of 3)

Component	QAD Issue	Description
ETL performance	QBI-614	The daily_date_roll_qad is very slow when current week spans year boundary.
	QBI-635	STAGE_OM_INVOICE1 taking exceptionally long to load
Installation	QBI-1429	INITIAL_JOB_SETUP can add non-existent POSTPROCESS jobs to job order parameters.
Metadata (Capacity Plan)	QBI-1778	fact_op_transaction—transaction_number currently flagged as a measure, but should not be.
Metadata (Financials SE)	QBI-2131	fact_ap_invoice_snapshot not deleting interim records.
	QBI-729	Research and correct budget amount measures in fact_gl_balance.
Metadata (Inventory)	QBI-543	Inventory balances not matching Inventory transactions.
	QBI-715	Updated 3.5 Design Specification to include logic from lnd_det (Location Detail) tables.
	QBI-1694	Inventory—fact_inv_mth_balances does not properly capture the unit_cost of items, leaving unit_cost of 0, so although the end of month quantity can be > 0, the value = 0 (incorrectly).
	QBI-1802	Inventory—fact_inv_mth_balances does not properly set the end of month qoh balance so all the calculations for every month are not coming out like they should.
	QBI-1893	New parameter INV_HISTORY_DATE should be added to the parameter list and populated by INITIAL_JOB_SETUP on install.
	QBI-1980	The Inventory module job does not sequence some of the last post load tasks properly, instead running them all at the same time.
	QBI-1985	New Parameter INV_HISTORY_DATE should be added to the parameter list and populated by INITIAL_JOB_SETUP on install. (r7m)
	QBI-1986	fact_inv_mth_balance should not include kit items in the transaction portion of the change calculation for a given month. We may also need to not include GIT (goods in transit).
	QBI-2102	stage_inv_bal_revalue2 is not source system specific so it will grab all records in the fact every time it runs.
	QBI-2107	3.6 column transformation change for ship_type in stage_inv_transaction1 is causing downstream staging tables to not properly calculate qoh changes and balances.
	QBI-2125	Fact_inv_mth_balance shows value_issued_base as negative values but shows the quantity_issued_base as positive. In stage_inv_mth_balance1 we are setting the quantity_issued amount to the ABS (absolute) value so both negative and positive amounts are pos.
Metadata (Multi-Module)	QBI-711	load_tr_hist picks up new records on daily loads, even if there are no new records in the source system
	QBI-717	daily_date_roll_qad should parameterize the date it uses to set Current/Previous/Lastyear/No (GetDate() is hard coded 3 times in procedure)
	QBI-1275	stage_unit_of_measure1 missing join constraints
	QBI-1775	Scheduled Jobs for CUBES do not have the "submit_next_chained_job()" task so they can be automatically part of the DAILY job chain.
Metadata (Operations)	QBI-1704	Truncation of load tables combined with placement of load tables ensures no data gets into fact_inv_mth_balance on daily runs. Need to load the inv_transaction types earlier.
	QBI-2145	The Days On Hand Calculation shown in the Inventory Dashboard is inconsistent with the Inventory Turns calculation.

Table 10 BI 3.7 Fixes (2 of 3)

Component	QAD Issue	Description
	QBI-2146	The calculation of throughput in the Capacity Planning and Control - Production Lines Dashboard uses "Active Days" (reported time) not "Scheduled Days" from the shop calendar.
Metadata (Order Management)	QBI-276	GL Calendar needed for Order Management.
	QBI-631	All extended prices in fact_om_order_history are calculated based on the open_amount, not the order_amount. Customers are unhappy about this and we need to determine if our logic is correct or not.
	QBI-632	QMI (2011 EE) Shipment Transaction Report not matching BI OM Shipment Fact
	QBI-1553	stage_om_order3 not matching dim_account - error in outer join.
	QBI-1699	fact_om_shipment references the wrong source columns for several of it's columns including most importantly shipment date. Need to correct for fact_om_shipment to work properly.
	QBI-1996	stage_om_invoice_line_range fails in Chinese environment
	QBI-2067	3.5.1 and 3.6.1 maintenance releases have a bug in historic load logic for OM table fact_om_order_history. This bug is in stage_om_order1
	QBI-2068	fact_om_order_history sometimes will have CLOSED orders that are the most recent/current version of the record, but will not be shown as most recent/current and are then showing up in fact_om_order as OPEN even though they are CLOSED.
	QBI-2092	The 3.5.1 patch had a couple of rank over clauses that did not rank transaction_date correctly and needs to be corrected.
Metadata (Order Management, Purchasing)	QBI-2101	Need SALES_LOOKBACK_DAYS and PO_LOOKBACK_DAYS parameters
Metadata (Purchasing)	QBI-750	Remove extended_cost_ from fact_po_order_history - duplicates open_amount_
	QBI-771	fact_po_order_history storing incorrect last receipt date
	QBI-2124	Our PO Snapshot and OM snapshot tables have a problem in stage_po_order_snap1 and stage_om_order_snap1 where if the last day of a month and last day of a week are the same, only the Monthly record values are retrieved.
Portal	QBI-468	Text area on dashboard— no title causes problems.
	QBI-533	Portal gets sluggish. Must close browser and restart.
	QBI-594	In queries, "AND" and "OR" not translated.
	QBI-790	BI Portal cannot display plus sign in visual items due to a known problem in Flex.
	QBI-1314	Check boxes not displaying properly in Security tab for object in repository browser.
	QBI-1388	Ops-Capacity Planning Sub-module—Performance Ratio truncating or rounding down.
	QBI-1891	Visual Items—when creating a heat map, the range at the bottom does not change when the different type of heat map is selected.
	QBI-1913	Visual Items—creating Collaboration/Message type of visual item, in the right-side Edit pane, the heading says "essage" instead of "Message."
	QBI-2136	Report Browser, Report Links, and Run Report page title do not show translated names.
Portal Standard Objects (Capacity Planning)	QBI-1430	QAD Standard queries folder includes a "Fran" folder.
Portal Standard Objects (Fin EE, Fin SE)	QBI-1427	CFO Dashboard Template missing from Financials module portal objects.
Portal Standard Objects (Inventory)	QBI-795	Issues and questions regarding the Drop Down parameters list on the Inventory Item Management dashboard.

Table 10 BI 3.7 Fixes (3 of 3)

Component	QAD Issue	Description
	QBI-1244	Inventory Management Dashboard—miscellaneous usability issues.
	QBI-1245	Inventory Management Dashboard—Questions about Nettable vs Non-Nettable visual item.
	QBI-1246	Inventory Management Dashboard—Inventory On Hand by Product Line does not show any data.
	QBI-1247	Inventory Management Dashboard—Inventory On Hand by Site does not show any data.
	QBI-1248	Inventory Management Dashboard—Inventory OH Trend Parameter only has a single data point, not a trend.
	QBI-1251	Inventory Management Dashboard—Parameters for Inventory On Hand Report should be consistent with other reports.
	QBI-1253	Inventory Management Dashboard—Top 10 Average Days OH by Product Line does not display any data.
	QBI-1254	Inventory Management Dashboard—Top 10 Average Days OH by Site does not display any data.
	QBI-1255	Inventory Management Dashboard—Inventory Transaction reports do not display data.
	QBI-1256	Inventory Management Dashboard—Inventory Trends reports do not display data.
	QBI-1257	Inventory Management Dashboard—Inventory Turnover does not display any data and has not parameters to change.
Portal Standard Objects (Purchasing)	QBI-779	Purchasing Dashboard—Top 10 Supplier by Spend visual item contains minor typo in the title
	QBI-780	Purchasing Dashboard—The Reports visual item is not large enough to display the report titles
	QBI-781	Purchasing Dashboard—Year parameter visual item does not reposition correctly when drop-down is displayed
	QBI-783	Purchasing Dashboard—The query for the Cash Requirements Forecast cannot be found
	QBI-784	Purchasing Dashboard—Trouble displaying data in Missed Delivery Detail report
	QBI-786	Purchasing Dashboard—Open PO Cash Commitments by Due Date Summary and "For Year" reports have misc problems
	QBI-787	Purchasing Dashboard—PO Delivery Performance Summary reports have misc problems
	QBI-788	Purchasing Dashboard—Supplier Spend Ranking - Historical report does not work

Release Notes for Releases 3.6.2 and 3.5.2

QAD Business Intelligence Version: 3.6.2 and 3.5.2

Date: July 2012

QAD BI 3.6.2 and 3.5.2 address the following issues:

- fact_inv_mth_balance has been corrected so that it handles partial quantities.
- fact_om_order_history has been corrected to ensure CLOSED orders are the most recent/current version of the record, so that the CLOSED status should also show properly in fact_om_order.

Fixes

QAD BI 3.6.2 and 3.5.2 include all fixes from 3.6.1 and 3.5.1, respectively, and in addition address:

Component	QAD Issue	Releases	Description
Metadata	QBIS-51	BI 3.5.2, BI 3.6.2	Inventory - fact_inv_mth_balance is now able to handle partial quantities; the numeric type for the columns has been corrected.
Metadata	QBI-2085, QBI-2091	BI 3.5.2, BI 3.6.2	Order Management - the order on the rank over clause is not set properly for the transaction_date, resulting in incorrect fact_om_order_history records.
Metadata	QBI-2087, QBI-2088	BI 3.5.2, BI 3.6.2	Order Management - update_stage_om_invoice_l_rng now uses the DATE_EARLIEST_POSSIBLE and DATE_LATEST_POSSIBLE parameters instead of hard-coding dates using English month names, to avoid issues in non-English environments.
Metadata	QBI-2068, QBI-2089, QBI-2090	BI 3.5.2, BI 3.6.2	Order Management - fact_om_order_history sometimes will have CLOSED orders that are the most recent/current version of the record, but will not be shown as most recent/current and are then showing up in fact_om_order as OPEN even though they are CLOSED.
Metadata	QBI-2086	BI 3.6.1	Financials - load_vo_mstr Where clause corrected usage of AP_PROCESS_DAYS and AP_CHECK_PROCESS_DAYS parameters.

Data Warehouse Tables Changed

The following section lists the Data Warehouse tables that have been changed, added, or deleted.

Note The tables on the Modified list may have been changed structurally. For example:

- Columns added or deleted
- Indexes added or deleted
- Changes made to business display names
- Changes to visibility of particular columns in the BI Portal
- Any combination of these modifications

List of Tables Modified for BI 3.6.2

Common Module

- load_tr_hist
- perm_transaction_hist
- permsup_transaction_hist
- stage_tr_hist_list

Financials Module

- load_vo_mstr

Operations Module

- extract_inv_trans_hist_cons
- extract_inv_transaction_hist
- extract_po_transaction_hist
- extract_op_transaction_hist
- fact_inv_mth_balance
- fact_inv_transaction
- fact_op_transaction
- perm_op_hist
- stage_inv_bal_mth_current
- stage_inv_bal_mth_current4
- stage_inv_bal_mth_date
- stage_inv_bal_mth_date1
- stage_inv_bal_mth_date2
- stage_inv_bal_mth_list
- stage_inv_bal_mth_trans
- stage_inv_bal_mth_trans1
- stage_inv_bal_mth_trans2
- stage_inv_mth_balance
- stage_inv_mth_balance_hist_calc
- stage_inv_mth_balance1
- stage_inv_transaction1
- stage_inv_transaction_con_cus3
- stage_inv_transaction_con_cus4
- stage_op_tr_hist_rjct_wo
- stage_op_trans_scrapi
- stage_op_transaction
- stage_op_transaction_merge
- stage_op_transaction_merge
- stage_op_transaction_merge
- stage_op_transaction0
- stage_op_transaction1
- stage_op_transaction2
- stage_po_order_hist_initial4
- stage_po_order_hist_initial5
- stage_po_order_hist_initial6
- work_inv_change_hist_list
- work_inv_change_list
- work_inv_change_list1

Order Management Module

- extract_om_transaction_hist
- fact_om_booking
- fact_om_shipment
- stage_om_booking
- stage_om_booking_max_tran
- stage_om_invoice_line_list
- stage_om_order_snap3
- stage_om_booking_previous
- stage_om_booking_transaction
- stage_om_booking_transaction1
- stage_om_invoice_transaction
- stage_om_invoice_transaction1
- stage_om_order_snap
- stage_om_order
- stage_om_order1
- stage_om_order2
- stage_om_order3
- stage_om_invoice_line_ranged
- stage_om_order_snap1

List of Tables Added for BI 3.6.2

- stage_inv_mth_end_cst
- stage_inv_mth_end_cst1
- stage_inv_trx_chg_mths
- stage_inv_trx_chg_mths1

List of Tables Deleted for BI 3.6.2

No tables deleted for BI 3.6.2 upgrade.

List of Tables Modified for BI 3.5.2

Note The 3.5.2 patch includes all changes from the 3.5.1 patch. Even if you already installed the 3.5.1 patch, this reloading of application changes should not affect operation, but does mean that if any of the tables modified in 3.5.1 or 3.5.2 have customizations, you will need to reapply all those customizations. Follow the upgrade instructions carefully.

- extract_inv_trans_hist_cons
- extract_inv_transaction_hist
- extract_om_transaction_hist
- extract_po_transaction_hist
- fact_inv_mth_balance
- fact_inv_transaction
- fact_om_booking
- fact_om_shipment
- stage_inv_bal_mth_trans1
- stage_inv_bal_mth_trans2
- stage_inv_bal_revalue1
- stage_inv_mth_balance
- stage_inv_mth_balance_hist_calc
- stage_inv_mth_balance1
- stage_inv_transaction_con_cus3
- stage_inv_transaction_con_cus4
- stage_om_order1
- stage_om_order2
- stage_om_order3
- stage_om_order_snap
- stage_om_order_snap1
- stage_om_order_snap3
- stage_po_order_hist_initial4
- stage_po_order_hist_initial5

- load_tr_hist
- perm_transaction_hist
- permsup_transaction_hist
- stage_inv_bal_item_list
- stage_inv_bal_mth_current
- stage_inv_bal_mth_current4
- stage_inv_bal_mth_date
- stage_inv_bal_mth_date1
- stage_inv_bal_mth_date2
- stage_inv_bal_mth_list
- stage_inv_bal_mth_trans
- stage_om_booking
- stage_om_booking_max_tran
- stage_om_booking_previous
- stage_om_booking_transaction
- stage_om_booking_transaction1
- stage_om_invoice_line_list
- stage_om_invoice_line_ranged
- stage_om_invoice_transaction
- stage_om_invoice_transaction1
- stage_om_order
- stage_po_order_hist_initial6
- stage_po_order_snap1
- stage_po_order_snap3
- stage_po_order_snapshot
- stage_tr_hist_list
- stage_tr_hist_list
- stage_unit_of_measure3
- work_inv_change_hist_list
- work_inv_change_list
- work_inv_change_list1

List of Tables Added for BI 3.5.2

- dim_snapshot_period_type
- load_snapshot_period_type
- stage_inv_mth_end_cst
- stage_inv_mth_end_cst1
- stage_inv_trx_chg_mths
- stage_inv_trx_chg_mths1

List of Tables Deleted for BI 3.5.2

No tables deleted for BI 3.5.2 upgrade.

Upgrade to 3.6.2 from 3.6 or 3.6.1

Preparation

- 1 Plan for a couple of hours of down time.
- 2 Ensure that there are no loads currently in progress. All jobs must be completed.
- 3 Put all scheduled jobs On Hold until the upgrade is complete. Shut down the scheduler.
- 4 Take a backup of the current warehouse database.
- 5 Before you begin, make note of the following:
 - Note any custom DAILY_LOAD_JOBxxx jobs that appear after the final ROLLUP jobs; for example, DAILY_PO_ROLLUP or DAILY_SALES_ROLLUP if you do not have the Purchase Orders module installed. If you have neither Sales nor Purchase Order processing, note any custom jobs that might be after the final SNAPSHOT jobs: _____
 - Note any custom HIST_LOAD_JOBxxx jobs that appear after the standard ROLLUP or SNAPSHOT jobs: _____

Important This upgrade will replace some load and stage tables. If there are any customizations to these tables, ensure that they are ready to be made again.

