

# QAD Business Intelligence Release Notes

## September 2008

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 you have the latest QAD Business Intelligence release notes, installation errata, installation guide, and installation media.

<http://support.qad.com>

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## Release Notes for Current Release

**QAD BI Version:** 2.7.2

**Date:** September 2008

**MFG/PRO Compatibility:** MFG/PRO 9.0, eB, eB2, eB2.1, QAD 2007, QAD 2008 Standard and above, QAD 2008 Enterprise and above

**Languages:** English, French, Spanish, German, Dutch, Simplified Chinese, Traditional Chinese, Japanese, Korean, Polish (Polish available for OpenEdge 10 edition only)

QAD Business Intelligence 2.7.2 ships with two editions of Data Transformer. One supports Progress 9.1D and 9.1E; the other OpenEdge 10.1C.

This release of QAD Business Intelligence now supports both Cognos 8.2 and Cognos 8.3.

The following defects are fixed in this release:

- Update IQD source database error
- Non-English cube generation error
- dw.ini could not be properly configured during installation

# Release Notes for Release 2.7

**QAD BI Version:** 2.7

**Date:** March 2008

**MFG/PRO Compatibility:** MFG/PRO 9.0, eB, eB2, eB2.1, QAD 2007, QAD 2008 Standard, QAD 2008 Enterprise

**Languages:** English, French, Spanish, German, Dutch, Simplified Chinese, Traditional Chinese, Japanese, Korean, Polish (Polish available for OpenEdge 10 edition only)

*Technical Reference:* QAD Business Intelligence has been updated and broken into *Installation Guide: QAD Business Intelligence (78-0703A)* and *User Guide: QAD Business Intelligence (78-0704A)* in this release.

QAD Business Intelligence 2.7 ships with two editions of Data Transformer. One supports Progress 9.1D and 9.1E; the other OpenEdge 10.1B.

The Data Transformer OpenEdge 10 edition includes changes in the following areas:

- SQL Query Analysis Tool
- Business Key Maintenance
- Business Key Import and Export
- Audit-Based Replication
- Parameter Maintenance
- Field Precision
- Preview Target Data Filter
- Multiple Metadata Import
- New System Tasks

## SQL Query Analysis Tool

This release of QAD BI features a built-in SQL query analysis tool that you can use to execute SQL queries against the data warehouse database, display and export query results, and view query execution plans.

## Business Key Maintenance

A new Business Key Maintenance user interface is available for maintaining business key definitions. The business key-related toolbar icons previously used for defining business key indexes are removed from the Indexes window.

## Business Key Import and Export

Business key information used to rebuild links between the data source and the data warehouse is now loaded into the dwh-admin database as a part of the metadata import process. You can also store business key definitions in the metadata file for reuse by exporting metadata. The business key index load and removal utilities are no longer provided in this release.

## Audit-Based Replication

A new replication method is available that lets you take advantage of OpenEdge auditing features and replicate data based on audit information stored in the source database. Using the audit-based replication method, only created, updated, and deleted data in the source database is synchronized to the target database, which significantly improves replication performance.

**Note** To use this feature, the source database must be OpenEdge 10.1B or higher.

## Parameter Maintenance

A new parameter maintenance interface is available for maintaining database-level, domain-level, or global parameters in custom scripts. Previously, parameters could only be defined in custom scripts.

## Field Precision

You can now change precision and decimal places of values stored in decimal-type fields as a part of field properties when performing field mapping.

## Preview Target Data Filter

You can now filter data by database and domain when previewing target data.

## Multiple Metadata Import

You can now select multiple metadata files to import when importing metadata. Previously, only one metadata file could be imported at a time.

## New System Tasks

Two new system tasks are provided to manage ETL log files and BI monitor archives respectively.

# Release Notes for Release 2.5

**QAD BI Version:** 2.5

**Date:** September 2007

**MFG/PRO Compatibility:** MFG/PRO 9.0, eB, eB2, and eB2.1, QAD 2007.1

**Languages:** English, French, Spanish, German, Dutch, Simplified Chinese, Traditional Chinese, Japanese, Korean, Polish (Polish available for OpenEdge 10 edition only)

*Technical Reference:* *QAD Business Intelligence* (item number 78-0652D) has been updated for this release.

