Ariba Analysis
Release Guide

Version 3.0
May 2004

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Chapter 1
Introduction

This release guide describes new features and changes in Ariba Analysis 3.0.

Note: Download the latest Ariba Analysis 3.0 Release Guide from Connect:

`https://connect.Ariba.com/`

To use this document effectively, decide which sections apply to you:

- Chapter 2, "Changes in Ariba Analysis 3.0," describes what's new in Ariba Analysis 3.0.
- Chapter 3, "Migration from Ariba Analysis 2.1 and 2.5.x" details the steps necessary to move from earlier releases to Ariba Analysis 3.0.

Known Issues

This sections informs you how to find a list and details of known limitations of the Ariba Analysis 3.0.

For the latest information about known defects, and suggested workarounds, see `http://connect.ariba.com`. To view the defect lists, follow these links: **Product Info > Ariba Analysis > Analysis 3.0> Product Updates**. In the Product Updates table, for the 3.0 release, click the **Known Problems** link.

Chapter 2

Changes in Ariba Analysis 3.0

This chapter describes changes between Ariba Analysis version 3.0 and earlier releases. It includes the following sections:

Supported Locales

This release supports the following languages:

- American English: `en_us`
- German: `de`
- French: `fr`

Supported Platforms

This section details changes to the supported platforms since the previous release.

Oracle 9.2, JDBC 9.2.04 Required

If you use Oracle, this release requires the latest patch of Oracle 9.2. Earlier versions of Oracle are no longer supported.

Likewise, you must use Oracle JDBC driver 9.2.04. Older versions of the driver are not recommended.

Application Server Upgrades

The supported application servers for this release are either BEA WebLogic 8.1 SP2 or IBM WebSphere Application Server 5.1. Earlier versions of these application servers are no longer supported.

Ariba Spend Management Integration

This release features tighter integration of Ariba Analysis with all Ariba Spend Management applications. Integration includes the following areas:

- "Dashboard-Only Deployment" on page 10
- "Supplier Performance Management" on page 11
- "Publishing Portlet Content to Third-party Applications" on page 11

Dashboard-Only Deployment

In this release, the Spend Management Dashboard has been separated from the Ariba Analysis OLAP features. A new panel displayed during installation allows the installation of only the Spend Management Dashboard.

The new parameter `analysis.olap.selected` has been added to the Ariba Analysis `install.sp` file for silent installation:

- `analysis.olap.selected="false"` installs only the Spend Management Dashboard.

- `analysis.olap.selected="true"` installs both Ariba Analysis OLAP features and the Spend Management Dashboard.

For more information, see the updated *Ariba Analysis Installation Guide*.

Supplier Performance Management

Ariba Analysis is a part of Ariba's Supplier Performance Management (SPM) solution. Combined with Ariba Enterprise Sourcing and Ariba Category Management, Ariba Analysis provides organizations with the tools to monitor and improve their supplier relationships.

Ariba Analysis features in support of SPM include the following:

- "User-defined Fields: Grades" on page 21
- "Threshold Highlighting: Alerts" on page 21
- "Facts, Measures, Dimensions, and Hierarchies" on page 27

Note: Many of these features are more widely applicable than just for SPM. For example, alerts can be helpful to get visibility into any aberrations in your spend.

For more information about Supplier Performance Management and Ariba applications, see the *Ariba Enterprise Sourcing RFX Owner Guide* and online help.

A new Quick Tour showing integrated SPM-related features is available in this release.

Publishing Portlet Content to Third-party Applications

Ariba introduced portlet programming in Summer, 2003. In Ariba applications, portlets are "little portals" that display their content directly in the Spend Management Dashboard.

In this release, Ariba portlets can publish their content to third-party applications, that support the WSRP Consumer capabilities as specified by the OASIS Web Services for Remote Portlets (WSRP) 1.0 specification. Several Portal vendors such as IBM (WebSphere), Plumtree and BEA (WebLogic) have announced support for the WSRP standard in upcoming releases. Customers building enterprise portal environments can include Ariba portlet content through this WSRP-compliant content publish mechanism.