Upgrade Steps for QAD BI Metadata

- 6 Unzip the metadata for the Common module and any other modules you have installed.

Note Because the metadata files are now segregated by module, it is only necessary to install the modules that are needed.

- Perform the Common upgrade first. The other upgrades can be done in any order.
- All users need to run the Common metadata upgrade application.
- If you process any of the Order Management (Sales) fact_om_* tables, install the Order Management (OM) upgrade application.
- If you process Inventory and/or Purchase Order tables, install the Operations module upgrade application.
- If you process any Financial tables, install the Financials module upgrade application.

7 Log in to Setup Administrator.

8 Choose Tools|Start Logging. Select a name and location for your log file and save.

9 Load the Common Module Upgrade Application as follows:

- a Set your application directory to the new metadata/common folder.
- b Load application upgradeCom by right-clicking on the file and choosing Install Application.
- c From the drop-down list, select the ODBC DSN for your DWD instance.
- d The system prompts you to proceed. Click OK.

Note You can cancel the installation here to review the list of new and modified objects. To continue with the load, right-click in the window and choose Proceed with Load Application.

- e The next dialog box is Application Load Properties. Verify that the default values are correct. Make any changes if necessary:
 - On the left, select Dimension. On the right, click on the box next to *Existing Dimension objects will be* and select Altered.
 - On the left, select Dimension View. On the right, click on the box next to *Existing Dimension View objects will be* and select Recreated.
 - On the left, select Stage Table. On the right, click on the box next to *Existing Stage table objects will be* and select Recreated.
 - On the left, select Permanent Stage Table. On the right, click on the box next to *Existing Permanent Stage table objects will be* and select Altered.
 - On the left, select Fact Table. On the right, click on the box next to *Existing Fact table objects will be* and select Altered.
 - Click OK.

10 Repeat for any other modules that must be upgraded.

- **Order Management.** Change the Application Directory to the metadata/order_management subdirectory and install application upgradeOM.
- **Operations.** Change the Application Directory to the metadata/operations subdirectory and install application upgradeOps.
- **Financials.** Change the Application Directory to the metadata/financials subdirectory and install application upgradeFin.

Note The upgrade application installations will take some time as the load process alters and re-creates various objects.

11 Start the Scheduler. Make sure all jobs are still suspended.

- 12 If the upgrade affected any customized tables, reapply your customizations. For a list of new and modified tables, see “Data Warehouse Tables Changed” on page 46.
- 13 If there were any customizations previously added to any of the modified jobs, update the job to reinclude those extra parts. You can double check what was in the job by looking at the newly renamed <jobname>_1. The jobs that changed in this release are:
- PREPROCESS_COMMON_LOADS
 - PREPROCESS_COMMON_TRUNCATE
 - PREPROCESS_OP_LOAD
 - PREPROCESS_OP_TRUNCATE
 - DAILY_OP_PERM_EXTRACT
 - HIST_OP_PERM_EXTRACT
 - DAILY_OP_INV_PROCESS_CHAINED
 - HIST_OP_INV_PROCESS_CHAINED
 - HIST_OM_PROCESS_CHAINED
- 14 Check the values of the TR_HIST_DATE_MAX_Sxx parameters for each source. If necessary, increase TR_HIST_PROCESS_DAYS from the default value of 3 days. The number of Process Days must be such that the TODAY – earliest TR_HIST_DATE_MAX_Sxx is less than the TR_HIST_PROCESS_DAYS. There are also several new parameters to control how the BI system handles the rollover of the tr_trnbr:
- **TR_HIST_PROCESS_DAYS.** This is the number of look-back days when extracting data from tr_hist. The records being extracted are records where tr_trnbr is greater than the highest transaction_number records already extracted for that source, except after tr_trnbr rollover, when newer transactions may have smaller trnbrs than older transactions. The BI DW must also take into account the transaction date in order to find the lower-numbered transactions that are actually new. This parameter says to extract from the ERP transactions entered within the last X days. If the number of days since the TR_HIST_DATE_MAX_Sxx is greater than the TR_HIST_PROCESS_DAYS parameter, a task that checks this during the run will fail and indicate this number needs to be increased. The default value is 3.
 - **TR_HIST_MAX_VALUE.** This is the maximum number allowed for the tr_hist.tr_trnbr field, or in other words, the number after which the tr_trnbr will roll over and start at the first available low number. The default value is 99999999. If the tr_sq01 sequence is set to a different maximum value, enter that here.
 - **TR_HIST_PRE_ROLLOVER_COUNT.** This is the number of records that would typically be in three days worth of data to ensure readiness for tr_hist.tr_trnbr rollover. Once the tr_trnbr for a source is detected to be within TR_HIST_PRE_ROLLOVER_COUNT of TR_HIST_MAX_VALUE, the BI system sets the TR_HIST_TRAN_MAX_Sxx value for the source to 0. This will force the tr_hist extraction to scan the whole table for records that have been processed within the last TR_HIST_PROCESS_DAYS. The default value is 5000.
 - **TR_HIST_PCT_OF_MAX_REF.** This is the percent of the TR_HIST_MAX_VALUE to use as a reference point to look for new low-numbered transactions when dealing with the rollover. The default value is 50. When this value is 50, you will search the transactions with numbers less than 50% of the TR_HIST_MAX_VALUE for the highest number with a transaction date within the processing window.
- 15 If you already installed the BI 3.6.1 patch, skip ahead to Step 16. If you are upgrading directly from BI 3.6, run the Upgrade jobs for the tr_hist.tr_trnbr roll-over issue for each module you have installed:

- **Common Module.** Run the UPGRADE_36_to_361_QBIS_25_COMMON job to update the permsup_transaction_hist table to include the transaction date and to seed the TR_HIST_DATE_MAX values for each source.
- **Order Management.** Run the UPGRADE_36_to_361_QBIS_25_OM job to update the fact_om_booking table to include the transaction date.
- **Operations.** Run the UPGRADE_36_to_361_QBIS_25_OP job to update the fact_op_transaction table to include the transaction date.

16 Run the upgrade job for BI 3.6.2:

- Run the UPGRADE_36_TO_362_QBI_2068 job.
- Set the JOB_CHAINING_ENABLED parameter back to Y.

17 Set the INV_PROCESS_DAYS to 50000 to ensure that all data is reprocessed. Then run the DAILY loads.

Note The daily load will take longer than normal, as all inventory transactions are being reprocessed to correct errors.

18 After the daily load completes, set the INV_PROCESS_DAYS to a small value, such as 2, and resume normal processing.

Note These steps reload the fact_inv_transaction table with data as of the current day. Depending on the amount of process days, when the DAILY update resumes, it will reference all records from that fact table while trying to update the fact_inv_mth_balances table. Longer processing times are expected until the current date, minus the number of process days, exceeds the dss_update_time timestamp value from the reload. Once that time period has passed, the run times should improve substantially. Please be aware that you may experience at least one day of long processing time on the daily load.

Upgrade to 3.5.2 from 3.5 or 3.5.1

Preparation

- Plan for a couple of hours of down time.
- Ensure that there are no loads currently in progress. All jobs must be completed.
- Put all scheduled jobs On Hold until the upgrade is complete. Shut down the scheduler.
- Take a backup of the current warehouse database.
- Before you begin, make note of the following:
 - Note any custom DAILY_LOAD_JOBxxx jobs that appear after the final ROLLUP jobs; for example, DAILY_PO_ROLLUP or DAILY_SALES_ROLLUP if you do not have the Purchase Orders module installed. If you have neither Sales nor Purchase Order processing, note any custom jobs that might be after the final SNAPSHOT jobs: _____
 - Note any custom HIST_LOAD_JOBxxx jobs that appear after the standard ROLLUP or SNAPSHOT jobs: _____

Important This upgrade will replace some load and stage tables. If there are any customizations to these tables, ensure that they are ready to be made again.

Upgrade Steps for QAD BI Metadata

- 6 Unzip the metadata for the BI 3.5.2 Upgrade.
 - 7 Log in to Setup Administrator.
 - 8 Choose Tools|Start Logging. Select a name and location for your log file, then save.
 - 9 Load the BI 3.5.2 Upgrade Application as follows:
 - a Set the application directory to the new metadata folder.
 - b Load application upgradeBI by right-clicking on the file and choosing Install Application.
 - c From the drop-down list, select the ODBC DSN for your DWD instance.
 - d The system prompts you to proceed. Click OK.
 - e You can always cancel here to review the list of new and modified objects. To continue with the load, right-click in the window and choose Proceed with Load Application.
 - f The next dialog box is Application Load Properties. Verify that the default values are correct. Make any changes if necessary:
 - On the left, select Dimension. On the right, click on the box next to *Existing Dimension objects will be* and select Altered.
 - On the left, select Dimension View. On the right, click on the box next to *Existing Dimension View objects will be* and select Recreated.
 - On the left, select Stage Table. On the right, click on the box next to *Existing Stage table objects will be* and select Recreated.
 - On the left, select Permanent Stage Table. On the right, click on the box next to *Existing Permanent Stage table objects will be* and select Altered.
 - On the left, select Fact Table. On the right, click on the box next to *Existing Fact table objects will be* and select Altered.
 - Click OK.
- Note** The upgrade application installations will take some time as the load process alters and re-creates various objects.
- 10 If the upgrade affected any customized tables, reapply your customizations. For a list of new and modified tables, see “Data Warehouse Tables Changed” on page 46.
 - 11 Start the Scheduler. Make sure all jobs are still suspended.
 - 12 If any customizations were previously added to HIST_INV_PROCESS_XXXXXXX and DAILY_INV_PROCESS_XXXXXXX, update the job to reinclude those extra parts. You can double check what was in the job by looking at the newly renamed HIST_INV_PROCESS_XXXXXXX_1 or DAILY_INV_PROCESS_XXXXXXX_1. Then, rename any existing DAILY_INV_PROCESS_<source> job to DAILY_INV_PROCESS_<source>_1. Insert a copy of the new DAILY_INV_PROCESS_XXXXXXX and rename it to DAILY_INV_PROCESS_<source>. Repeat this to copy the new HIST_INV_PROCESS_XXXXXXX for each source.
 - 13 If any customizations were previously added to HIST_LOAD_PERM_XXXXXXX and DAILY_PERM_XXXXXXX, update the job to reininclude those extra parts. You can double check what was in the job by looking at the newly renamed HIST_LOAD_PERM_XXXXXXX_1 or DAILY_PERM_XXXXXXX_1. Then, rename any existing DAILY_PERM_<source> job to

DAILY_PERM_<source>_1. Insert a copy of the new DAILY_PERM_XXXXXXXX and rename it to DAILY_PERM_<source>. Repeat this to copy the new HIST_LOAD_PERM_XXXXXXXX for each source.

- 14 If any customizations were previously added to HIST_SALES_PROCESS_XXXXXXXX, update the job to reinclude those extra parts. You can double check what was in the job by looking at the newly renamed HIST_SALES_PROCESS_XXXXXXXX_1. Then, rename any existing HIST_SALES_PROCESS_<source> job to HIST_SALES_PROCESS_<source>_1. Insert a copy of the new HIST_SALES_PROCESS_XXXXXXXX and rename it to HIST_SALES_PROCESS_<source>.
- 15 Check the values of the TR_HIST_DATE_MAX_Sxx parameters for each source. If necessary, increase TR_HIST_PROCESS_DAYS from the default value of 3 days. The number of Process Days must be such that the TODAY – earliest TR_HIST_DATE_MAX_Sxx is less than the TR_HIST_PROCESS_DAYS. There are also several new parameters to control how the BI system handles the rollover of the tr_trnbr:
 - **TR_HIST_PROCESS_DAYS.** This is the number of look-back days when extracting data from tr_hist. The records being extracted are records where tr_trnbr is greater than the highest transaction_number records already extracted for that source, except after tr_trnbr rollover, when newer transactions may have smaller trnbrs than older transactions. The BI DW must also take into account the transaction date in order to find the lower-numbered transactions that are actually new. This parameter says to extract from the ERP transactions entered within the last X days. If the number of days since the TR_HIST_DATE_MAX_Sxx is greater than the TR_HIST_PROCESS_DAYS parameter, a task that checks this during the run will fail and indicate that this number needs to be increased. The default value is 3.
 - **TR_HIST_MAX_VALUE.** This is the maximum number allowed for the tr_hist.tr_trnbr field, or in other words, the number after which the tr_trnbr will roll over and start at the first available low number. The default value is 99999999. If the tr_sq01 sequence is set to a different maximum value, enter that here.
 - **TR_HIST_PRE_ROLLOVER_COUNT.** This is the number of records that would typically be in three days worth of data to ensure readiness for tr_hist.tr_trnbr rollover. Once the tr_trnbr for a source is detected to be within TR_HIST_PRE_ROLLOVER_COUNT of TR_HIST_MAX_VALUE, the BI system sets the TR_HIST_TRAN_MAX_Sxx value for the source to 0. This will force the tr_hist extraction to scan the whole table for records that have been processed within the last TR_HIST_PROCESS_DAYS. The default value is 5000.
 - **TR_HIST_PCT_OF_MAX_REF.** This is the percent of the TR_HIST_MAX_VALUE to use as a reference point to look for new low-numbered transactions when dealing with the rollover. The default value is 50. When this value is 50, you search the transactions with numbers less than 50% of the TR_HIST_MAX_VALUE for the highest number with a transaction date within the processing window.
- 16 If you are upgrading from 3.5.1 to 3.5.2, skip to step 17. If you are upgrading directly from 3.5 to 3.5.2, run the UPGRADE_35_to_351_QBIS_25 job to update the permsup_transaction_hist and fact_om_booking tables to include the transaction date, and to seed the TR_HIST_DATE_MAX values for each source.
- 17 Run the Upgrade jobs for the inventory valuation and order history issues as follows:
 - a Set the JOB_CHAINING_ENABLED parameter to N.

Note Ensure that the INV_PROCESS_DAYS parameter is set to be large enough to load records from the ERP system since the last Daily run.

 - b Run the UPGRADE_35_TO_352_OM_order_hist_index_drop_and_table_truncate job.

- c** Run SET_CONNECTION_<connection_name> for your first source system. If you have only one source system, you do not need to perform this step.
 - d** If you have already installed BI 3.5.1, skip to step i. Otherwise, if you are upgrading directly from BI 3.5, run DAILY_COMMON_PROCESS_<connection_name>.
 - e** Run DAILY_PERM_<connection_name>.
 - f** Run DAILY_INV_PROCESS_<connection_name>.
 - g** Replace the prefix of the word DAILY with HIST for the INV_PROCESS_RUNNING_JOB_NAME parameter.
 - h** Run the UPGRADE_35_to_351_QBI_1773 job.
- Note** This job may take a long time because it is recalculating the entire fact_inv_mth_balance table.
- i** Run the HIST_PERM_EXTRACT job.
 - j** Run the UPGRADE_35_TO_352_QBI_2068_OM_ORD_HIST_RELOAD job.
 - k** Repeat steps c through j for each connection name.
 - l** Run the UPGRADE_35_TO_352_OM_order_hist_index_rebuild job.
 - m** Run the UPGRADE_35_TO_352_QBI_2068_ROLLUPS job.
- 18** Set the INV_PROCESS_DAYS parameter back to an appropriate value such as 5-10 days, if necessary.
 - 19** Set the JOB_CHAINING_ENABLED parameter back to Y.
 - 20** Reset the DAILY_START job so that it will run again normally.
 - 21** Resume normal processing.

Release Notes for Releases 3.6.1 and 3.5.1

QAD Business Intelligence Version: 3.6.1 and 3.5.1

Date: June 2012

QAD BI 3.6.1 and 3.5.1 address the tr_hist.trnbr roll-over issue and the inventory issues involving correct determination of unit cost and end quantity on hand. Customers who are not experiencing these issues are not required to install this maintenance release.