QAD Business Intelligence 2.5 ships with two editions of Data Transformer. One supports Progress 9.1D and 9.1E; the other OpenEdge 10.1B.

The Data Transformer OpenEdge 10 edition includes changes in the following areas:

- Multi-layer Data Warehousing
- Flexible Task Scheduling
- Database Logging
- BI Monitor
- Cube Creation Using Impromptu Query Definition Files
- IQD Editor
- QAD-Provided Dashboards

## Multi-layer Data Warehousing

In this release of QAD BI, a data warehouse database can connect to other QAD BI data warehouse databases as its data source. Multiple data warehouse databases can be chained together where data residing in lower-level databases is aggregated to the high-level data warehouse for analysis.

This multi-layer data warehousing architecture has several benefits:

- Data residing in legacy databases that cannot be directly accessed by QAD BI Data transformer can be retrieved through intermediate data warehouse databases.

For example, if you install QAD BI on OpenEdge 10, QAD BI Data Transformer cannot directly connect to legacy Progress 8 data sources due to Progress backward compatibility limitations. However, you can overcome this by connecting to a QAD BI Progress 9 edition data warehouse that stores data extracted from Progress 8 databases.

- Data Transformer extracts data from physically distributed data sources more efficiently.
- Data replication performance is boosted.
- This release of QAD BI can work in conjunction with previous versions of QAD BI in extracting, transforming, and loading data.

## Flexible Task Scheduling

You can now group tasks into task sets and set different schedules for them.

## Database Logging

You can now log detailed processing and error information of tasks and task sets to the administration database as well as write to log files. You can use the BI Monitor tool to view database logs and archive them when they grow large.

## BI Monitor

BI Monitor is a new tool in QAD BI 2.5 for monitoring and managing tasks. BI Monitor lets you:

- View detailed information on currently running tasks and task sets.
- Stop a running task.
- View logs of tasks and task sets stored in the administration database.
- Archive logs of tasks and task sets in the administration database.

## Cube Creation Using Impromptu Query Definition Files

Cubes are now created using Impromptu Query Definition (IQD) files instead of using Microsoft Access as a query layer between Cognos PowerPlay and the data warehouse. The latter method is no longer supported.

IQD files are query definition files to be used in Cognos PowerPlay Transformer. One file with native SQL corresponds to each query subject or dimension externalized for use in Transformer.

## IQD Editor

You can now create, edit, and validate IQD files in IQD Editor, a new tool in this release of QAD BI.

## QAD-Provided Dashboards

The QAD BI solution ships with the following dashboards as optional components to provide out-of-the-box dashboard reports in QAD 2007.1 using the QAD .NET user interface:

- Sales Management
- Warehouse Management
- Purchase Management

Dashboards add an interactive element to reports. They let you:

- Drill up and down to see higher and lower levels of detail.
- Include multiple charts derived from different data sources in a single report.

**Note** QAD ReportNet Bundle 1.0 is required to implement QAD-provided dashboards in the QAD 2007.1 .NET user interface. It is delivered with QAD .NET UI version 2.5.

## Release Notes for Release 2.3.2

**QAD BI Version:** 2.3.2

**Date:** April 2007

**MFG/PRO Compatibility:** MFG/PRO 9.0, eB, eB2, and eB2.1

**Languages:** English, French, Spanish, German, Dutch, Simplified Chinese, Traditional Chinese, Japanese, Korean, Polish (Polish available for OpenEdge 10 edition only)

*Technical Reference:* *QAD Business Intelligence* (item number 78-0652C) has been updated for this release.

QAD Business Intelligence 2.3.2 ships with two editions of Data Transformer. One supports Progress 9.1D and 9.1E; the other OpenEdge 10.1B.