For more information about OASIS WSRP itself, see the following location:

`http://www.oasis-open.org/`

For more information about Ariba portlet programming, see the *Ariba Spend Management Integration Guide*.

Security Enhancement for Microsoft Excel Export

This release includes a major enhancement to the security of data export from Ariba Analysis to Microsoft Excel. Ariba Analysis now uses signed ActiveX controls to ensure the authenticity of requests to download data. In addition, a digital certificate secures the data communications to the client computer.

The security features allow IT organizations a choice of security controls. Although no change in browser settings is required, users can reconfigure their web browsers to take advantage of the enhanced security.

Depending on their security needs and policies, IT has two options for deploying the secure ActiveX control:

- Configure browsers to prompt users to allow installation of Ariba's signed ActiveX control dynamically during export.
- Manually distribute the ActiveX controls to users' computers.

For more information about these deployment options, see the *Ariba Analysis Configuration Guide*.

Usability Improvements and Changes

Ariba Analysis report creation, editing, and data display have been improved in this release. The density of the data in reports has been increased while the visibility into that data has been improved.

This section contains the following topics:

For specific details about using these new features, see the Ariba Analysis online help.

Drag-and-Drop Report Building

Ariba Analysis now supports drag-and-drop report building. The Spend Management Dashboard also now supports drag-and-drop.

Note: Drag-and-drop is supported only for Microsoft Internet Explorer.

Dragging is the act of clicking an object, holding the mouse button down, moving the cursor to a droppable area, and releasing the mouse button.

Steps 1 and 2 of the Analysis Wizard and the pivot table now support drag and drop. On the pivot table, you can drag fields from a palette of fields (called the **Field Browser**) onto page, row, and column areas. Likewise, you can remove fields or move them to different locations by dragging.

Note: For ADA (Americans with Disabilities Act) compliance, the former menus to move fields to page, row, or column areas is still available. One click on a field name (instead of dragging) reveals the menu.

Source Data Pull-down Menu Alphabetized

With this release, the default pull-down menu to select **Fact** (formerly labeled **Source Data**) on Step 1 of the Analysis Wizard has been alphabetized by fact name.

Multiple Facts in a Single Report

With this release, you can include data from more than one fact in a single analytical report. For example, a single report can now show data for both purchase orders and invoices or for both contracts and contract projects.

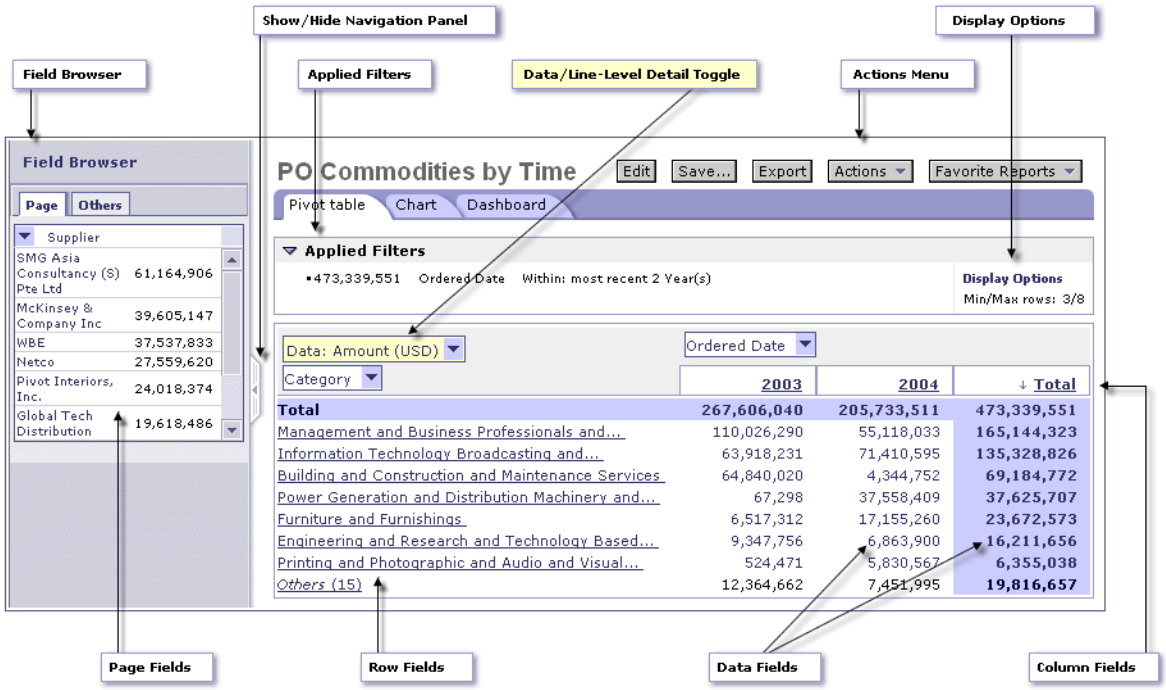
To create a report containing multiple facts, in Step 1 of the Analysis Wizard, the **Source Data** pull-down menu has an option at the bottom: **Create multi-fact report**.