Fixes

Component	QAD Issue	Releases	Description
Metadata	QBIS-25	BI 3.5.1, 3.6.1	tr_hist.trnbr archive and rollover are now handled in BI.
Metadata	QBI-1363	BI 3.5.1, 3.6.1	Inventory - fact_inv_mth_balance will now properly capture the unit_cost of items.
Metadata	QBI-33, QBI-1773	BI 3.5.1, 3.6.1	Corrects calculation of Inventory End Quantity on Hand.
Metadata	QBI-1556	BI 3.6.1	Added sales_person_code to perm_transaction_hist.
Metadata	QBI-1698	BI 3.6.1	Truncation and load of inventory transaction type tables moved earlier as required by Inventory processing.
Metadata	QBI-1768	BI 3.6.1	stage_om_order3 join to dim_account corrected.
Metadata	QBI-703	BI 3.5.1	Index added to stage_inv_mth_balance to improve performance of fact_inv_mth_balance custom processing.

Data Warehouse Tables Changed

The following section lists the Data Warehouse tables that have been changed, added, or deleted.

Note The tables on the Modified list may have been changed structurally. For example:

- Columns added or deleted
- Indexes added or deleted
- Changes made to business display names
- Changes to visibility of particular columns in the BI Portal
- Any combination of these modifications

List of Tables Modified for BI 3.6.1

Common Module

- load_tr_hist
- stage_tr_hist_list
- perm_transaction_hist
- permsup_transaction_hist

Operations Module

- extract_inv_trans_hist_cons
- extract_inv_transaction_hist
- extract_po_transaction_hist
- extract_op_transaction_hist
- fact_inv_mth_balance
- fact_inv_transaction
- stage_inv_bal_mth_list
- stage_inv_bal_mth_trans
- stage_inv_bal_mth_trans1
- stage_inv_bal_mth_trans2
- stage_inv_mth_balance
- stage_inv_mth_balance_hist_calc
- stage_op_transaction_merge
- stage_op_transaction_merge
- stage_op_transaction_merge
- stage_op_transaction0
- stage_op_transaction1
- stage_op_transaction2

- fact_op_transaction
- perm_op_hist
- stage_inv_bal_mth_current
- stage_inv_bal_mth_current4
- stage_inv_bal_mth_date
- stage_inv_bal_mth_date1
- stage_inv_bal_mth_date2
- stage_inv_mth_balance1
- stage_inv_transaction_con_cus3
- stage_inv_transaction_con_cus4
- stage_op_tr_hist_rjct_wo
- stage_op_trans_scrapi
- stage_op_transaction
- stage_po_order_hist_initial4
- stage_po_order_hist_initial5
- stage_po_order_hist_initial6
- work_inv_change_hist_list
- work_inv_change_list
- work_inv_change_list1

Order Management Module

- extract_om_transaction_hist
- stage_om_booking
- fact_om_booking
- fact_om_shipment
- stage_om_booking_max_tran
- stage_om_booking_previous
- stage_om_booking_transaction
- stage_om_booking_transaction1
- stage_om_invoice_transaction
- stage_om_invoice_transaction1
- stage_om_order
- stage_om_order1
- stage_om_order2
- stage_om_order3

List of Tables Added for BI 3.6.1

- stage_inv_mth_end_cst
- stage_inv_trx_chg_mths
- stage_inv_mth_end_cst1
- stage_inv_trx_chg_mths1

List of Tables Deleted for BI 3.6.1

No tables deleted for BI 3.6.1 upgrade.

List of Tables Modified for BI 3.5.1

- extract_inv_trans_hist_cons
- extract_inv_transaction_hist
- extract_om_transaction_hist
- extract_po_transaction_hist
- fact_inv_mth_balance
- fact_inv_transaction
- fact_om_booking
- fact_om_shipment
- load_tr_hist
- perm_transaction_hist
- permsup_transaction_hist
- stage_inv_bal_item_list
- stage_inv_bal_mth_current
- stage_inv_bal_mth_current4
- stage_inv_bal_mth_date
- stage_inv_bal_mth_date1
- stage_inv_bal_mth_date2
- stage_inv_bal_mth_list
- stage_inv_bal_mth_trans
- stage_inv_bal_mth_trans1
- stage_inv_bal_mth_trans2
- stage_inv_bal_revalue1
- stage_inv_mth_balance
- stage_inv_mth_balance_hist_calc
- stage_inv_mth_balance1
- stage_inv_transaction_con_cus3
- stage_inv_transaction_con_cus4
- stage_om_booking
- stage_om_booking_max_tran
- stage_om_booking_previous
- stage_om_booking_transaction
- stage_om_booking_transaction1
- stage_om_invoice_transaction
- stage_om_invoice_transaction1
- stage_om_order
- stage_om_order1
- stage_om_order2
- stage_om_order3
- stage_po_order_hist_initial4
- stage_po_order_hist_initial5
- stage_po_order_hist_initial6
- stage_tr_hist_list
- stage_tr_hist_list
- stage_unit_of_measure3
- work_inv_change_hist_list
- work_inv_change_list
- work_inv_change_list1

List of Tables Added for BI 3.5.1

- stage_inv_mth_end_cst
- stage_inv_trx_chg_mths
- stage_inv_mth_end_cst1
- stage_inv_trx_chg_mths1

List of Tables Deleted for BI 3.5.1

No tables deleted for BI 3.5.1 upgrade.

Upgrade to 3.6.1 from 3.6

Preparation

- 1 Plan for a couple of hours of down time.
- 2 Ensure that there are no loads currently in progress. All jobs must be completed.
- 3 Put all scheduled jobs On Hold until the upgrade is complete. Shut down the scheduler.
- 4 Take a backup of the current warehouse database.
- 5 Before you begin, make note of the following:
 - Note any custom DAILY_LOAD_JOBxxx jobs that appear after the final ROLLUP jobs; for example, DAILY_PO_ROLLUP or DAILY_SALES_ROLLUP if you do not have the Purchase Orders module installed. If you have neither Sales nor Purchase Order processing, note any custom jobs that might be after the final SNAPSHOT jobs: _____
 - Note any custom HIST_LOAD_JOBxxx jobs that appear after the standard ROLLUP or SNAPSHOT jobs: _____

Important This upgrade will replace some load and stage tables. If there are any customizations to these tables, ensure that they are ready to be made again.

Upgrade Steps for QAD BI Metadata

- 1 Unzip the metadata for the Common module and any other modules you have installed.

Note Because the metadata files are now segregated by module, it is only necessary to install the modules that are needed.

 - Perform the Common upgrade first. The other upgrades can be done in any order.
 - All users need to run the Common metadata upgrade application.
 - If you process any of the Order Management (Sales) fact_om_* tables, install the Order Management (OM) upgrade application.
 - If you process Inventory and/or Purchase Order tables, install the Operations module upgrade application.
 - There is no upgrade to the Financials module in this maintenance release.
- 2 Log in to Setup Administrator.
- 3 Choose Tools|Start Logging. Select a name and location for your log file and Save.
- 4 Load the Common Module Upgrade Application as follows:
 - a Set your application directory to the new *metadata/common* folder.
 - b Load application *upgradeCom* by right-clicking on the file and choosing Install Application.
 - c From the drop-down list, select the ODBC DSN for your DWD instance.
 - d The system prompts you to proceed. Click OK.

Note You can cancel the installation here to review the list of new and modified objects. To continue with the load, right-click in the window and choose Proceed with Load Application.

- e The next dialog box is Application Load Properties. Verify that the default values are correct. Make any changes if necessary:
 - On the left, select Dimension. On the right, click on the box next to *Existing Dimension objects will be* and select Altered.
 - On the left, select Dimension View. On the right, click on the box next to *Existing Dimension View objects will be* and select Recreated.
 - On the left, select Stage Table. On the right, click on the box next to *Existing Stage table objects will be* and select Recreated.
 - On the left, select Permanent Stage Table. On the right, click on the box next to *Existing Permanent Stage table objects will be* and select Altered.
 - On the left, select Fact Table. On the right, click on the box next to *Existing Fact table objects will be* and select Altered.
 - Click OK.

5 Repeat for any other modules that must be upgraded.

- **Order Management.** Change the Application Directory to the *metadata/order_management* subdirectory and install application *upgradeOM*.
- **Operations.** Change the Application Directory to the *metadata/operations* subdirectory and install application *upgradeOps*.

Note The upgrade application installations will take some time as the load process alters and re-creates various objects.

6 After the upgrade applications have been installed, reapply the customizations to the upgraded tables. Verify that all other customizations are not affected.

7 Start the Scheduler. Make sure all jobs are still suspended.

8 Run the Upgrade jobs for the tr_hist.tr_trnbr roll-over issue for each module you have installed:

- **Common Module.** Run the UPGRADE_36_to_361_QBIS_25_COMMON job to update the permsup_transaction_hist table to include the transaction date and to seed the TR_HIST_DATE_MAX values for each source.
- **Order Management.** Run the UPGRADE_36_to_361_QBIS_25_OM job to update the fact_om_booking table to include the transaction date.
- **Operations.** Run the UPGRADE_36_to_361_QBIS_25_OP job to update the fact_op_transaction table to include the transaction date.

9 Run the Upgrade job for the inventory valuation issues:

- a Set the JOB_CHAINING_ENABLED parameter to N.

Important Ensure that the INV_PROCESS_DAYS parameter is set to be large enough to load records from the ERP system since the last Daily run.

- b Run the UPGRADE_36_to_361_QBI_1773 job.

- c Set the JOB_CHAINING_ENABLED parameter back to Y.

10 If the upgrade affected any customized tables, reapply your customizations. For a list of new and modified tables, see “Data Warehouse Tables Changed” on page 55.

- 11 If there were any customizations previously added to any of the modified jobs, update the job to reinclude those extra parts. You can double check what was in the job by looking at the newly renamed <jobname>_1. The jobs that changed in this release are:
- PREPROCESS_COMMON_LOADS
 - PREPROCESS_COMMON_TRUNCATE
 - PREPROCESS_OP_LOAD
 - PREPROCESS_OP_TRUNCATE
 - DAILY_OP_PERM_EXTRACT
 - HIST_OP_PERM_EXTRACT
 - DAILY_OP_INV_PROCESS_CHAINED
 - HIST_OP_INV_PROCESS_CHAINED
- 12 Check the values of the TR_HIST_DATE_MAX_Sxx parameters for each source. If necessary, increase TR_HIST_PROCESS_DAYS from the default value of 3 days. The number of Process Days must be such that the TODAY - earliest TR_HIST_DATE_MAX_Sxx is less than the TR_HIST_PROCESS_DAYS. There are also several new parameters to control how the BI system handles the rollover of the tr_trnbr:
- **TR_HIST_PROCESS_DAYS.** This is the number of look-back days when extracting data from tr_hist. The records being extracted are records where tr_trnbr is greater than the highest transaction_number records already extracted for that source, except after tr_trnbr rollover, when newer transactions may have smaller trnbrs than older transactions. The BI DW must also take into account the transaction date in order to find the lower-numbered transactions that are actually new. This parameter says to extract from the ERP transactions entered within the last X days. If the number of days since the TR_HIST_DATE_MAX_Sxx is greater than the TR_HIST_PROCESS_DAYS parameter, a task that checks this during the run will fail and indicate this number needs to be increased. The default value is 3.
 - **TR_HIST_MAX_VALUE.** This is the maximum number allowed for the tr_hist.tr_trnbr field, or in other words, the number after which the tr_trnbr will roll over and start at the first available low number. The default value is 99999999. If the tr_sq01 sequence is set to a different maximum value, enter that here.
 - **TR_HIST_PRE_ROLLOVER_COUNT.** This is the number of records that would typically be in three days worth of data to ensure readiness for tr_hist.tr_trnbr rollover. Once the tr_trnbr for a source is detected to be within TR_HIST_PRE_ROLLOVER_COUNT of TR_HIST_MAX_VALUE, the BI system sets the TR_HIST_TRAN_MAX_Sxx value for the source to 0. This will force the tr_hist extraction to scan the whole table for records that have been processed within the last TR_HIST_PROCESS_DAYS. The default value is 5000.
 - **TR_HIST_PCT_OF_MAX_REF.** This is the percent of the TR_HIST_MAX_VALUE to use as a reference point to look for new low-numbered transactions when dealing with the rollover. The default value is 50. When this value is 50, you will search the transactions with numbers less than 50% of the TR_HIST_MAX_VALUE for the highest number with a transaction date within the processing window.
- 13 Resume normal processing.

Upgrade to 3.5.1 from 3.5

Preparation

- 1 Plan for a couple of hours of down time.
- 2 Ensure that there are no loads currently in progress. All jobs must be completed.
- 3 Put all scheduled jobs On Hold until the upgrade is complete. Shut down the scheduler.
- 4 Take a backup of the current warehouse database.
- 5 Before you begin, make note of the following:
 - Note any custom DAILY_LOAD_JOBxxx jobs that appear after the final ROLLUP jobs; for example, DAILY_PO_ROLLUP or DAILY_SALES_ROLLUP if you do not have the Purchase Orders module installed. If you have neither Sales nor Purchase Order processing, note any custom jobs that might be after the final SNAPSHOT jobs: _____
 - Note any custom HIST_LOAD_JOBxxx jobs that appear after the standard ROLLUP or SNAPSHOT jobs: _____

Important This upgrade will replace some load and stage tables. If there are any customizations to these tables, ensure that they are ready to be made again.

Upgrade Steps for QAD BI Metadata

- 1 Unzip the metadata for the BI 3.5.1 Upgrade.
- 2 Log in to Setup Administrator.
- 3 Choose Tools|Start Logging. Select a name and location for your log file, then save.
- 4 Load the BI 3.5.1 Upgrade Application as follows:
 - a Set the application directory to the new metadata folder.
 - b Load application *upgradeBI* by right-clicking on the file and choosing Install Application.
 - c From the drop-down list, select the ODBC DSN for your DWD instance.
 - d The system prompts you to proceed. Click OK.

Note You can always cancel here to review the list of new and modified objects. To continue with the load, right-click in the window and choose Proceed with Load Application.

- e The next dialog box is Application Load Properties. Verify that the default values are correct. Make any changes if necessary:
 - On the left, select Dimension. On the right, click on the box next to *Existing Dimension objects will be* and select Altered.
 - On the left, select Dimension View. On the right, click on the box next to *Existing Dimension View objects will be* and select Recreated.
 - On the left, select Stage Table. On the right, click on the box next to *Existing Stage table objects will be* and select Recreated.
 - On the left, select Permanent Stage Table. On the right, click on the box next to *Existing Permanent Stage table objects will be* and select Altered.

- On the left, select Fact Table. On the right, click on the box next to *Existing Fact table objects will be* and select Altered.
- Click OK.

Note The upgrade application installations will take some time as the load process alters and re-creates various objects.

- 5 If the upgrade affected any customized tables, reapply your customizations. For a list of new and modified tables, see “Data Warehouse Tables Changed” on page 55.
- 6 Start the Scheduler. Make sure all jobs are still suspended.
- 7 If any customizations were previously added to HIST_INV_PROCESS_XXXXXXX and DAILY_INV_PROCESS_XXXXXXX, update the job to reinclude those extra parts. You can double check what was in the job by looking at the newly renamed HIST_INV_PROCESS_XXXXXXX_1 or DAILY_INV_PROCESS_XXXXXXX_1. Then, rename any existing DAILY_INV_PROCESS_<source> job to DAILY_INV_PROCESS_<source>_1. Insert a copy of the new DAILY_INV_PROCESS_XXXXXXX and rename it to DAILY_INV_PROCESS_<source>. Repeat this to copy the new HIST_INV_PROCESS_XXXXXXX for each source.
- 8 If any customizations were previously added to HIST_PERM_XXXXXXX and DAILY_PERM_XXXXXXX, update the job to reinclude those extra parts. You can double check what was in the job by looking at the newly renamed HIST_PERM_XXXXXXX_1 or DAILY_PERM_XXXXXXX_1. Then, rename any existing DAILY_PERM_<source> job to DAILY_PERM_<source>_1. Insert a copy of the new DAILY_PERM_XXXXXXX and rename it to DAILY_PERM_<source>. Repeat this to copy the new HIST_PERM_XXXXXXX for each source.
- 9 Run the UPGRADE_35_to_351_QBIS_25 job to update the permsup_transaction_hist, fact_om_booking, and fact_op_transaction tables to include the transaction date and to seed the TR_HIST_DATE_MAX values for each source.
- 10 Run the Upgrade job for the inventory valuation issues:
 - a Set the JOB_CHAINING_ENABLED parameter to N.