Both the Progress 9 and OpenEdge 10 editions of Data Transformer include the following change:

- New Full Replication Logic

The Data Transformer OpenEdge 10 edition also includes changes in the following areas:

- Unicode Support
- Separate Installations of Data Transformer Components
- Faster Cube Creation Using Impromptu Query Definition (.iqd) Files
- Batch Replication Mode Options
- Pagination of the Task List, Labels, and Data Preview Screens
- Task Search Capability
- Label Search Capability
- New Progress Bars
- Progress Editor Icon
- Business Key Indexes Load and Removal Utilities

### Change to Progress 9 and OpenEdge 10 Editions

#### New Full Replication Logic

In this release, Data Transformer performs full replication in a more efficient manner. The new full replication logic performs the following actions:

- Updates records that already exist in the data warehouse
- Copies records that have never been replicated to the data warehouse
- Deletes all other records in the data warehouse that are neither updated nor newly created in this full replication

A new integer field `Updated_Seq_` is now available for each table in the data warehouse to identify each full replication.

Previously in full replication, the system cleared all existing fields in the data warehouse for the data source and completely replaced the contents.

## Changes to OpenEdge 10 Edition

### Unicode Support

This release of QAD BI Data Transformer OpenEdge 10 edition is Unicode-compliant and supports multiple languages:

- The data warehouse and administration databases are deployed using the utf-8 code page by default.
- Data Transformer can connect to multiple source databases using different code pages, and data is automatically converted to utf-8 when replicated to the data warehouse.

### Separate Installations of Data Transformer Components

You now have the option of deploying Data Transformer, the data warehouse database (dwh), and the administration database (dwh-admin) separately on different machines. Previously, the QAD BI Data Transformer installation program only allowed you to install all of these components on the same server.

### Faster Cube Creation Using Impromptu Query Definition (.iqd) Files

You now have the option of creating Cubes faster using Impromptu Query Definition (.iqd) files. Previously, Cubes could only be created using Access as a query layer that made data in the Progress warehouse available to Cognos PowerPlay.

### Batch Replication Mode Options

You can now choose whether to run batch replication in shared memory or client/server mode (through TCP/IP) when you have installed Data Transformer, data warehouse, and administration databases on the same server. If you have deployed these components on different machines, batch replication can only operate in client/server mode.

### Pagination of the Task List, Labels, and Data Preview Screens

You can now view scheduled tasks, labels, and preview target and database data in a paginated view in their respective screens, with a maximum of 50 records on each page. You can use the navigation controls at the bottom of these screens to easily page through records or jump to a page by its number.

### Task Search Capability

You can now search for scheduled tasks by name or database in the Task List. This feature was not available in previous releases.

### Label Search Capability

You can now search for labels by name or language in the Labels screen. This feature was not available in previous releases.

### New Progress Bars

A progress bar is now available for several processes that may take a long time to execute, including the following:

- Connecting to databases when launching Data Transformer

- Updating link
- Checking scripts
- Creating Cubes
- Importing metadata

Previously, there was no indication of execution progress when these tasks were being executed.

### **Progress Editor Icon**

You can now launch Progress Editor from Data Transformer by clicking the new Progress Editor icon on the toolbar. You can then choose which databases the current Progress Editor session will connect to. Progress Editor uses the same Propath settings as Data Transformer.

### **Business Key Indexes Load and Removal Utilities**

Two utilities are provided in this release to perform the following actions:

- Load a business key index file to add business key indexes to standard tables in the data warehouse for QAD-provided business models.
- Remove all business key indexes from the data warehouse to improve system performance during data replication.

# Release Notes for Release 2.3.1

**QAD BI Version:** 2.3.1

**Date:** November 2006

**MFG/PRO Compatibility:** MFG/PRO 9.0, eB, eB2, and eB2.1

**Languages:** English, French, Spanish, German, Dutch, Simplified Chinese, Traditional Chinese, Japanese, Korean

*Technical Reference:* *QAD Business Intelligence* (item number 78-0652B) has been updated for this release.

QAD Business Intelligence 2.3.1 includes changes in the following areas:

- Support for OpenEdge 10.1A
- System Tasks

## Support for OpenEdge 10.1A

This release of QAD Business Intelligence ships with two editions of Data Transformer. One supports Progress 9.1D and 9.1E; the other OpenEdge 10.1A. The installation instructions in *Technical Reference: QAD Business Intelligence* have been updated to reflect the two possible deployment options.

## System Tasks

A new System Tasks function is available in the Data Transformer OpenEdge 10 edition in this release. This function lets you reference custom scripts that you have written to perform data warehouse maintenance tasks, such as updating statistics data in the data warehouse.