For more information about multi-fact reports, see the *Ariba Analysis Advanced User Guide*.

Pivot Table UI Changes

This section describes many improvements to the Ariba Analysis pivot table UI.

The following annotated diagram shows areas of the pivot table.



Field Browser

The left panel of the Ariba Analysis pivot table is the **Field Browser**. With the **Field Browser**, you can add or remove data fields directly to or from an analytical report without having to return to the Analysis Wizard.

The **Field Browser** has two tabs: **Page** and **Others**.

- The **Page** tab lists the page fields currently included in the analytical report. Fields that are associated with the report's facts and not currently included on a report row, column or page edge appear on the **Page** tab. Likewise, when an field is dragged off the report and dropped onto the **Page** tab, it reappears in the **Page** tab.
- The **Others** tab lists the entire set of dimensions and hierarchies associated with the report's source data. From this list you can add fields to the row or column areas of the pivot table or to the new **Page** list.

Note: Line-level detail can be added or removed from the report by changing the data level to line-level details and then clicking on the **Others** tab. The corresponding line-level details for the facts in the report appear in the pivot table.

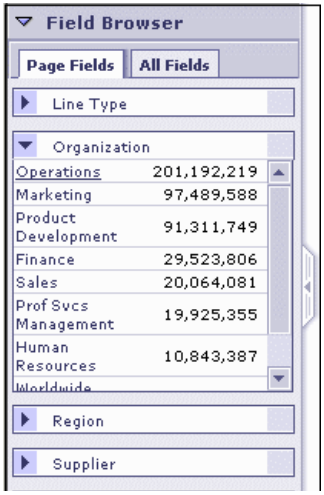
- The **Show/Hide** tab hides or reveals the **Field Browser**. When the **Field Browser** is hidden, all page fields are shown across the top of the pivot table (as in previous releases).

Page Field Viewer Drill-Down

The location of data fields you add as page fields to an analytical report has been moved to the **Page** view area in the **Field Browser**.

Click the triangle to the left of a page field name to see useful numbers about that page field directly in the **Field Browser**.

Click the name of any of the listed hierarchies to drill-down into it.



Actions Across the Top

The actions formerly located in the navigation panel have been moved across the top of the pivot table. These actions include the following:

- **Edit**: invoke Step 3 of the Analysis Wizard
- **Save**: **Save** report or **Save As…**
- **Export**: one-button Excel data export
- **Favorite Reports**

- **Actions** menu: In addition to **Edit**, **Save Changes**, and **Export Data**, the new **Actions** menu includes the following:
  - **Display Options**
  - **Configure Export**
  - **Return to Scorecard** and **Return to Project** when Ariba Analysis is integrated with Ariba Enterprise Sourcing or Ariba Category Management.