Important Ensure that the INV_PROCESS_DAYS parameter is set to be large enough to load records from the ERP system since the last Daily run.

- b Run SET_CONNECTION_<connection_name> for your first source system. If you have only one source system, you do not need to perform this step.
- c Run DAILY_COMMON_PROCESS_<connection_name>.
- d Run DAILY_PERM_<connection_name>.
- e Run DAILY_INV_PROCESS_<connection_name>.
- f Replace the prefix of the word DAILY with HIST for the INV_PROCESS_RUNNING_JOB_NAME parameter.
- g Run the UPGRADE_35_to_351_QBI_1773 job.

Note This job may take a long time because it is recalculating the entire fact_inv_mth_balances table.

- h Repeat steps b through g for each connection name.
- i Set the INV_PROCESS_DAYS parameter back to an appropriate value such as 5-10 days.
- j Set the JOB_CHAINING_ENABLED parameter back to Y.

k Reset the DAILY_START job so that it will run again normally.

- 11** Check the values of the TR_HIST_DATE_MAX_Sxx parameters for each source. If necessary, increase TR_HIST_PROCESS_DAYS from the default value of 3 days. The number of Process Days must be such that the TODAY - earliest TR_HIST_DATE_MAX_Sxx is less than the TR_HIST_PROCESS_DAYS. There are also several new parameters to control how the BI system handles the rollover of the tr_trnbr:

- **TR_HIST_PROCESS_DAYS.** This is the number of look-back days when extracting data from tr_hist. The records being extracted are records where tr_trnbr is greater than the highest transaction_number records already extracted for that source, except after tr_trnbr rollover, when newer transactions may have smaller trnbrs than older transactions. The BI DW must also take into account the transaction date in order to find the lower-numbered transactions that are actually new. This parameter says to extract from the ERP transactions entered within the last X days. If the number of days since the TR_HIST_DATE_MAX_Sxx is greater than the TR_HIST_PROCESS_DAYS parameter, a task that checks this during the run will fail and indicate that this number needs to be increased. The default value is 3.
- **TR_HIST_MAX_VALUE.** This is the maximum number allowed for the tr_hist.tr_trnbr field, or in other words, the number after which the tr_trnbr will roll over and start at the first available low number. The default value is 99999999. If the tr_sq01 sequence is set to a different maximum value, enter that here.
- **TR_HIST_PRE_ROLLOVER_COUNT.** This is the number of records that would typically be in three days worth of data to ensure readiness for tr_hist.tr_trnbr rollover. Once the tr_trnbr for a source is detected to be within TR_HIST_PRE_ROLLOVER_COUNT of TR_HIST_MAX_VALUE, the BI system sets the TR_HIST_TRAN_MAX_Sxx value for the source to 0. This will force the tr_hist extraction to scan the whole table for records that have been processed within the last TR_HIST_PROCESS_DAYS. The default value is 5000.
- **TR_HIST_PCT_OF_MAX_REF.** This is the percent of the TR_HIST_MAX_VALUE to use as a reference point to look for new low-numbered transactions when dealing with the rollover. The default value is 50. When this value is 50, you search the transactions with numbers less than 50% of the TR_HIST_MAX_VALUE for the highest number with a transaction date within the processing window.

- 12** Resume normal processing.

Release Notes for Release 3.6

QAD Business Intelligence Version: 3.6

Date: March 2012

QAD BI 3.6 introduces a new sub-module to QAD BI—Operations Metrics. The Data Warehouse Designer has undergone some changes to the look and feel of the application. Finally, significant changes have been made to improve the performance of the extract, transformation, and load processes.

Installation Changes

BI Modules can now be installed independently. Please refer to the *QAD BI 3.6 Installation Guide* for additional information.

The *Installation Guide* also includes instructions on how to upgrade to QAD BI 3.6 from QAD BI 3.5.

Application Changes

Operations Module

A new sub-module has been added for Capacity Planning and Control. This new functionality has been introduced to support OEE metrics for production lines. Five new Query Areas have been added: *Equipment Effectiveness*, *Item Efficiency*, *Work Orders*, *Operations Transactions*, and *Work Order Routings*. A new QAD Standard dashboard, *Capacity Planning and Control – Production Lines*, has been added to display OEE metrics including OEE (Overall Equipment Effectiveness), Availability, Performance, and Quality Performance. The dashboard provides both high-level metrics by site and production line within a site, and drill-downs to the supporting data.

Additional information is available in the *QAD BI 3.6 Portal User Guide*.

Performance

The load logic for many tables has been modified to restrict the amount of data that is loaded each day during the ETL process. This makes the daily processing much more efficient, reducing daily run times greatly.

Job Scheduler

The daily scheduled jobs have been streamlined. This reduces redundancy and improves operational monitoring and troubleshooting. The Job names have changed considerably. More details on this are provided in the *QAD BI 3.6 Installation Guide*.

Data Warehouse Designer Upgrade

The DWD User Interface has been upgraded. The changes include renaming the *Browser* tab to *Builder*. There are expanded context menu items available for objects. Right-click on an object and an “Impact” option is now displayed. This allows you to run key object reports, including Track Back/Forward Reports, directly from the Object Browser.

Fixes and Minor Enhancements

Component	Issue ID	Description
Modules	QBIS-16	Fact_inv_mth_balance processing – divide by 0 error in stage_inv_mth_balance_calc.
Modules	QBIS-20	Data loads from multiple sources now loading correctly. Problem had been reported with multiple EE Source systems and control parameters.
Modules	QBI-491	Stage_gl_transaction1 processing was slow due to corporate currency conversion.
Modules	QBI-569	The loads of ih_hist and idh_hist were pulling all source data for every daily run. This has been resolved.
BI Portal	QBI-598	Internationalization – BI Portal users are now able to change their own language setting.
Modules	QBI-610	PO Order History records were not matching dim_item_key. This has been fixed.
BI Portal	QBI-615	Visual Item Actions in Flex Portal – corrected drill in/drill out and easy reorder of menu actions.
DWD Admin	QBI-616	Problem with metadata translation file headers for Czech and Korean languages has been resolved.
Modules	QBI-618	The load time for stage_gl_transaction1 greatly reduced.
Modules	QBI-624	The source unit cost used in the purchasing module is now correctly handled as the transaction currency.
BI Portal	QBI-649	Ability to drill-down on separate measures.
Modules	QBI-657	Load_ee_domainShareSet was not being used properly in the EE environment. This has been fixed.
Modules	QBI-675	Order performance – additional flags added to fact_om_order_performance and fact_om_shipment to improve overall performance reporting. Fact_om_shipment - 'late/early/on-time' flags added. Fact_om_order_performance: • Early_shipment_flag • In_full_flag • Late_shipment_flag • On_time_flag • OTIF_flag (on-time, in-full) Column removed from fact_om_performance: • Ontime_due_date_flag New Parameters have been added: • SALES_EARLY_TOLERANCE_DELAY • SALES_LATE_TOLERANCE_DELAY • SALES_PERCENT_QTY_OVER • SALES_PERCENT_QTY_UNDER
Modules	QBI-699	Dimension columns that had Business Display names that were causing problems in SQL Server Analysis Services have been corrected.
Modules	QBI-700	The logic to determine late markers in the fact_om_performance table has been updated.
Modules	QBI-703	The custom processing for stage_inv_mth_balance has been modified to improve performance.
Modules	QBI-737	Load Logic for fact_po_order modified to include closed lines. The PO_SNAPSHOT_FREQUENCY parameter was modified. The Daily option was removed and the default set to “B” both weekly and monthly. Two attributes added to the QAD Date Dimension to indicate if snapshot is end of week or end of month. • calendar_end_of_week_flag • calendar_end_of_month_flag
Modules	QBI-745	Unit cost in fact_po_order_history, fact_po_order and fact_po_order_performance modified to consider discounts. See also QBI-746.
Modules	QBI-746	Purchasing - cost measures are now correctly extended to factor in discounts in the fact_po_order_history and fact_po_order_performace tables. See also QBI-745

Component	Issue ID	Description
Modules	QBI-756	Business (display) name of dim_po_line_type has been changed to Line Ship Type.
BI Portal	QBI-793	Standard QAD Excel workbooks now have “QAD” as their creator.
BI Portal	QBI-798	INFO line in BI Portal Server corrected.
Modules	QBI-799	A problem with the sequencing of the Address and Customer data load has been resolved.
Modules	QBI-808	Some tables in the Purchasing sub-module had varchar types. These have been changed to nvarchar.
Modules	QBI-809	Some tables in the Order Management module had varchar types. These have been changed to nvarchar.
Modules	QBI-810	The UNICODE flag is now correctly set in the load_in_hist table.
Modules	QBI-811	The SubstrPartN function now correctly returns all the elements of an array.
Modules	QBI-924	ETL logic for fact_po_order_history now setting history_end_dates correctly on closed orders.
Modules	QBI-984	Performance improvement to EE GL Balance processing by modifying the exchange rate calculations.
Modules	QBI-986	Removed “Drop all indexes,” “Build all indexes,” and “Analyze” from the standard scheduled jobs.
Modules	QBI-1000	Corrected issue with fact_om_shipments related to location codes.
Modules	QBI-1002	An issue with number of decimal places for the list_price_trans in the fact_om_booking table is corrected. This field is now correctly handled with 10 decimal places.
BI Portal	QBI-1003	A Date/Time column in a Grid type visual item will now display the correct default format when no format is selected.
Mobile	QBI-1006	Problem with iPad app if Dashboard includes a horizontal bar resolved.
Modules	QBI-1025	ADDRESS_PROCESS will now work correctly for Historical data loads. A fix was made to the second pass of this process.
Modules	QBI-1172	Stage_gl_balance2 performance has been improved by reworking calls to the ConvertCurrencyValueTrans function.
Modules	QBI-1232	The following columns have been added to dim_customer: • SIC_code • SIC_description • Credit_limit • Debtor_tax_id_misc1 • Debtor_tax_id_misc2 • Debtor_tax_id_misc3 • Payment_group_code • Payment_group_description • Payment_condition_code • Payment_condition_description
Modules	QBI-1235	Territory Description attribute added to Salesperson dimension.

Component	Issue ID	Description
Modules	QBI-1236	Many new columns added to dim_account: • account_gl_type_code • account_gl_type_description • account_currency_code • account_is_active_flag • account_system_type_code • account_system_type_description • account_shared_set_code • account_budget_group_code • account_budget_group_description • account_unit_of_measure_code • account_unit_of_measure_description • account_intercompany_code • account_cash_group_code • account_cash_group_description • account_is_project_flag • account_is_balance_sheet_flag • account_is_division_flag • account_is_cost_centre_flag • account_is_saf_flag
Modules	QBI-1268	Display names for amount and cost columns were corrected to follow the standard QAD BI naming conventions.
Modules	QBI-1269	The logic for the fact_om_order_history table was not handling the complete_status_flag from sod_det properly, when determining records with and order_status of DELETED. This has been fixed.
Modules	QBI-1271	The following columns have been added to fact_inv_transaction: • Sales_order_job_number • Inventory_status • Order_number • Order_line_number In addition, a link to the User Dimension has been added.
Modules	QBI-1273	The fact_om_invoice table will now correctly join to the dim_entity table, even with the site_code on the OM Invoice Header is null.
Modules	QBI-1274	The following value columns in the fact_inv_mth_balance table will now be correctly calculated: • Open_value_oh_total_corp • Open_value_oh_net_corp • Open_value_oh_nonnet_corp • End_value_oh_total_corp • End_value_oh_net_corp • End_value_oh_nonnet_corp • Value_issue_corp • Value_receipt_corp • Value_sales_order_corp • Value_git_corp
Modules	QBI-1279	Fact_om_shipment now uses correct source for the following columns: • Shipment_date = transaction.shipment_date • Due_date = order_line.due_date • Project Code = order_line.project_code • Salesperson[1-4] = order_line.salesperson[1-4]

Known Issues

Portal Issues

- The BI Portal application cannot run in the same instance of Tomcat as QXtend. (QBI-174)
- Model changes in DWD are not picked up by custom models until the model is opened in the Portal, saved, and closed. (QBI-127)
- The *Compare By* in the Query Designer does not allow calculated fields. (QBI-587)
- Export to PDF of a report – Chinese characters do not show up properly. (QBI-590)
- The GUI supports translation of repository object names, but the Export/Import object functionality does not yet include the import and export of the translated strings. (QBI-604)
- Rename of Data Security Model changes in Model screen, but not in Add/Edit User screen. (QBI-626)
- Chrome – Visual Items sometimes show no data when in fact, there is data. As a short-term workaround, the user can view a different dashboard and return the dashboard experiencing the problem. (QBI-772)
- Mobile BI – Separate drill-ins for multi-measure charts does not work on the iPad platform. (QBI-1307)
- After changing your own language in the Portal, you must log out and log back in; you will receive “invalid session” errors if you try to do some other function after a language change. (QBI-1312)

Metadata (Module) Issues

- Fact_ar_invoice_history has the “entered date” value stored as a degenerate dimension value rather than as a dimensional join. This will change to a full dimension join in future releases of the BI data warehouse. Doing so might cause some queries to need to change in the future. (QBI-26)
- The extended amounts calculated for closed orders is 0 because the extended amount is calculated using the open_amount, not the order_amount. (QBI-631)
- Installation of BI modules in a pre-domain ERP environment requires manual changes to metadata. (QBI-691)
- The FINANCIAL_REPORT_GENERATOR job only works on Standard Edition data, not on Enterprise Edition. (QBI-697).
- Corporate amounts in the fact_ap_invoice_snapshot are always 0. Note that the amounts in the Base currency are correct. (QBI-777)
- In the BI Portal, upon login, the portal tries to open a dashboard from a different instance. (QBI-1007)
- For Visual Items in the BI Portal, white space on graph headers should be minimized. (QBI-1023)
- The system will not show a production line and its associated quality statistics in the *Quality Data by Site, Production Line* grid anytime the site has had 13 or more prior weeks without any data reported against it. This is different from the Availability and Performance grids work. (QBI-1310)
- Reset of transaction number in QAD Enterprise Application (tr_hist.tr_trnbr) to 1 is not handled in BI. (QBIS-25)

Release Notes for Release 3.5

QAD Business Intelligence Version: 3.5

Date: September 2011

QAD BI 3.5 continues the evolution of QAD Business Intelligence to bring more analysis and an improved portal with which to explore the data. In addition, it now supports a native iPad app for accessing the Dashboards and Collaborative forums.

This section contains the following topics:

- New Feature Summary
- Fixes
- Known Issues
- Data Warehouse Tables Changed
- Upgrade to QAD BI 3.5 from BI 3.4.1

New Feature Summary

iPad App

- A QAD BI app is now available on the Apple app store for iPad devices. It works with this release of the BI Portal. Existing dashboards defined on the BI portal that do not include any parameter bars and have charts on them are available to be viewed from this app. Visual Items available with this release are various types of charts. The rest of the visual item types on the dashboard are not displayed on the iPad. Users can drill into charts from the charts on the dashboard. The app honors user security just like the BI Portal. In addition, users can view the collaboration forums (as defined in the BI Portal), read the topics, and post their own topics and comments. The topics are searchable.

Modules

- Purchasing - purchasing receipt and performance handling has been improved. Performance now includes flags for On Time (within tolerance parameter for early/late); In Full (within tolerance parameters for quantity percent over and under); On Time In Full (if a receipt is both on time and in full); and Return Quality (whether the amount of returns is within a tolerance percentage of total quantity ordered).
- Sales (Order Management) - order history processing has been improved to handle closed orders properly. The system properly determines if an order is a consignment, is scheduled, or has an FSM type. Order Snapshot (fact_om_order) processing now matches other modules in that the user can select snapshots as weekly, monthly, or both.
- Standard Edition (SE) Financials - improvements have been made in AR and AP processing, including currency conversion corrections and handling of partially applied voucher payments. Updated QAD standard portal dashboards for SE AR, AP, and GL have been provided.
- This version includes a new, QAD-branded data warehouse designer that supports Unicode data loads.