# Release Notes for Release 2.3

**QAD BI Version:** 2.3

**Date:** July 2006

**MFG/PRO Compatibility:** MFG/PRO 9.0, eB, eB2, and eB2.1

**Languages:** English, French, Spanish, German, Dutch, Simplified Chinese, Traditional Chinese, Japanese, Korean

*Technical Reference:* *QAD Business Intelligence* (item number 78-0652A) has been updated for this release.

QAD Business Intelligence 2.3 includes changes in the following areas:

- Integration with Cognos 8
- Double-Byte Language Support Issues
- Corrections to Existing Features

## Integration with Cognos 8

This release of QAD Business Intelligence is integrated with Cognos 8 as a complete business intelligence solution. You can now use the following Cognos 8 components to take advantage of the new features in Cognos 8 for modeling, reporting, and analysis:

- Transformer  
Use Transformer as the modeling tool to create PowerCubes for use with Cognos Series 8.
- Framework Manager  
Use Framework Manager as the new modeling tool to create and manage business-related metadata for use in Cognos 8 analysis and reporting.
- Cognos Connection  
Use Cognos Connection—a Web portal provided with Cognos 8—to provide a single point of entry for querying, analyzing, and organizing data. You can run all Web-based Cognos 8 applications through Cognos Connection.
- Analysis Studio  
Use Analysis Studio to explore, analyze, and compare dimensional data. Analysis Studio provides access to dimensional, OLAP (online analytical processing), and dimensionally modeled relational data sources.

## Double-Byte Language Support Issues

QAD Business Intelligence 2.3 supports the use of four double-byte languages. However, known issues with Cognos 8 exist when publishing double-byte languages to the Cognos 8 Web portal. If you do not plan to use the Cognos 8 Web publishing features, you can implement a double-byte version of QAD BI 2.3 without a problem. Otherwise, contact QAD Support for more information.

## Corrections to Existing Features

- 1 You can now connect to up to 12 databases (including `dwh.db` and `dwh-admin.db`) in QAD Data Transformer and execute parallel replication successfully.

Previously, parallel replication failed when more than five databases were connected in QAD Data Transformer.

**Note** You can change the number of databases Progress allows to make simultaneous connections by modifying the following parameter in the `appserver.pf` file under the QAD BI installation directory:

```
-h 12
```

The maximum number of databases Progress can simultaneously connect to is 240.

- 2 Previously, merging tables from multiple databases resulted in the check box being cleared and priority being set to 0 in the Task List for every script related to the merged tables. This error is corrected in this release.
- 3 This release corrects an error that occurred when you modified the description of a field in a custom table and resulted in resetting the field's Characters value to 1.

# Release Notes for Release 2.2.1

**QAD BI Version:** 2.2.1

**Date:** March, 2006

**MFG/PRO Compatibility:** MFG/PRO 9.0, eB, eB2, and eB2.1

**Languages:** English, French, Spanish, German, Dutch, Simplified Chinese, Traditional Chinese, Japanese, Korean

If you are upgrading QAD BI to Release 2.2.1 from any prior release, you must complete a set of steps to prepare your data to take advantage of the new features. Upgrade instructions are included in *Technical Reference: QAD Business Intelligence* (item number 78-0637B).

QAD Business Intelligence 2.2.1 includes changes in the following areas:

- Business Key Index
- Rebuild Links

## Business Key Index

Previous releases of QAD BI Data Transformer use the DB-NAME and REC-ID fields to maintain links between the data source and the data warehouse. However, this approach is not always reliable in some circumstances:

- When the user dumps and loads tables in the source database, the REC-ID values of the records in these tables are changed.
- Data is archived and no longer exists in the source database.

In both cases, the links between the data source and the data warehouse are broken and can no longer be used for replication purposes. Continuing to perform data replication without first rebuilding the links may cause data corruption in the data warehouse.

Now you can designate indexes that can represent unique identifiers of records as business key indexes to construct more reliable links between the data source and the data warehouse. You can then use the business key indexes to synchronize the REC-ID values between the source and target databases to rebuild the links based on the REC-ID field for replication purposes.

Four command icons are added to the toolbar in the Index window in QAD BI Data Transformer that let you designate indexes as business key indexes.