Drill-down on Applied Filters

The Ariba Analysis pivot table includes information about the **Applied Filters** (constraints) in effect on the pivot table. This information (called "breadcrumbs") is displayed above the pivot table. As you drill down or collapse the data, the breadcrumbs show the location of data in the hierarchies on the pivot table.

Both the constraints and the amount of spend are displayed in the **Applied Filters**. The Amount values are hyperlinks that take you back up the levels of the **Applied Filters** to a previous view of the report. You can click any level displayed in the breadcrumbs to return the data to that pivot table view. This feature allows quick changing of views.

Display Options and Percentile Rule

The current **Display Options** settings for the analytical report, including the percentile rule, are shown in the upper right above the pivot table. To change the display options, click either the heading **Display Options** or select **Display Options** from the **Actions** menu.

Drag-and-Drop on the Pivot Table

To move fields to different locations on the pivot table, you can drag-and-drop them. For instance, from the **Others** field list of the **Field Browser**, you can drag a field to the **Page** tab of the **Field Browser** or to the row or column fields area on the pivot table. Likewise, to remove a field, drag it from the pivot table and drop it on the **Field Browser**.

ADA Compliance: Menus for Field Moves

Ariba Analysis complies with the Americans for Disabilities Act. Instead of drag-and-drop, click the name of a field to display a menu by which you can move a field to the page, row, or column areas.

Traditional Reports: Line-level Detail Directly in Pivot Table

With this release you can add line-level detail (lowest level transaction information) directly to the Ariba Analysis pivot table. Line-level details are the data loaded into Ariba Analysis from other applications before those details are summarized, aggregated, and rolled-up into data fields.

In Step 1 of the Analysis Wizard, you can add as many of the available line-level fields as you want. (You must also add at least one data field.) If you want the line-level fields to show on the resulting pivot table, click **Show line-level details in report**. Otherwise, the initial state of the pivot table shows data fields. On the pivot table, you can click one of the data fields to display a menu that lets you reveal the report's line-level details or use the data field/line-level details toggle.

You can also use the **Field Browser** to add or remove line-level details. See "Field Browser" on page 15 for details.

Report Caching

This release includes a significant performance enhancement: report caching in both main memory and disk. Ariba Analysis saves the results of database queries from generating analytical reports. Any user who creates or runs an analytical report with the same results benefits from this cache: reports are displayed with little or no delay.

For details about system administration aspects of the report cache, see "Parameters for Report Cache and Background Limits" on page 42.

Scheduling Reports and Running Reports in Background

In this release, you can schedule analytical reports to run at specified times and intervals or run reports in the background, rather than wait for them to complete. Scheduling or running a report in background has the effect of caching that report, so that subsequent running of the report is faster.

Running Reports in Background

Note: Only basic analytical reports, not compound reports, can be run in background.

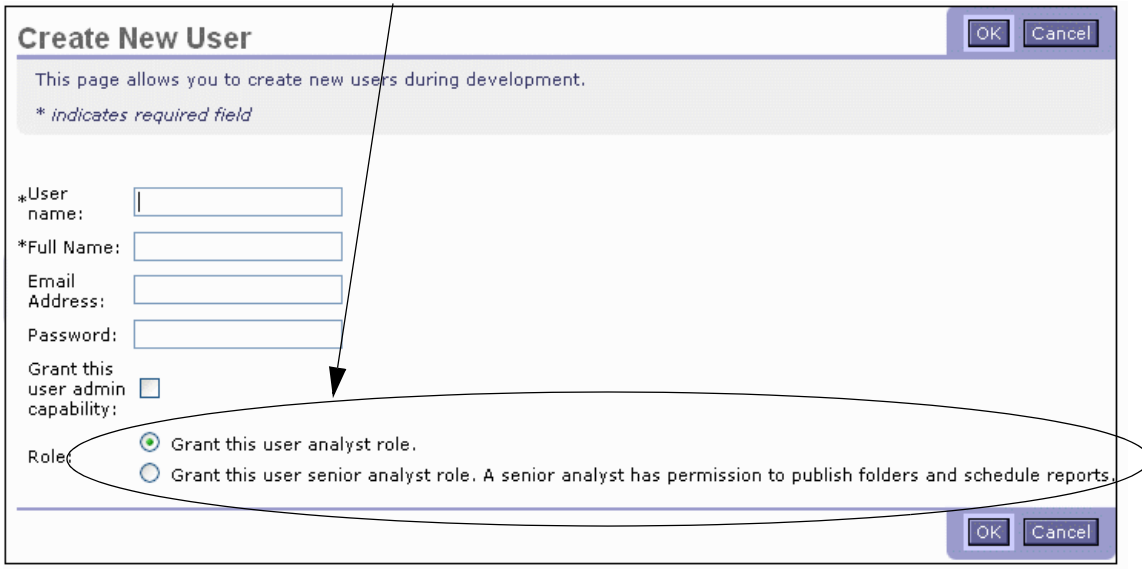
You have several ways to run a previously created report in the background:

- In the folder interface, click the name of the report to display a pull-down menu and select **Run in Background**.
- If you run a report that exceeds a certain threshold set by your system administrator, you see a message telling you that the report is executing a long-running query. At this point, you can click **Run in Background** to finish the report.

To see if a report you have run in the background has finished, look at the report in your folders. The date and time the report was most recently run are listed next to the report name.

Scheduling Reports and Senior Analyst Role

With this release, users with the appropriate permission (`AnalysisScheduleReports`) can schedule reports for running at a later time. In addition, users can be given the Senior Analyst role, which includes the permission to schedule reports. In development, from the **Create New Test User** page, you can grant this role or permission to a new user.



▼ **To schedule a report:**

1 In the folder interface, click the name of the report to display the pull-down menu.

Note: You can schedule only basic analytical reports, not compound reports.

2 Select **Schedule**.

3 On the **Schedule Report** page, specify the schedule.

You can schedule your analytical reports to run at certain specified times:

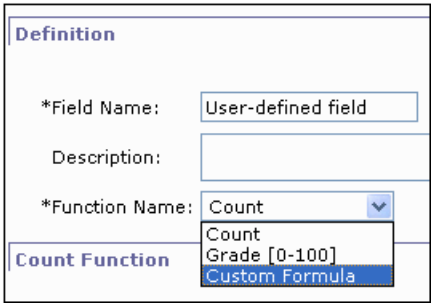
- Daily, weekly, or monthly
- Specific minute of a specific hour (AM or PM)
- At recurring intervals

Monitoring Scheduled Report Runs

From the Spend Management Dashboard **Customize** menu, you can add content that allows you to see the currently scheduled reports and when they finished: **Recently Run Reports**. In addition, in the folder interface, the date and time the report was most recently run is listed next to the report name.

User-defined Fields: Custom Formulas

This release of Ariba Analysis supports custom formulas in user-defined fields. Functions formerly available with a pull-down menu have been consolidated onto the **Custom Formula** page.



With custom formulas, you can combine fields from the report's facts with arithmetic operators to create the formula. A list of field names also aids the easy creation of formulas. More complex formulas can be entered by hand.

For more information about creating custom formulas, see the Ariba Analysis online help.

User-defined Fields: Grades

This release of Ariba Analysis introduces a special type of user-defined field: grades. With a grade, you can assign a numerical score from 0 to 100 to any data field or other user-defined field. For example, invoices whose amounts are less than a certain value can be assigned a low grade.

In the area of Supplier Performance Management (SPM), when Ariba Analysis is integrated with Ariba Enterprise Sourcing, grades complement supplier scorecards by allowing you to quantify specific transaction data as a grade, which is then used as a KPI (key performance indicators) on scorecards evaluating suppliers.

Grades can also be used independently of Ariba Enterprise Sourcing.

You can define a grade in two ways:

- As a straight linear function, in which each data value between a low and high value is given a discrete numeric score.
- As a data range, in which values less than, greater than, or equal to a certain value are assigned a numeric score.