Fixes

Component	Issue ID	Description
PORTAL	QBI-514	Two or more dashboards can now have the same name as long as they are in different folders. Previously the portal could display the wrong dashboard when there were dashboards in different folders with the same name.
	QBI-701	Query results are now ordered by column properly when locale-specific numbers are in use.
	QBI-708	In a Portal data security model, two constraints within the same dimension are now ORed rather than ANDed. This means that a user with a security model with two constraints on the same dimension now sees the Superset of values that meet either constraint (rather than the subset of values that meet both constraints only). For example, if the Customer Bill-To dimension has one constraint that Customer Country = UK, and another that the Customer Salesperson 1 Name = John Doe, then the user with this model can now see all records where the Customer Country is UK (no matter what the Customer Salesperson1 Name is), plus all the records where the Customer Salesperson 1 Name is John Doe (no matter what the Customer Country is). Previously the user would only see those records where Customer Country = UK and the Customer Salesperson 1 = John Doe.
	QBI-754	If a chart is viewed via drill-in from another chart, and then collaborated on, the collaboration icon only appears on the proper chart, and not on its parent. Previously the portal would display the icon on the top-level chart of the drill-in hierarchy.
	QBI-789	The Test Run button in the Query Designer now creates the proper Comparative query. Previously the Test Run button would not generate the proper comparative measures.
METADATA	QBI-660	Sales (Order Management) snapshots were previously only weekly; you can now choose to have them done Weekly, Monthly, or Both like other snapshot tables. Default is Monthly.
	QBI-664	Closed orders are no longer excluded from fact_om_order_history.
	QBI-668	fact_om_order_history should no longer create records with overlapping dss_history_start and end dates
	QBI-704	dim_credit_term slowly changing column changed from credit_term_percent_due to credit_term_percent_due_orig to prevent keys from changing daily. New keys should now be generated only when the percent due changes in the record in ERP; previously certain customized versions of the code would generate new keys daily even though the percent due had not changed.
	QBI-705	Blanket Release Purchase Orders are now included in fact_po_order_history.
	QBI-707	Some work tables for OM and PO processing were not filtering for source system code, and therefore processing more records than necessary. These tables now filter by source code, which should improve performance.
	QBI-710	Historic loads of Purchase Order History sometimes failed due to null purchase order dates. The DATE_EARLIEST_POSSIBLE parameter value is now used to set the purchase_order_history_date if the value in the ERP records is null.
	QBI-721	Standard Edition (SE) Accounts Receivable and Accounts Payable currency conversion have been corrected to use override exchange rates where applicable. Also corrected in the SE AR and AP tables was the proper use of the ROUNDNUMBERAP and ROUNDNUMBERAR functions (in some places AR processes had been using the AP function and vice versa); AP Voucher processing now uses credit_term_split_sequence as part of the primary key; and voucher processing uses the proper amount for partially paid vouchers.
	QBI-723	Since the concept of 'bookings' was not really applicable to Purchase Orders, the fact_po_booking table and its associated stage tables have been removed. Also, the po_growth_rate measure has been removed from fact_po_order.

Component	Issue ID	Description
	QBI-724	The fact_ap_invoice_snapshot table has been renamed to the AP Voucher Snapshot table in its Business Display name (end user label), since the concept in AP is better known as Voucher, not Invoice. Also, the primary key has been set to Source_system, domain, invoice_number (from ap_mstr.ap_ref), credit_term_split_sequence (ctd_det.ctd_seq), effective_date.
	QBI-725	The aging measures have been hidden from end user display for fact_ar_invoice_history and fact_ap_voucher_history tables, since they really only make sense in the corresponding snapshot tables (where there will be only one row per invoice) and not in the history tables (where there might be many records per invoice as the records change over time).
	QBI-733	work_po_change_list4 has been corrected to consider changes based upon the perm_update_time rather than the dss_update_time (which was causing it to process records that had not really changed).
	QBI-734	fact_po_order_history insertion has been corrected to ensure the discount_percentage is in the appropriate column order. The incorrect order of columns was causing unnecessary creation of extra rows in the table.
	QBI-736	The primary key for the fact_po_order_history table has been modified to include the dss_version_number, and a second unique index has been added on source_system_code, domain_code, po_number, po_line_number, dss_history_start_date, dss_history_end_date.
	QBI-738	Purchase Order performance changes: Supplier performance tracks order lines received On Time or not On Time (early or late) based on any receipts against the line being early or late factoring in a tolerance days. It also tracks In Full or not In Full, based on the PO line, factoring in a quantity tolerance. Determining the In Full portion of OTIF requires the line to be past due or closed.
	QBI-739	Purchase Receipt changes: In measuring On Time-ness for Supplier Performance KPIs, we need to look at the actual receipts since every receipt needs to be On Time for its own due date. When the Supplier Performance module is used, On Time-ness including built in days tolerances is accurately found via the vepd_det table (one vepd_det record created for every receipt for tracked Suppliers). For End-Users who do not use Supplier Performance and also for End Users who do use Supplier Performance but for PO lines for Suppliers not tracked there, the receipts have a due date associated with that receipt. We indicate the receipt is On Time, early, or late. We now do all this in fact_po_receipt. This accounts for multiple receipts with multiple due dates. If any of the receipts against a line are flagged as early or late, the whole line is NOT OTIF.
	QBI-740	Purchase Order Performance: In Full flag added. In order for a PO Line to be considered In Full, the line must be closed or past due (we are looking at all receipts for a PO Line cumulatively). If Actual Net Qty Received = Qty Ordered in Ordered UM, then In Full Flag = 1 If (Actual Net Qty Received/ Qty Ordered in Ordered UM) > 1 and <= 1 + % PO_PERCENT_QTY_OVER, then In Full Flag = 1 If (Actual Net Qty Received/Qty Ordered in Ordered UM) < 1 and >= 1 - % PO_PERCENT_QTY_UNDER, In Full Flag = 1 Else In Full Flag = 0 PO_PERCENT_QTY_OVER and PO_PERCENT_QTY_UNDER are new BI parameters
	QBI-741	Purchase Order Performance: On Time In Full flag added. If On Time Flag = 1 AND In Full Flag = 1 then 1 else 0.
	QBI-742	Purchase Order Performance: po_line_quality is now called Returns Flag and is calculated thus: If pod_qty_rtnd > PO_RET_QTY_TOLERANCE * order quantity then 1, else 0. PO_RET_QTY_TOLERANCE is a new BI parameter - note this is a different % quantity tolerance than that used to determine In Full (see QBI-740 above)

Component	Issue ID	Description
	QBI-749	The sourcing and calculation of Quantity Open measures have been corrected in fact_po_order_history, fact_po_order, and fact_po_order_performance. The business name (end user label) for Quantity Open has been changed to Quantity Open in Ordered UM. The business names for the open_amount measures have been changed to Actual Open Value.
	QBI-751	The primary key for the fact_om_order_history table has been modified to include the dss_version_number, and a second unique index has been added on source_system_code, domain_code, order_number, order_line_number, dss_history_start_date, dss_history_end_date.
	QBI-758	Two load tables have been modified to collect information required to determine if a sales order is consignment, FSM, or scheduled. The table load_sod_det now includes columns sod_sched, sod_fsm_type, sod_consignment, and sod_compl_stat (this last column is EE-only). The table load_idh_hist now includes columns idh_fsm_type and idh_sched.
	QBI-761	Some Standard Edition AR and AP columns that are no longer used have been removed from end user display - sort and entity_exchange_rate.
	QBI-763	fact_om_order_history now populates the order status properly for open and closed orders.
	QBI-764	A new dimension has been added named dim_order_line_order_type that is linked to fact_om_order_history and contains flags for whether an order is consigned, scheduled, or has an FSM type (SSM Flag).
	QBI-765	fact_om_order_history will populate order_complete_state properly for EE orders that are closed but still in the system (sod_compl_stat = 01). (Since the sod_compl_stat column does not exist in SE, the order_complete_state for SE records are set to N/A.)
	QBI-766	If the base and transaction currency are the same, but are different from the corporate currency, the currency conversion is now calculated properly. Previously the corporate value would be set to the same as the base & transaction value in this case.

Known Issues

Portal Issues

- The BI Portal application cannot run in the same instance of Tomcat as QXtend. (QBI-174)
- Model changes in DWD are not picked up by custom models until the model is opened in the Portal, saved, and closed. (QBI-127)
- Compare By in Query Design does not allow calculated fields. (QBI-587)
- Export to PDF of report - Chinese characters do not show up properly. (QBI-590)
- The GUI supports translation of repository object names, but the Export/Import object functionality does not yet include the import and export of the translated strings. (QBI-604)
- Rename of Data Security Model changes name in Model screen, but not in Add/Edit User screen. (QBI-626)
- Query Designer Advanced mode cannot be used if the query includes a Comparative component. (QBI-671)
- In the BI Portal, a Dashboard text area cannot be edited when Firefox is the browser. (QBI-677)

Metadata (Module) Issues

- fact_ar_invoice_history has the 'entered date' value stored as a degenerate dimension value rather than as a dimensional join. This will change to a full dimension join in future releases of the BI data warehouse. Doing so might cause some queries to need to change in the future. (QBI-26)

- fact_om_order_performance sometimes provides false late measures. (QBI-700)
- The extended amounts calculated for any closed orders is 0 because the extended amount is calculated using the open_amount, not the order_amount. (QBI-631)
- Corporate amounts in fact_ap_invoice_snapshot are always 0. Note that the amounts in the Base currency are correct. (QBI-777)
- Installation of BI analytical modules in a pre-domain ERP environment requires manual changes to metadata. (QBI-691)
- The FINANCIAL_REPORT_GENERATOR job only works on Standard Edition data, not on Enterprise Edition. (QBI-697)

Data Warehouse Tables Changed

The following sections list the Data Warehouse tables that have been changed, added, or deleted. Note that those in the Modified list may have been changed structurally (for example, columns added or deleted), or they may have had indexes added or deleted, or they may have had changes made to business display names or visibility of particular columns in the BI Portal, or any combination of these modifications.

List of Tables Modified

- dim_credit_term
- dim_exchange_rate
- fact_ap_check
- fact_ap_invoice_snapshot
- fact_ap_voucher
- fact_ap_voucher_history
- fact_ar_invoice_history
- fact_ar_invoice_snapshot
- fact_ee_ap_invoice_snapshot
- fact_om_booking
- fact_om_invoice
- fact_om_order
- fact_om_order_history
- fact_om_order_performance
- fact_om_shipment
- fact_po_order
- fact_po_order_performance
- fact_po_receipt
- load_idh_hist
- load_sod_det
- stage_ap_check_base2
- stage_ap_check_base3
- stage_ap_check_base4
- stage_ap_check_voucher_sum
- stage_ap_voucher_base
- stage_ap_voucher_base2
- stage_ap_voucher_base3
- stage_ap_voucher_base4
- stage_ap_voucher_hist_final
- stage_ap_voucher_history
- stage_ar_invoice_base1
- stage_ar_invoice_base2
- stage_ar_invoice_base3
- stage_ar_invoice_base4
- stage_ar_payment_base1

- stage_ar_payment_base2
- stage_ar_payment_base3
- stage_ar_payment_base4
- stage_credit_term
- stage_om_invoice_line
- stage_om_invoice_order_line
- stage_om_order
- stage_om_order1
- stage_om_order2
- stage_om_order3
- stage_om_order_hist_end_date1
- stage_om_order_hist_end_date2
- stage_om_order_inv_line
- stage_om_order_inv_line1
- stage_om_order_inv_line2
- stage_om_order_line
- stage_om_order_line_all
- stage_om_order_snap
- stage_om_order_snap1
- stage_om_order_snap2
- stage_om_order_transaction
- stage_om_order_transaction1
- stage_om_order_transaction4
- stage_om_order_transaction5
- stage_po_ord_perf
- stage_po_ord_perf1
- stage_po_ord_perf2
- stage_po_ord_perf_curr1
- stage_po_ord_perf_date
- stage_po_ord_perf_date1
- stage_po_ord_perf_full
- stage_po_order_hist1
- stage_po_order_hist3
- stage_po_order_hist_initial1
- stage_po_order_hist_initial3
- stage_po_order_hist_initial6
- stage_po_receipt
- stage_po_receipt1
- stage_po_receipt2
- stage_po_receipt3
- stage_po_receipts_perf1
- stage_po_receipts_perf2
- stage_po_receipts_perf_rank
- stage_po_receipts_perf_top
- work_om_change_hist_list
- work_po_change_hist_list
- work_po_change_list4

List of Tables Added

- dim_order_line_order_type
- load_order_line_order_type
- load_shop_cal
- load_vep_mstr
- load_vepd_det
- stage_om_order_snap3
- stage_om_order_snap4

- stage_order_line_order_type
- stage_po_receipt_ontime_tolerance
- stage_po_receipt_perf
- stage_po_receipt_vep_perf
- stage_shop_cal
- work_po_perf_list

List of Tables Deleted

- stage_po_booking
- stage_po_booking_orig_order
- stage_po_booking_previous
- stage_po_booking_transaction
- stage_po_booking_transaction1
- stage_po_booking_transaction2
- stage_po_booking1
- stage_po_booking2
- stage_po_booking3
- stage_po_booking4
- fact_po_booking

Upgrade to QAD BI 3.5 from BI 3.4.1

BI Portal Upgrade Procedure

Preparation

- Shut down Tomcat.
- Back up the BI Portal database.

Upgrade Steps for QAD BI Portal

- 1 Copy the TOMCAT_HOME\webapps\your_bi_appname directory to *TOMCAT_HOME\your_bi_appname.save341* so that you have a backup of your BI 3.4.1 web application.
- 2 Unzip the new BI 3.5 Portal data.zip file into TOMCAT_HOME\webapps\your_bi_appname, overwriting any existing files with the newer version from the data.zip file. Your configuration files will not be overwritten.
- 3 Delete the file TOMCAT_HOME\webapps\your_bi_appname\WEB-INF\lib\xstream-1.3.1.jar.
- 4 Start Tomcat.

Note Users may need to clear their browser cache prior to reconnecting to the BI Portal to ensure that they are running the latest version of the application. Go to the Portal URL in the browser and click on the Refresh button to make sure that the latest version of the application is loaded.

Verification

Connect to your BI Portal. Click on the About link on the login screen and verify that the Version is 3.5 and the Build Number is BI3-TRUNK-JOB1-1086.

BI Metadata Upgrade Procedure

Refer to the release notes for what has changed in this release.

Preparation

- 1 Plan for a couple of hours of down time.
- 2 Ensure that none of the loads are currently in progress. All jobs must be completed.
- 3 Put all scheduled jobs On Hold until the upgrade is complete. Shut down scheduler.
- 4 Take a backup of the current warehouse database.
- 5 Before you begin, make note of the following:
 - a Note any DAILY_LOAD_SOURCE_Sxx jobs that appear after the standard _SNAPSHOT tables.
 - b Note any HIST_LOAD_SOURCE_Sxx jobs that appear after the standard _SNAPSHOT tables.

Important This upgrade will replace some load and stage tables, so if there are any customizations to these tables, ensure that they are ready to be made again.

Upgrade Steps for QAD BI Metadata

- 1 Due to significant improvements in Purchase Order processing, the fact_po_receipt, fact_po_order_history, and fact_po_order_performance tables need to be reloaded completely. Corrections made to the SE Financials module require the re-processing of SE AP and AR data. The fact_om_order_history table must also be reloaded. Truncate these tables now; after the upgrade application is loaded, jobs will be run to reload these tables using the new processing. In SQL Server, truncate the tables as follows:
 - truncate table fact_po_receipt
 - truncate table fact_po_order_performance
 - truncate table fact_om_order_history
 - truncate table fact_ap_voucher_history
 - truncate table fact_po_order_history
- 2 Log in to Setup Administrator.
- 3 Set your application directory to the new metadata folder. Load Application 35-up (new/modified tables, procedures, parameters, and jobs) by right-clicking on it and choosing Install.
 - a A dialog box will prompt you to proceed; click OK.
 - b The next dialog box is for Application Load Properties:
 - Select Dimension on the left; on the right, click on the box next to Existing Dimension objects will be and select Altered.
 - Select Dimension View on the left; on the right, click on the box next to Existing Dimension View objects will be and select Recreated.
 - Select Stage Table on the left; on the right, click on the box next to Existing Stage table objects will be and select Recreated.
 - Select Permanent Stage Table on the left; on the right, click on the box next to Existing Permanent Stage table objects will be and select Altered.