If you are certain the business key index you define can uniquely identify each record, designate it as a complete business key index; otherwise, designate it as an incomplete business key index to have the system validate uniqueness and maximize accuracy when updating data links.

## Rebuild Links

This release of QAD Business Intelligence lets you rebuild links by synchronizing the REC-ID values between the source and target databases based on the REC-ID field so that you can continue to perform replication after table dump/load or data archiving in the source database without data loss or corruption.

To support this feature, a Rebuild Links icon is added to the toolbar in the QAD BI Data Transformer main screen.

# Release Notes for Release 2.2

**QAD BI Version:** 2.2

**MFG/PRO Compatibility:** MFG/PRO 9.0, eB, eB2, and eB2.1

**Languages:** English, French, Spanish, German, Dutch, Simplified Chinese, Traditional Chinese, Japanese, Korean

If you used a previous version of QAD Business Intelligence, you can either replace it completely or update it during installation. Installation instructions are included in *Technical Reference: QAD Business Intelligence* (item number 78-0637A), which has been updated for this release.

QAD Business Intelligence 2.2 includes changes in the following areas:

- Support for Double-Byte Languages
- Support for Progress 9.1E
- Other Enhancements

## Support for Double-Byte Languages

The previous release of QAD Business Intelligence supported only Western language characters using code page ISO8859-1. This release supports the following double-byte languages:

- Simplified Chinese
- Traditional Chinese
- Japanese
- Korean

The data warehouse can now support simultaneous use of one double-byte language and English. Multiple data sources of the same double-byte language and English can be supported at the same time.

**Note** No ISO8859-1 language other than English can be used with a double-byte language.

The installation script now provides additional parameters for supported double-byte languages that you can use to set the default code page.

## Support for Progress 9.1E

This version supports both Progress 9.1D and Progress 9.1E.

## Other Enhancements

- You can now select specific tables and scripts from a metadata file and import the table structures and script contents into the data warehouse. Previously you had to import the entire metadata file.

To support this functionality, this release provides a new Meta Filter window on the Data Transformer|Import MetaData menu. This window includes details about which tables or scripts are new and which already exist.

- You can now change the table name that was initially applied to a target table when you performed replication setup. Previously, this name could not be changed when required.

To support this functionality, a new Rename Table function has been added to the Data Transformer|Tools menu.

- Previously, you used the Update Link and Check Scripts functions on the Data Transformer|Tools menu to start the validation and linking of scripts and tables after importing metadata. Now, this process can be performed automatically as a part of the metadata import.

To support this functionality, the current Automatically Refresh Linked Tables function on the Application Settings|Table Linking tab has been enhanced. When set to active, it now automatically refreshes linked tables for metadata imports. In addition, the current Automatically Check ETL-Scripts function (Application Settings|Data Warehouse) now automatically checks scripts during metadata import.

- The previous release provided a non-editable filter on code tables that you could use after performing replication setup. This restricted you to only one query on code tables. In this release, the filter function using the WHERE clause is enhanced to let you define an additional filter for each code table.

To support this feature, the Source Table Filter input field on the Table Properties window (Data Transformer|Tools|Replication Setup|Properties) lets you enter an additional filter that works with the original filter.

- Previously, users could not check the validity of mapping between source database tables and data warehouse tables. It was difficult to resolve any mapping corruption that might occur after activities such as database replication.

Now you can check for any mapping corruption and view messages related to the status of table or field mappings. Using this status information, you can recover from corrupted mappings. To support this functionality, this release provides a new Validate Table function on the Data Transformer|Tools menu.

- You can now delete data records without deleting an entire table and its mapping information. Previously, when you wanted to delete data records from a table in the data warehouse, you had to delete the entire table.

To support this functionality, this release provides a new Delete Target Data function on the Data Transformer|Tools menu. You can stop the deletion at any time before it is completed.

- Previously, one log file recorded all information about system activities. This release introduces the following enhancements:

- Daily log files are generated and kept, improving performance and access to logged information.
- The log can be written in a language other than English.
- To manage the amount of information being logged, you can set four different log levels:
  - Error captures only error information.
  - Warn captures both errors and warnings.
  - Info captures errors, warnings, and information.
  - Debug produces a complete log of errors, warnings, information, and debug information.