For more information about creating grade computed fields, see the Ariba Analysis online help.

For more information about Supplier Performance Management and integrated Ariba applications, see *Ariba Analysis Advanced User Guide*, the *Ariba Enterprise Sourcing RFX Owner Guide*, and the Ariba Enterprise Sourcing online help.

Threshold Highlighting: Alerts

In this release, you can define thresholds on fields that trigger visual alerts (cell highlighting) and notification message text in the Ariba Analysis pivot table. Alerts can also be added to Summarized Views in compound reports.

You can assign a color to the threshold. Data values that are not in tolerance are displayed in cells of this color on the pivot table. For example, you can specify that for any purchase order whose amount exceeds $1,000,000, Ariba Analysis should display the amount field in red. You can apply the threshold to the pivot table totals, the totals on individual rows, or the line-level detail rows.

The notification message text you associate with an alert is visible in the pivot table when your cursor rolls over the triggered alert area.

If Ariba Analysis and Ariba Category Management have been integrated, the triggering of an alert in an analytical report creates a new task in any ACM project that the report is associated with.

For an overview of the use and effect of Ariba Analysis alerts with integrated Ariba applications, particularly for Supplier Performance Management, see the *Ariba Analysis Advanced User Guide*.

Charting Changes

This release contains improvements in charting.

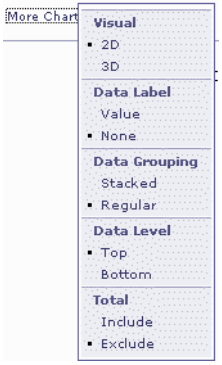
Standard Chart Types

Names of the types of charts in Ariba Analysis have been standardized on those offered by popular spreadsheet applications.

Old term	New Chart Type Name
Bar Chart	Column chart
Column Chart	Bar Chart
	Columns on 2-Axes Chart
	Column-Line on 2-Axes Chart
	Lines on 2-Axes Chart
	Line-Column on 2-Axes Chart

Chart Controls on Top

The context-sensitive chart controls to change the chart type, format, and other aspects have been moved from the lower left corner to across the top of the charting page.



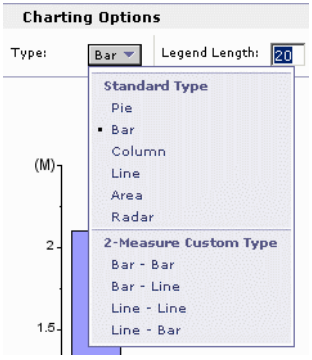
The **More Chart Options** hyperlink is a context-sensitive menu that displays the functions described in the online help.

Charting Two Data Fields

With this release you can chart up to two data fields on a single chart. By default, only a single data field is charted: the top data field in Step 1 of the Analysis Wizard or the leftmost data field in the pivot table. When your analytical report includes more than one data field, Ariba Analysis displays a new chart control from which you can select one or multiple measures to be charted.

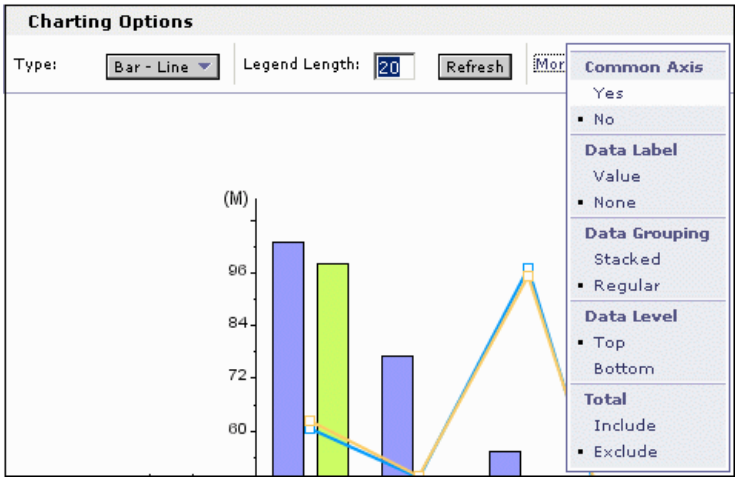
The available chart types for two data fields are combinations of the standard supported chart types introduced in an earlier release:

- **Bar - Bar**
- **Bar - Line**
- **Line - Line**
- **Line - Bar**



Common Vertical Axis for Both Data Fields

By default, each data field on a chart is given a separate vertical (Y) axis. When appropriate for the data fields you are charting, you can set a single, common vertical axis. From the **More Chart Options** menu, select **Common Axis > Yes**.



Improved Folder Interface

The folder interface has been enhanced in this release. With a single click on a report name, you can select many functions directly from a pull-down menu:

- **Run**
- **Edit**
- **Run in Background**
- **Schedule Report**
- **Export**
- **Copy** or **Move to Folder**

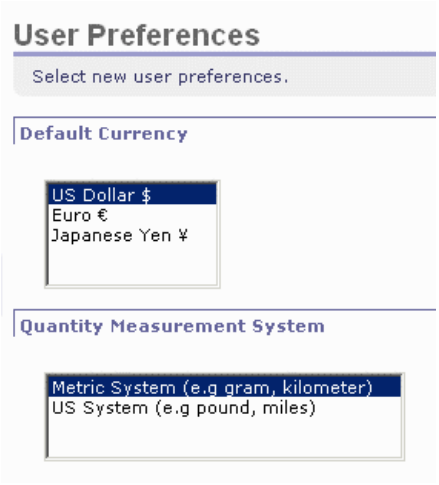
In addition, next to the name of the report, Ariba Analysis displays the following:

- The date and time a report was last run.
- The description of the report. (You enter the description of a report can in Step 1 of the Analysis Wizard.)
- Whether the results of the report are still in the report cache.

See the online help for more information.

New User Preference for Units of Measure (UOM)

Users can now set their preferred Units of Measure (UOM) from the **Preferences** page. The available quantity measurements depend on which UOM systems have been configured.



For more information about the configurable aspects of UOMs, see "Systems of Units Of Measurement" on page 34.

New Report and Template Models

This release comes with many new report and template models (formerly known as "prepackaged reports") using new facts to illustrate analytical reports and multi-fact reports. The new models include:

- Contingent Labor Analysis
- Contract Savings Analysis
- General Templates
- Sourcing Analysis
- Supplier Order Delivery Status

The report and template models are fully documented in the new *Ariba Analysis Advanced User Guide*.

TemplateUser Set to aribasystem

In this release `TemplateUser` is set as `aribasystem`. Login as `aribasystem` to change the default dashboard template.

The parameter `TemplateUser` in `config/Parameters.table` controls the default dashboard for all users, unless dashboard templates have been set up for specific roles.

For more information about setting up dashboard templates based on roles, see the *Ariba Analysis Advanced User Guide*.

Data Modeling Enhancements

This section describes changes to the Ariba Analysis data model.

See the *Ariba Analysis Customization Guide* for specific details about these new features.

Facts, Measures, Dimensions, and Hierarchies

New or changed facts, measures, dimensions, and hierarchies in this release include the following:

- Contract hierarchy now supports new features from Ariba Contract Compliance, such as hierarchical contracts
- Contract clauses
- Contract savings forecasts
- Projects from Ariba Contract Workbench
- Collaborative requisitions
- Expense Report violations
- Invoice line exceptions
- Payment forecasts and tracking
- Purchase Order delivery information
- Temporary Labor (PO)
- Time sheets
- Units of Measure (UOM)

Slowly Changing Dimensions: Versioning Data Values

This release supports slowly changing dimensions, or versioning. A *slowly changing dimension* is one whose field values change over time. For example, consider the Organization hierarchy. At one point, an employee might belong to a certain division.

The next year, that same employee might transfer to a different division. With Ariba Analysis support for slowly changing dimensions (also called *versioning*), this employee organizational transfer is recorded in the data.