- Select Fact Table on the left; on the right, click on the box next to Existing Fact table objects will be and select Altered.
 - Click OK.
- 4 The upgrade application installation will take some time as the load process alters/recreates various objects. Once the process completes, make any necessary customizations to your load tables. Verify that all other customizations are not affected.
 - 5 The upgrade application output may have errors that some indexes could not be dropped; this is OK as they are new indexes that do not yet exist in the database (the upgrade script tries to drop each index prior to re-creating it; the drop will fail if the index is new). Any other errors in the upgrade output other than those index errors listed above should be noted; consult QAD Support before continuing.
 - 6 Start the Scheduler, but make sure all jobs are still suspended.
 - 7 You must populate some new parameters and possibly modify some existing values, as follows:
 - a Modify PO_RET_QTY_TOLERANCE, PO_PERCENT_QTY_UNDER, PO_PERCENT_QTY_OVER from the default values if desired:
 - PO_PERCENT_QTY_OVER: Percentage of Receipt Quantity over Order Quantity for a Purchase Order to still be considered In Full. Default value is 10%. In other words, the actual quantity received can be up to 10% greater than the amount ordered and the order line will still be considered In Full. If the quantity received is greater than the quantity ordered plus 10%, the order line is not considered In Full.
 - PO_PERCENT_QTY_UNDER: Percentage of Receipt Quantity under Order Quantity for a Purchase Order to still be considered In Full. Default value is 10%. In other words, the actual quantity received can be up to 10% less than the amount ordered and the order line will still be considered In Full. If the quantity received is less than the quantity ordered minus 10%, the order line is not considered In Full.
 - PO_RET_QTY_TOLERANCE: This is the Percentage of Returns Quantity used for calculating the Defect Rate. Default value is 15%. In other words, if the return quantity is greater than 15% of the order quantity, the order line will be considered a defect.
 - b Modify SALES_SNAPSHOT_REPLACE_FLAG and SALES_SNAPSHOT_FREQUENCY from the default values if desired:
 - SALES_SNAPSHOT_REPLACE_FLAG: Y to replace the snapshot for recalculated periods when the SALES_ROLLUP job is run; N to just add new records and not update previously calculated records. Default value is N.
 - SALES_SNAPSHOT_FREQUENCY: Set to M for monthly snapshots, W for weekly snapshots, or B for both monthly and weekly. Default value is M.
- Important** Check the PO_ORDER_HISTORY_DATE and SALES_ORDER_HISTORY_DATE parameters. If the current date minus the PO_PROCESS_DAYS is newer than the PO_ORDER_HISTORY_DATE, or the current date minus the SALES_PROCESS_DAYS is newer than the SALES_ORDER_HISTORY_DATE, increase the process days value so that the current date minus that number of days will produce a date that is before the related ORDER_HISTORY_DATE (PO or SALES).
- 8 Set INITIAL_JOB_SETUP_DATE to the current date.
 - 9 Change INITIAL_JOB_SETUP_ENABLED to Y.

- 10 Check the following jobs for customizations. Note any custom changes that have been made; reapply them to the new job templates. Then delete the following jobs for each existing source (Note: do NOT delete the job name ending in _XXXXXXX; that is the template from which the source-specific jobs will be created):
 - DAILY_COMMON_PROCESS_sourcename
 - DAILY_PERM_sourcename (CAUTION: do NOT delete the job named DAILY_PERM_EXTRACT)
 - DAILY_PO_PROCESS_sourcename
 - DAILY_SALES_PROCESS_sourcename
 - HIST_COMMON_PROCESS_sourcename
 - HIST_PERM_sourcename
 - HIST_PO_PROCESS_sourcename
 - HIST_SALES_PROCESS_sourcename
- 11 In the Scheduler, run the INITIAL_JOB_SETUP job.
- 12 The list of History and Daily jobs will have been rewritten by the INITIAL_JOB_SETUP job. Make sure any customizations that were made to the new job templates are now in the source-specific copies of those jobs (or reapply any customizations as necessary). Also add to the end of the DAILY_ and HIST_ load lists any jobs that occurred after the snapshot jobs (which you noted in the Preparation section).
- 13 This might be a good time to review the Parameters and their definitions in the BI 3.5 Installation Guide. Check your parameter settings; you might want to consider changing some, such as various PROCESS_DAYS and SNAPSHOT_NUM_DAYS values, to make sure you are not reloading extra data unnecessarily each day. The module PROCESS_DAYS are typically set to 10 by default; SNAPSHOT_NUM_DAYS are set to 31 by default.

Fixing Existing Fact Tables

Now run the jobs to reload the fact tables you had truncated earlier. Note that you will need to run these for each source. Depending on the amount of history data in your system, these jobs may take a while to run.

- 1 Set parameter JOB_CHAINING_ENABLED to N.
- 2 Run the job SET_CONNECTION_XXXXXX, where XXXXXX = the source connection name.
- 3 Run HIST_PERM_EXTRACT.
- 4 Run the job HISTORY_RELOAD_OM_35_UPGRADE.
- 5 Run the job HISTORY_RELOAD_PO_35_UPGRADE.
- 6 Run the job UPGRADE_FACT_PO_RECEIPT_341_TO_35.
- 7 (SE sources only) Run the job RELOAD_SE_AP_AR_FROM_PERM.
- 8 Repeat steps 2-7 for each source connection (if you have multiple sources).
- 9 Run the job HISTORY_SALES_ROLLUP.
- 10 Run the job HISTORY_PO_ROLLUP.
- 11 When upgrade jobs have been run for all sources, make sure to set the parameter JOB_CHAINING_ENABLED back to Y.

Re-create Purchasing Cube

If you use the Purchasing cube, you must delete the measure group that referenced the fact_po_booking table:

- 1 Delete the cube in the Analysis Server.
- 2 In the DWD, right-click on the OLAP Purchasing cube and select Display Measure Groups.
- 3 Right-click on the fact_po_booking measure group and choose Delete Measure Group. Click OK to answer the verification questions about deleting the associated measures.
- 4 Right-click on the OLAP Purchasing cube and choose Create (Alter) Cube.
- 5 Process the cube.

Upgrade should be complete at this point. Resume normal processing.

To Add a new Source

If you want to add an additional data source, do the following:

- 1 Add the new source name to DAILY_LOAD_SOURCE_Sxx (where xx represents the next number in the sequence).
- 2 Add the new source name to HIST_LOAD_SOURCE_Sxx (where xx represents the next number in the sequence).
- 3 Add the new source name to INITIAL_JOB_SETUP_CONNECTION_xx (where xx represents the next number in the sequence).
- 4 Add a new INITIAL_JOB_SETUP_CONNECTION_xx_RUN (if it does not already exist) and set its value to N.
- 5 Add a new INITIAL_JOB_SETUP_CONNECTION_xx_TYPE (if it does not already exist) and set its value to either EE or SE depending on which type your financials system for that source is.
- 6 Make sure INITIAL_JOB_SETUP_DATE is set to the current date.
- 7 Double-check the INITIAL_JOB_SETUP_CONNECTION_xx_RUN parameters to make sure that any sources that have been historically loaded have a Y next to their relative _xx_ number and that any new sources have an N.
- 8 Go to the Scheduler. Start the HIST_START job. Once it starts, double-check to make sure it started running HIST_ jobs only for your new data source.

Update Portal Model

Log in to the Portal as an Administrator. Go to the Administration menu and choose Model Administration. Click on Rebuild Model.

After the model has been rebuilt, if you have any custom data models, open each model and save it to ensure that it picks up changes in the Master model.

Update Portal Documentation and Standard Objects

Update the metadata documentation:

- Delete the existing TOMCAT_HOME\webapps\your_bi_appname\documentation\suite directory.
- Unzip the latest qadbi-documentation.zip (found on the BI 3.5 Modules CD) into your TOMCAT_HOME\webapps\your_bi_appname\documentation directory.

To install the latest BI Portal standard objects, copy these files from the BI 3.5 Modules CD into your TOMCAT_HOME\webapps\your_bi_appname\export directory:

- BI35_deprecated_items.zip
- qad_standard_items.zip

Then, in the BI Portal:

- 1 Log in as an Administrator.
- 2 Go to the Administration -> Data Migration screen.
- 3 Click on the Import tab.
- 4 Select the Update existing records box.
- 5 Click the radio button in front of File on server.
- 6 Enter in the box the file name BI35_deprecated_items.zip and click on Import.
- 7 Repeat for the qad_standard_items.zip file.

Release Notes for Release 3.4.1

QAD Business Intelligence Version: 3.4.1

Date: June 2011

QAD BI 3.4.1 continues the evolution of QAD business intelligence to bring more modules for analysis and an improved portal with which to explore that data.

New Feature Summary

Portal

- Locale-specific formatting: The portal will now display numerical values and dates on reports and grids in locale-specific format. (QBI-647)
- The portal has been certified to run in Tomcat 7.0. (QBI-643)
- The portal has been certified to run in SQL Server 2008 R2. (QBI-644)

Modules

- The analytical modules have been certified to run in SQL Server 2008 R2. (QBI-644)
- The Accounts Receivable (AR) and Accounts Payable (AP) fact tables now include a link to a dim_expected_pay_date dimension. (QBI-226)
- All Data Warehouse tables now support multi-byte characters (all varchar and char columns have been changed to nvarchar). (QBI-629)

Fixes

Component	Issue ID	Description
Portal	QBI-609	Internationalization - Query designer display of Average, Minimum, Maximum for measures not handling all characters properly
Portal	QBI-637	Portal Upgrade loses target of action item in visualizations
Portal	QBI-646	Visual Items - cannot pass in the value of a level to the drill in when the level is not included in the chart
Portal	QBI-663	Reports: parameters of type datetime do not get passed into the reports
Portal	QBI-669	Sometimes dashboard menu items (folders) display \${Name} rather than translated strings
Portal	QBI-670	Top visual item border not displayed if "show titlebar" is turned off
Portal	QBI-673	Columns of type DateTime defined on dimensions really only capture Date (not the time component) and should be interpreted as such
Portal	QBI-679	Can't select "no format" for Order Date in Reports; Order Date defaults to specific format (rather than no format) in Grids
Portal	QBI-692	Query Designer: Lost context (right-click) menu on Filters
Portal	QBI-694	Repository browser: lost right-click menu on items in Reference By tab
Portal	QBI-695	Test Run button on query designer won't work for other languages
Metadata	QBI-275	CA815434 - Issue with same day cancelled orders in population of fact_om_booking.
Metadata	QBI-308	AR invoices staging not mapping expected payment date to due date if the expected payment date is blank.
Metadata	QBI-505	AR Invoice contains record not in AR Invoice History
Metadata	QBI-568	load_id_det hangs due to oversized comment columns

Component	Issue ID	Description
Metadata	QBI-573	EE: needs to get invoice type for OM from different column than SE
Metadata	QBI-575	INITIAL_JOB_SETUP works only off of HIST_LOAD sources, not DAILY_LOAD sources
Metadata	QBI-583	hist_load_wait_for_tr_hist ends with "unhandled exception"
Metadata	QBI-586	load_pod_det - not running off scheduler but will run manually
Metadata	QBI-607	EE AP/AR loads fail if more than one EE data source
Metadata	QBI-608	AP and AR Snapshots processed more than necessary in multisource environment
Metadata	QBI-612	CLEANUP_LOAD_TABLES job doesn't include EE financial load, stage tables
Metadata	QBI-613	stage_inv_transaction_con_cus5 not processed in any job
Metadata	QBI-619	CA812413 - Product Group Description not populated correctly
Metadata	QBI-620	AR and AP SE History Snapshots not using AR/AP_SE_HIST_SNAPSHOT_START_DATE parameter
Metadata	QBI-621	OM non-OLAP cubes have problems with some dimension level hierarchies
Metadata	QBI-622	Order Management history reload not properly processing historic data
Metadata	QBI-623	ConvertCurrencyValueTrans sets base value to 0 if exchange_rate = exchange_rate1
Metadata	QBI-625	Orders in 7.15.1 Sales Orders by Order Report (eB) not reported in 7_15_1 OM Order Validation (BI)
Metadata	QBI-629	Data Warehouse not handling Chinese characters in ETL process
Metadata	QBI-634	fact_gen_led_report_line dimension keys incorrectly flagged as additive, have incorrect Source Table values
Metadata	QBI-636	UNICODE checkbox on the Source Mapping tab of the load tables not set
Metadata	QBI-638	CA817513 - fact_inv_mth_balance does not match QAD Progress load_ld_det.ld_status is null causing quantity to drop
Metadata	QBI-640	CA814417 - Fact_ar_invoice_snapshot has \$42 Million in 201012 and it should be closer to \$2 Million ("amount_open_base_91_over" too high due to closed ar invoices not fully paid)
Metadata	QBI-645	Behind one day for fact_ar_invoice_snapshot
Metadata	QBI-658	EE AP and AR Invoice Snapshot Fact table update procedures don't delete 'interim' records for current month
Metadata	QBI-661	For EE loads of AR/AP if there is more than one source system being installed at the same time, nothing prevents the next data source from running even though the AR/AP tables are not finished loading.
Metadata	QBI-678	EE AR/AP History loads can be corrupted if GL load fails
Metadata	QBI-681	Daily SE AR Invoice processing failed at stage_ar_inv_hist_age_recalc Custom job - trying to insert NULL into fact_ar_invoice_history.dim_expected_pay_date_key
Metadata	QBI-560	Need to research purpose of SALES_ORDER_HISTORY_DATE and PO_ORDER_HISTORY_DATE parameters and the problems created by them lagging after a restart.

Known Issues

Portal Issues

- The BI Portal application cannot run in the same instance of Tomcat as QXTend. (QBI-174)
- Visual items: drill-in using hierarchy the "loading" spinner displays forever. (QBI-181)
- Model changes in RED are not picked up unless a custom model is opened in the Portal, saved and closed. (QBI-127)
- Creating two Dashboards with same name in different folders causes problems. (QBI-514)

- "Compare By" in Query Design does not allow calculated fields. (QBI-587)
- Export to PDF of report - Chinese characters don't show up properly. (QBI-590)
- The GUI supports translation of repository object names, but the Export/Import object functionality does not yet include the import and export of the translated strings (QBI-604)
- Rename of Data Security Model changes name in Model screen, but not in Add/Edit User screen. (QBI-626)
- Query Designer Advanced mode cannot be used if the query includes a Comparative component. (QBI-671)
- In the BI Portal, a Dashboard text area cannot be edited when Firefox is the browser. (QBI-677)

Metadata (Module) Issues

- fact_ar_invoice_history has the 'entered date' value stored as a degenerate dimension value rather than as a dimensional join. This will change to a full dimension join in future releases of the BI data warehouse. Doing so might cause some queries to need to change in the future. (QBI-26)
- fact_om_order_history is currently filtering out any orders where the open_amount in tr_hist = 0. We need these transactions to complete the history of transactions. (QBI-664) This problem can also cause fact_om_order_performance to give false late markers. (QBI-700)
- Installation of BI analytical modules in a pre-domain ERP environment requires manual changes to metadata. (QBI-691)
- The BI analytical modules do not yet support the QAD ERP running in Oracle. (QBI-693)
- The FINANCIAL_REPORT_GENERATOR job only works on Standard Edition data, not on Enterprise Edition. (QBI-697)
- dim_credit_term - slowly changing dimension, creates new dimension key using same column values every day. (QBI-704)
- fact_po_order_history is filtering out the offspring of blanket orders and it's unclear if this is actually correct. (QBI-705)

Upgrade to QAD BI 3.4.1 from BI 3.4

BI Portal Upgrade Procedure

Preparation

- 1 Shut down Tomcat.
- 2 Back up the BI Portal database.

Note QAD BI Portal version 3.4 requires WhereScape RED or QAD BI DWD version 6.1 or later.

Upgrade Steps for QAD BI Portal

- 1 Copy the TOMCAT_HOME\webapps\your_bi_appname directory to TOMCAT_HOME\your_bi_appname.save34 so that you have a backup of your BI 3.4 web application.
- 2 Unzip the new BI 3.4.1 Portal data.zip file into TOMCAT_HOME\webapps\your_bi_appname, overwriting any existing files with the newer version from the data.zip file. Your configuration files will not be overwritten.

3 Start Tomcat.

Note on Password Encryption in the BI Portal

As of BI Portal 3.4, you may now encrypt the SQL Server password in both the server-config.xml file (which contains the connection information for the BI Portal database) and in the aw_sys_config table (which contains the connection information for the BI Data Warehouse). The encryption uses the Blowfish algorithm.

A command-line tool to encrypt the password named encpwd.bat is located in TOMCAT_HOME\webapps\your_bi_appname\cmdline. To run this, open a DOS window, change to the cmdline directory, and run:

```
encpwd.bat mypassword
```

The encrypted password will be printed on the screen. Copy this value and use it in the server-config.xml file as the value for the pwd. Also make sure that pwdEncrypted="true". (If you change back to using an unencrypted password value, make sure you set pwdEncrypted="false".)

Similarly, if you want to encrypt the password used by the Portal to connect to the Data Warehouse, use the encpwd.bat script to generate the encrypted password, then edit the value for the jdbcPassword in the aw_sys_config table, the DATASERVICE row, and set it to the encrypted value; make sure you add pwdEncrypted="true".

If you change either password, you must stop and restart Tomcat for the change to take effect.

Verification

- 1 Connect to your BI Portal. Click on the About link on the login screen and verify that the Version is 3.4.1 and the Build Number is BI3-TRUNK-JOB1-1008.

BI Metadata Upgrade Procedure

Refer to the release notes for what has changed in this release. One of the very important changes is that the warehouse now supports multi-byte characters. All varchar and char columns will now be changed to nvarchar.

Preparation

- 1 Take a backup of the current warehouse database.
- 2 Plan for a couple of hours of down time.
- 3 Ensure none of the loads are currently in progress. All jobs must be completed.
- 4 Stop Scheduler.
- 5 Before you begin, make note the the following:
 - a Note the AP_EE_HISTORY_DATE (if it exists): _____
 - b Note the AR_EE_HISTORY_DATE (if it exists): _____
 - c Note any DAILY_LOAD_SOURCE_Sxx jobs that appear after the standard _SNAPSHOT tables:

 - d Note any HIST_LOAD_SOURCE_Sxx jobs that appear after the standard _SNAPSHOT tables:

Warning This upgrade will replace all your load tables, so if there are any customizations to the load tables, ensure they are ready to be made again.

Upgrade Steps for QAD BI Metadata

- 1 Log in to Setup Administrator.
- 2 Load Application 341-up (this includes all tables, but only new/modified parameters and jobs).
- 3 A dialog box will prompt you "Do you want to proceed now?"; click OK.
- 4 The next dialog box is for "Application Load Properties":
 - a Select Dimension on the left; on the right, click on the box next to "Existing Dimension objects will be" and select Altered.
 - b Select Dimension View on the left; on the right, click on the box next to "Existing Dimension View objects will be" and select Recreated.
 - c Select Stage Table on the left; on the right, click on the box next to "Existing Stage table objects will be" and select Altered.
 - d Select Permanent Stage Table on the left; on the right, click on the box next to "Existing Permanent Stage table objects will be" and select Altered.
 - e Select Fact Table on the left; on the right, click on the box next to "Existing Fact table objects will be" and select Altered.
 - f Click OK.
- 5 The upgrade application installation will take some time as the load process alters/recreates various objects. Once the process completes, make any necessary customizations to your load tables. Verify that all other customizations are not affected.
- 6 Start the Scheduler, but make sure all jobs are still suspended.
- 7 You must populate some new parameters and possibly modify some existing values, as follows:
 - a (EE sources only) Populate AP_EE_HISTORY_DATE_MIN with a value approximately three years back or whatever date value the customer specifies for their historic loads to begin at. Note the different date format of YYYYMMDD.
 - b (EE sources only) If it doesn't exist, create an AP_EE_HISTORY_DATE_Sxx where xx = the number for every EE source system you have already installed. The number for each source should correspond to the source tied to the 'xx' number values at the end of the corresponding Parameters for DAILY_LOAD_SOURCE_Sxx, HIST_LOAD_SOURCE_Sxx and INITIAL_JOB_SETUP_CONNECTION_xx. It's OK to skip numbers if you have an SE source system in between. Populate that value with the AP_EE_HISTORY_DATE you noted at the beginning.
 - c (EE sources only) Populate AR_EE_HISTORY_DATE_MIN with a value approximately three years back or whatever date value the customer specifies for their historic loads to begin at. Note the different date format of YYYYMMDD.
 - d (EE sources only) If it doesn't exist, create an AR_EE_HISTORY_DATE_Sxx where xx = the number for every EE source system you have already installed. The number for each source should correspond to the source tied to the 'xx' number values at the end of the corresponding Parameters for DAILY_LOAD_SOURCE_Sxx, HIST_LOAD_SOURCE_Sxx and

INITIAL_JOB_SETUP_CONNECTION_xx. It's OK to skip numbers if you have an SE source system in between. Populate that value with the AR_EE_HISTORY_DATE you noted at the beginning.

- e Set INITIAL_JOB_SETUP_CONNECTION_01_RUN to Y. If you have more than one source, create (if necessary) and set to Y a parameter named INITIAL_JOB_SETUP_CONNECTION_xx_RUN (where xx = the source number) for each INITIAL_JOB_SETUP_CONNECTION_xx source that has already been historically loaded.
- f *****Very important ***** - Check the PO_ORDER_HISTORY_DATE and SALES_ORDER_HISTORY_DATE parameters. If the current date minus the PO_PROCESS_DAYS is newer than the PO_ORDER_HISTORY_DATE, or the current date minus the SALES_PROCESS_DAYS is newer than the SALES_ORDER_HISTORY_DATE, increase the process days value so that the current date minus that number of days will produce a date that is before the related ORDER_HISTORY_DATE (PO or SALES). Then set INITIAL_JOB_SETUP_DATE to the current date.
- g Change INITIAL_JOB_SETUP_ENABLED to Y.
- h If you want to add an additional data source now, do the following:
 - Add the new source name to DAILY_LOAD_SOURCE_Sxx (where xx represents the next number in the sequence).
 - Add the new source name to HIST_LOAD_SOURCE_Sxx (where xx represents the next number in the sequence).
 - Add the new source name to INITIAL_JOB_SETUP_CONNECTION_xx (where xx represents the next number in the sequence).
 - Add a new INITIAL_JOB_SETUP_CONNECTION_xx_RUN (if it doesn't already exist) and set its value to N.
 - Add a new INITIAL_JOB_SETUP_CONNECTION_xx_TYPE (if it doesn't already exist) and set its value to either EE or SE depending on which type your financials system for that source is.
- i In the Scheduler, run the INITIAL_JOB_SETUP job.
- j The list of History and Daily jobs will have been re-written by the INITIAL_JOB_SETUP job. Now add to the end of the DAILY_ and HIST_ load lists any jobs that occurred after the snapshot jobs (which you noted in the Preparation section).
- k Double-check the INITIAL_JOB_SETUP_CONNECTION_xx_RUN parameters to make sure that any sources that have been historically loaded have a Y next to their relative _xx_ number and that any new sources have an N.
- l If you have added a new data source, go back to the Scheduler. Start the HIST_START job. Once it starts, double check to make sure it started running HIST_ jobs only for your new data source.

Fixing Existing SE Accounts Receivable (AR) Data

If you have SE sources and use the AR module, you will have to run the job named JOB_FOR_QBI_640 once for each SE source to correct improper AR aging calculations that were not taking into account the CLOSED status of an invoice. The AR Aging calculations for open amounts no longer include any unpaid remainders from closed invoices.

To run the job to correct existing data:

- 1 Set the parameter AR_PROCESS_CONNECTION_NAME to an SE source connection name.
- 2 In the QAD_MASTER connection, set the connection to the SE source with the appropriate extract id and password.
- 3 Run the job JOB_FOR_SE_QBI_640 in the Scheduler.
- 4 Repeat for each SE source connection (if you have multiple SE sources).

Run the Upgrade Script in SQL Server

A new dimension, dim_expected_pay_date, has been linked to the Accounts Payable and Accounts Receivable fact tables. In order to set the correct dimension key in the fact tables for existing rows, you must run a script in SQL Server as follows:

- 1 Log in to SQL Server studio.
- 2 Connect to the BI datawarehouse database and run the v34to341_metadata_post_upgrade.sql (found in the BI Portal install\sqlserver directory).

Upgrade should be complete at this point. Resume normal processing.

Update Portal Documentation and Standard Objects

To install the latest metadata documentation into your BI Portal, unzip the latest qadbi-documentation.zip into your TOMCAT_HOME\webapps\your_bi_appname\documentation directory, overwriting the previous suite subdirectory and its contents.

To install the latest BI Portal standard objects, copy the qad_standard_items.zip file into your TOMCAT_HOME\webapps\your_bi_appname\export directory. Then, in the BI Portal, log in as an Administrator. Go to the Administration -> Data Migration screen, click on the Import tab, click the radio button in front of "File on server" and enter in the box the file name qad_standard_items.zip. If you do NOT check the "Update existing records" box, only new objects will be imported; any of your current QAD Standard Objects will not be modified. To update the existing objects, check the "Update existing records" box. (You might want to export all objects prior to this step, so that you have a backup prior to updating existing records.)

Release Notes for Release 3.4

QAD Business Intelligence Version: 3.4

Date: March 2011

QAD BI 3.4 continues the evolution of QAD Business Intelligence to bring more modules for analysis and an improved portal with which to explore data. The data warehouse has been extended to include Financials (Enterprise Edition) schema set and a few extensions (new metrics) to the Purchasing schema. The portal is now internationalized so users of different languages can query/analyze the data in their preferred language. Also, the power of Comparative Queries in the Portal lets users compare measures side by side against given criteria.

- New Feature Summary
- Fixes
- Known Issues
- Upgrading to QAD BI Portal 3.4 from 3.3.x

New Feature Summary

Portal

- Comparative Queries allow users to do a side-by-side comparison of measures against time periods, or any other dimension values.
- Internationalization: The portal is now internationalized and can be configured for all 14 QAD supported languages.
- Fact Views created in the data warehouse are now visible and can be queried using the portal.

Modules

- Purchasing: New metrics added.
- EE Financials: Support for selected Enterprise Edition Financials metrics, reports and dashboards.
- Internationalization: Language translations have been added to all the modules, so table and column names when viewed in the portal display in the user's preferred language.
- A new, QAD-branded data warehouse designer that supports Unicode data loads.

Fixes

Component	Issue ID	Description
Portal	QBI-601	Data Security Model Builder - saved new model builder - name not saved
Portal	QBI-600	Internationalization - New Folder dialog buttons overlap when labels are longer than in English (for example, in German)
Portal	QBI-595	Translated data security model names not displaying properly
Portal	QBI-577	Query Editor: Advanced SQL shows extra line breaks
Portal	QBI-572	Parameter substitution incorrect in visual items
Portal	QBI-559	Wrap text on the column headers in grids
Portal	QBI-558	Invalid XML error on multi-series charts with measures that have a > character in their name

Component	Issue ID	Description
Portal	QBI-557	Report parameter supplied by drill in is not shown when the default value comes from a query
Portal	QBI-534	Dashboard with visual item with two parameters, and two parameter bars, not matching parameters properly, results in no data displayed
Portal	QBI-524	Charts take up more space in v3.3 compared to v3.2
Portal	QBI-523	Report Wizard causes error if unselect a field which happens to be a group by criteria
Portal	QBI-512	No scroll bar if Visual Item has many Actions
Portal	QBI-508	Editing an existing advanced query does not allow the user to go to the Next page
Portal	QBI-507	Advanced queries with parameters causes an error when creating report using the wizard
Portal	QBI-501	Change Password upon login dialog doesn't verify that entered & re-entered password actually match
Portal	QBI-472	Visual Item: allow reordering of measures on charts
Portal	QBI-470	Visual Item: uploaded images should retain their original size
Portal	QBI-469	Query Designer - sometimes the filters don't show up
Portal	QBI-467	multiple text areas on dashboard - font changes affect both
Portal	QBI-443	User Admin: Add User screen lets you enter Password values but doesn't use those values - disabled the password fields for User add operation.
Portal	QBI-416	Free form visual item allows rich text editor too - highlight links when put in place properly
Portal	QBI-411	Highlight links in dashboard text areas
Portal	QBI-331	Dashboard: Minimized objects stored that way in dashboard designer don't minimize to same location when viewing dashboard
Portal	QBI-328	Report Wizard: Can't set currency character to a Euro
Portal	QBI-217	Visual Item: Freeform item - when I select the text of a new item to edit it, the Selection Properties panel goes blank
Portal	QBI-452	Charts: filter inappropriate values from query on server, pass message to client
Portal	QBI-176	Allow for encryption of SQL Server password in server-config.xml
Metadata	QBI-597	dim_customer.salesperson1_code null when stage_customer had values for it
Metadata	QBI-596	Current and Previous YTD still wrong in daily_date_roll_qad
Metadata	QBI-581	Incorrect dependencies in HIST_LOAD_PERM caused permsup_om_invoice_line to have 0 rows even though perm_om_invoice_line has data
Metadata	QBI-544	load_idh_hist and load_SYSCOLUMNS lacking post- load File Action to delete all temporary files
Metadata	QBI-528	daily_date_roll_qad does not set week-in-year properly
Metadata	QBI-518	Make specific dimension views for dim_customer to make it easier to understand what kind of customer it is
Models	QBI-554	Constraints on data models are always created with a NotIn clause irrespective of what the user selects on the UI
Models	QBI-539	Model Builder ignoring EUL-visible flag on measures
Portal Standard Objects	QBI-606	Remove certain financials reports

Component	Issue ID	Description
Portal Standard Objects	QBI-549	Remove numbers from names of Portal Standard Items
Services	QBI-478	If tomcat started before SQL/Server, all connections in pool are invalid
Services	QBI-450	Add a standard format for date and time

Known Issues

- One of the Inventory tasks—stage_inv_transaction_con_cus5 Process—is missing from both the History and Daily load jobs. To correct this, prior to running the INITIAL_JOB_SETUP, Edit Tasks for both the HIST_INV_PROCESS_XXXXXXX and DAILY_INV_PROCESS_XXXXXXX jobs. After stage_inv_transaction_con_cus4 and before stage_inv_transaction_con_sup, add the task stage_inv_transaction_con_cus5 with the action Process. This task should not be grouped with those above or below it; it should have an Order that is higher than the con_cus4 task and lower than the con_sup task. Save and rebuild dependencies.
- The BI Portal application cannot run in the same instance of Tomcat as QXtend. (QBI-174)
- Visual items: drill-in using hierarchy the loading spinner displays forever. (QBI-181)
- Model changes in QAD BI DWD are not picked up unless a custom model is opened in the Portal, saved and closed. (QBI-127)
- fact_ar_invoice_history has the entered date value stored as a degenerate dimension value rather than as a dimensional join. This will change to a full dimension join in future releases of the BI data warehouse. Doing so might cause some queries to need to change in the future. (QBI-26)
- Now that the GUI supports translation of repository object names, the Export/Importobject functionality needs to support the import and export of the translated strings. (QBI-604)

Upgrading to QAD BI Portal 3.4 from 3.3.x

Preparation

- 1 Shut down Tomcat.
- 2 Back up the BI Portal database.

Note QAD BI Portal version 3.4 requires WhereScape RED or QAD BI DWD version 6.1 or later.

Upgrade Steps for QAD BI Portal

- 1 Move TOMCAT_HOME\webapps\your_bi_appname to TOMCAT_HOME\your_bi_appname.save33.
- 2 Unzip the new data.zip file into TOMCAT_HOME\webapps\your_bi_appname.
- 3 In TOMCAT_HOME\webapps\your_bi_appname\WEB-INF\config, copy the server-config.xml.default file to server-config.xml. Edit the file and set the connection information as it was set in your server configuration file, TOMCAT_HOME\your_bi_appname.save33\WEB-INF\config\server-config.xml file. Do not simply copy over your old file; there is a new section in the server-config.xml to support different languages that must be present. If you do not want to make all the languages available in the Add/Edit User dialog, you can remove the unnecessary ones from the list. However, at least one language must exist in the localeConfig section of the configuration file.

- 4 As there were no changes in BI Portal 3.4 to the LoggerConfig.properties file, you may either copy over the default and set up your log path; or just copy your old TOMCAT_HOME\your_bi_appname.save33\WEB-INF\config\LoggerConfig.properties file to TOMCAT_HOME\webapps\your_bi_appname\WEB-INF\config.
- 5 Copy over from your saved BI 3.3.x webapp directory any folders and documents containing content that you want to continue to access, such as:
 - m The documentation directory (if you had installed the Analytical Module documentation that comes with the metadata).
 - n The published directory (if you had installed the Excel spreadsheets for accessing cubes that comes with the metadata).
 - o Any images in the images directory.
 - p If you had customized a logo image for use in reports, copy that to the new TOMCAT_HOME\webapps\your_bi_appname\WEB-INF\classes\images directory.
- 6 Run the 3.3.x to 3.4 Portal upgrade script in your Portal database. Make sure that there are no errors in the output.
 - a In SQL Server Management Studio, choose File -> Open -> File. Navigate to your new TOMCAT_HOME\webapps\your_bi_appname\install\sqlserver directory and choose the v33tov34.sql script.
 - b Make sure the BI Portal database is selected as the target database.
 - c Click on Execute.
- 7 Start Tomcat.

Note on Password Encryption in the BI Portal

With this release of BI Portal, you can now encrypt the SQL Server password in both the server-config.xml file (which contains the connection information for the BI Portal database) and in the aw_sys_config table (which contains the connection information for the BI Data Warehouse). The encryption uses the Blowfish algorithm.

A command-line tool to encrypt the password named encpwd.bat is located in TOMCAT_HOME\webapps\your_bi_appname\cmdline. To run this, open a DOS window, change to the cmdline directory, and run:

```
encpwd.bat mypassword
```

The encrypted password will be printed on the screen. Copy this value and use it in the server-config.xml file as the value for the pwd. Also make sure that pwdEncrypted=true. (If you change back to using an unencrypted password value, make sure you set pwdEncrypted=false.)

Similarly, if you want to encrypt the password used by the Portal to connect to the Data Warehouse, use the encpwd.bat script to generate the encrypted password, then edit the value for the jdbcPassword in the aw_sys_config table, the DATASERVICE row, and set it to then encrypted value; make sure you add pwdEncrypted=true.

If you change either password, you must stop and restart Tomcat for the change to take effect.

Verification

Connect to your BI Portal. Click on the About link on the login screen and verify that the Version is 3.4 and the Build Number is BI3-TRUNK-JOB1-972.

Release Notes for Release 3.3.2

QAD Business Intelligence Version: 3.3.2

Date: December 2010

QAD BI 3.3.2 fixes an issue with the Portal's security builder.

Fixes

Component	QAD Issue	Customer Case	Description
Portal	QBI-556		Security models built on a dimension using an "IN" clause were incorrectly building with a "NOT IN" instead. This has been corrected, and models can be built properly.

Known Issues

- The BI Portal application cannot run in the same instance of Tomcat as QXTend. (QBI174)
- Model changes in RED are not picked up unless a custom model is opened in the portal, saved and closed. (QBI-127)
- fact_ar_invoice_history has the 'entered date' value stored as a degenerate dimension value rather than as a dimensional join. This will change to a full dimension join in future releases of the BI data warehouse. Doing so might cause some queries to need to change in the future. (QBI-26)
- The server-config.xml file includes user and password information for connecting to the QAD BI Portal database. Please secure this file properly with file system permissions. (QBI-176)

Release Notes for Release 3.3.1

QAD Business Intelligence Version: 3.3.1

Date: November 2010

QAD BI 3.3.1 adds new information in the Inventory warehouse module and a few minor fixes for the BI Portal.

New Feature Summary

Modules

Inventory: The inventory schema has been extended to include the following new measures:

- Average daily issued quantity and value historical: these columns contain the quantities of inventory issued during a period, and the value of that inventory based on standard costs for the items in the inventory being collected.
 - average_daily_issued_quantity_historical
 - average_daily_issued_value_historical
- Days on hand historical: inventory projected days on hand based on historic usage information for the inventory. Period calculations for inventory usages are used to project the amount of available inventory.
 - days_on_hand_historical
- Days on hand projected: projected amount of inventory on hand based on demand records recorded for that inventory. This value is recalculated daily to give accurate measures of inventory requirements.
 - days_on_hand_projected

Multi-measure cubes: Three new Multi-measure cubes have been added. These cubes cover Inventory, Purchasing and Sales. Each cube contains multiple fact tables from the module area, allowing the user to not only explore the fact tables themselves along many dimensions but to also relate the fact tables together inside an Excel pivot table.

Fixes

Component	QAD Issue	Customer Case	Description
Portal	QBI-527		Visual items were taking up slightly more space in 3.3 than the same visual item in 3.2, causing some dashboards to align incorrectly. This has been corrected.
	QBI-526		In some instances, editing a query in advanced mode did not allow the user to press the “next” button. This kept the user from assigning types to the columns in the advanced query. This is now corrected and the wizard button is always available.
	QBI-525		Using an advanced query that had multiple parameter values would cause a failure in the report designer when operating with that query.
Modules	QBI-475, QBI-476		The daily date roll stored procedure was not properly setting the YTD, MTD and QTD fields correctly. These calculations have all been updated to be correct.
	QBI-536		Item standard costs were not always updating in daily loads. This has been corrected: an item’s cost is now always loaded in daily runs.
	QBI-485, QBI-486		Problems during load could occur with very long holiday descriptions, or merged holiday name and description fields.

Component	QAD Issue	Customer Case	Description
	QBI-490		Indexes for all dimensional joins on fact tables have now been added in the data warehouse.
	QBI-506		The default setting for an installations snapshot table summaries is now set to monthly (M) rather than weekly (W). This default setting is more appropriate for most customers, and uses far less disk space.
	QBI-535		Unit costs on shipments are now correctly calculated on shipments when the item being shipped is a kit, not an individual item.
	QBI-537		Some display names in AP Voucher History, AP Invoice Snapshot and OM Order History have been changed to reflect a consistent naming standard for the costs and the currency in which they have been represented.
	QBI-495		An item's weight (net_weight) and unit of measure for the weight (net_weight_um) has been added to the dim_item dimension.
	QBI-509		The financial report generator tables would mistakenly enter many rows for line items in some cases. While this was often benign, the multiple rows were confusing and this behavior has been removed.
	QBI-538		GL accounts that are handled with fiscal period accounting were not properly resetting to zero balances in a new fiscal accounting period. This is now corrected. Accounts can be reset if they are of specific types. See the parameter information in the data warehouse for more information.
	QBI-545		AR and AP aging calculations would be off for records that did not change during a new period. This release fixes the problem, properly aging records even if they do not change in the source system.

Known Issues

- The BI Portal application cannot run in the same instance of Tomcat as QXTend. (QBI174)
- Model changes in RED are not picked up unless a custom model is opened in the Portal, saved and closed. (QBI-127)
- fact_ar_invoice_history has the 'entered date' value stored as a degenerate dimension value rather than as a dimensional join. This will change to a full dimension join in future releases of the BI data warehouse. Doing so might cause some queries to need to change in the future. (QBI-26)
- The server-config.xml file includes user and password information for connecting to the QAD BI Portal database. Please secure this file properly with file system permissions. (QBI-176)

Release Notes for Release 3.3

QAD Business Intelligence Version: 3.3

Date: September 2010

QAD BI 3.3 continues the evolution of QAD business intelligence to bring more modules for analysis and an improved portal with which to explore that data. The data warehouse has been extended to include Purchasing and Inventory schema sets. Extensions in the portal make creating dashboards and reports even easier. The addition of collaboration to the portal changes the user's interactions from reading data into discussion, analysis, and decision making.

New Feature Summary

Portal

- Collaboration: allows users to have a discussion on a dashboard or its contents, or any other subject, directly in the Portal application.
- Impact analysis: track where any query or visual item is used in the environment, and go directly to the item editor to make changes. This is exposed in a new tab on the item in the library view called "Referenced By."
- Edit in place: quickly and easily move inside the designers to a component item, jumping to the editor directly. All visual components have a new "information" icon in the upper right corner that shows details about the item.
- Report modifications: Reports are easier to create and run, with more control over parameter positions, report titles and formatting.
- Query Editor enhancements: data can be exported directly to Excel, a count of rows from each query is returned, and a new Test Run button allows for quick testing of a query.

Modules

- Inventory: inventory transactions and monthly summary schema sets have been added to the Operations module
- Purchasing: bookings, order history and receipts schema sets added to the finance module
- A new, QAD branded data warehouse designer

Fixes

Component	QAD Issue	Customer Case	Description
Portal	QBI-204		Clicking on a folder in the repository browser would sometimes cause the application to take a long time to display folders. This has been corrected.
	QBI-217, 220, 223		The portal's freeform item editor has been redesigned to allow easier and more functional creation of freeform items.
	QBI-238		Internet Explorer would fail to export reports in PDF or Excel format if the BI portals's tomcat server was not in the list of trusted sites. This has been corrected. Please note that File Download and Automatic Prompting for file download should be enabled in Internet Explorer. Typically these options are automatically enabled if the Portal server is included in the user's Trusted Sites or Local Intranet security zone.

Component	QAD Issue	Customer Case	Description
Modules	QBI-333		The parameter selection box now allows the user to type in a value. As the user types into the control, the list of parameters that start with the data being input are displayed in a selection list. The user can either type in the full value, or use one of the values from the displayed selection list.
	QBI-344		Report output in Excel format now correctly places output into Excel rows and columns so that the data can be easily sorted, filtered and otherwise manipulated.
	QBI-269		The Portal's query designer can export the results of a query run to Excel format, allowing the user to run ad-hoc queries and examine the results directly in Excel.
	QBI-318		All designer views now show the full path of the item being edited in the upper right of the item view. This information is presented when the user presses the blue "information" icon in the upper right.
	QBI-426, 166		If a report is selected from the Portal with all parameters filled in, or no parameters required at all, the report runs immediately. There is no need for the user to press the run button. Reports that return no information display a status message that no data was returned. Report parameter selections have been moved from a pane at the top of the screen to the left side to allow the user to see all available report parameters without resizing the report parameter selection pane.
	QBI-66		Selected parameter values can be included in the title of the report. To do so, give the name of the parameter in the title surrounded by P{ }. For example, a parameter named 'Territory' could be displayed in the report title with a string like this: Open inventory amount: P{Territory}
	QBI-382		Items in the designer libraries can now be moved from folder to folder, rather than just copied and the deleted from the source folder.
	QBI-232		When creating a chart style visual item the user can now select one of a set of dimension values in the query to use as the X axis for the chart. This allows the user to easily select dimension values such a month number in year (1 to 12) and month name, sort on the former and display the latter.
	QBI-381		Selections of a column in a grid and report now default to the format of that column as populated in the metadata.
	QBI-3		The internal permanent storage table 'perm_item_master' was visible to the user in the BI Portal. This has been adjusted so this table does not appear in the Portal's query designer.
	QBI-260		Documentation has been expanded for all fact and dimension tables. This documentation is available as a link off the Portal's "Welcome" dashboard and is included in the metadata release package.
	QBI-387		The CFO dashboard in the Portal uses fact_gl tables. These tables are populated with metrics of interest to those examining the general ledger and require modification at installation time. Documentation for these modifications is now given in the installation guide. See the section on installing the CFO dashboard.
	QBI-29		OM Shipments (fact_om_shipment) now has valid data for the effective date column. This information was not correctly populated in earlier data warehouses.
	QBI-401	CA785678	Added the sales person assigned to a customer into the customer dimension view. Expanded the AR fact tables to show the 4 sales people assigned to a receivable.
	QBI-369, 363		Added required date to order management shipment and performance fact tables. The required date can be used to determine if the order was shipped on or before the date that the receiver required the shipment.

Component	QAD Issue	Customer Case	Description
	QBI-430, 421		A number of problems with columns used by the metadata that do not exist in some SE source systems have been corrected. Notably, the tr_hist.tr_qty_cn_adj column is now properly handled in SE and EE databases.
	QBI-381		The portal's grid and report column formats now default to the metadata's format. The format values for all end user visible columns have been modified to properly show data formats that the BI portal can use.

Known Issues

- The BI Portal application cannot run in the same instance of Tomcat as QXTend. (QBI-174)
- Visual items: drill-in using hierarchy the "loading" spinner displays forever. (QBI-181)
- Model changes in RED are not picked up unless a custom model is opened in the Portal, saved and closed. (QBI-127)
- fact_ar_invoice_history has the 'entered date' value stored as a degenerate dimension value rather than as a dimensional join. This will change to a full dimension join in future releases of the BI data warehouse. Doing so might cause some queries to need to change in the future. (QBI-26)
- The server-config.xml file includes user and password information for connecting to the QAD BI Portal database. Please secure this file properly with file system permissions. (QBI-176)

Release Notes for Release 3.2.1

QAD Business Intelligence Version: 3.2.1

Date: June 6, 2010

Overview

This document contains information about the specific changes in the QAD BI 3.2.2 release. Most changes in this release impact the BI metadata that is used to build the data warehouse. Some changes to standardize names and fields used by the QAD BI Portal are also included.

Defect (metadata)

- Order for two different customers that share the same order number caused problem creating fact_om_order_history and fact_om_order_performance.
- dim_customer_sold_to.region_description had wrong datatype, causing problems in cube creation.
- stage_om_booking_transaction not considering item_number when building fact table, causing failure.
- stage_financial_date displays wrong month at end of financial year.
- fact_om_booking: Unit cost base, corp and trans were not showing up as measures in the portal query builder. Same was true for list price base, corp and trans.
- Unit_costs properly handled in base and trans values.
- Checks with null status in fact_ap_check were not showing as OPEN.
- fact_om_invoice: Unit Cost, List Price, Net Price Base, Corp, Trans were not showing up as measures in the portal query builder.
- Some fact tables do not have proper Business Display Names (End User Labels).
- Some dimension tables do not have proper Business Display Names (End User Labels).
- fact_om_order_history: Unit Cost, List Price, Net Price Base, Corp, Trans were not showing up as measures in the portal query builder.
- fact_om_shipment: Unit Cost, List Price, Net Price Base, Corp, Trans were not showing up as measures in the portal query builder.
- Bookings reversals have wrong effective date.
- AR invoice aging logic is only showing positive amounts, not credits.
- fact_ap_invoice_snapshot, fact_ar_invoice_history, fact_ar_invoice_snapshot - Credit Term Split Sequence should not be a measure in the portal query builder.
- fact_ap_voucher_history: several Amount Open bucket measures not showing up properly as measures in the portal query builder.
- fact_ar_invoice_history: Account Base not showing up properly as a measure in the portal query builder.
- work_ap_check_list has erroneous data source listed, causing data to load improperly.
- fact_om_order_history was not considering transactions that changed before the SALES_ORDER_HISTORY_DATE parameter value, even if they were back changed.
- fact_ap_voucher_history never receives closed vouchers (where the base amount is zero).
- fact_ar_invoice - open_amount_base was calculated incorrectly.
- Address field sizes were expanded to hold large address lengths, throughout the warehouse.
- fact_ap_check contained some checks that were really vouchers.

Defect (portal)

- Dashboard: dashboard view was incorrectly showing multiple scroll bars when the height of the dashboard was set to a smaller size than the items placed on it required.
- Report: Refreshing a query used by a report was not properly refreshing the queries parameters.
- Dashboard: Problems with multiple visual items using parameter bars would periodically cause. incorrect refresh behavior when the parameter bar changed, resulting in no data to display messages.
- Query Designer: use display names for fact tables in the drop down, rather than table names.

Enhancements

- Metadata: Fact table labels (Business Display Names, or EULs) made consistent across fact tables.
- Metadata: added cube creation job.