Slowly changing dimensions are implicit. You do not need to do anything to see earlier or later versions of the same data field. When you constrain an analytical report to a certain time period, the data values at that time are automatically displayed.

By default, versioning is not enabled, except in the demonstration configurations. To enable it, set the following:

```
<properties versioning="true">
```

The `versioning` attribute on the `<properties>` element associated with a `<dimension>` indicates that Ariba Analysis must maintain a historical record of all versions of the dimension's field values for auditing.

See also "New Tasks for Dimension Versioning" on page 39.

Disabling Unneeded Multi-valued Dimension Fields

Ariba Analysis provides several multi-valued dimension fields in its sample metadata XML definitions. However, some multi-valued dimensions are sometimes not needed. Unneeded definitions in the metadata XML impact the performance of database queries.

You can disable a field that refers to a multi-valued dimension with the `<disableVectorDim>` element in `<inFact>`.

```
<inFact name="ariba.analytics.fact.InvoiceLineItem">
   <disableVectorDim name="Approver"/>
</inFact>
```

This essentially removes the field from the Ariba Analysis metadata XML. The field still exists in the data model but is not included in database queries. For more information about multi-valued dimensions, see the *Ariba Analysis Customization Guide*.

Amount Range Changes

Formerly, Ariba Analysis had a single Amount Range dimension defined in the core `SpendAnalysis.aml` file.

In this release, the Amount Range dimension has been enhanced for flexibility in your design needs. By default, Ariba Analysis has a single Amount Range dimension defined in `SpendAnalysis.aml`:

```
ariba.analytics.dimension.AmountRange
```

However, the use of the Amount Range dimension has been moved to the extension file `SpendExt.aml`.

Data Modelling for Amount Ranges

The `SpendExt.aml` extension file has examples of Amount Ranges for different purposes:

1. A single Amount Range dimension associated with many different facts. The `AmountRange` dimension is used this way. For example, for multi-fact reports, this single `AmountRange` is associated with PO and Invoice.
2. A one-to-one correlation between a fact and its own separate Amount Range. Examples include `POLineAmountRangeEUR` and `ERAmountRange` for PO line items and Expense Report line items. In addition, different amount ranges are defined for different currencies.

Design Approach for Amount Range

Here is a high-level approach to designing Amount Ranges.

1. Define the metadata XML to create the ranges you need, patterning it after the examples in `SpendExt.aml`, and apply them to the appropriate facts. If each fact must have its own separate set of ranges, use this design. One example is currencies: the Japanese yen requires different ranges than the euro.
2. Look for commonality across data. Refine your design to reuse the dimensions. For example, if you want to create multi-fact reports, a single, common Amount Range produces the greatest intersection of the data. For information about multi-fact reports, see "Multiple Facts in a Single Report" on page 14 and the *Ariba Analysis Advanced User Guide*.

For more information about dimensions, see the *Ariba Analysis Customization Guide*.

Data Loading Changes

This release includes enhancements and miscellaneous changes to Ariba Analysis data loading. This section includes the following topics:

For more information about these features, see the new *Ariba Analysis Data Load Guide*.

Logging for Data-loading Debugging

Ariba Analysis has several logging categories for debugging data-loading problems. Detailed, low and high-level logging are in different categories.

Category	Description
`analysisMaster.analysisDataLoad`	`High-level logging`
`analysisMaster.analysisLoadDetails`	`Low-level logging`

You can enable logging to see information like SQL queries and profiling information at the end of a load. Ariba Analysis logs warning messages if dimension records are updated during fact loads to help you discover potential data-loading performance problems. Ariba Analysis logs the following:

- Dropping tables.
- Rebuilding indexes.
- Creating database statistics.

For more information about logging categories and using the Ariba Analysis administration console to enable them, see the *Ariba Analysis Configuration Guide*.

Improved Performance

For best performance, Ariba Analysis now minimizes database updates and inserts when loading data from Ariba Buyer and Ariba Category Management. Data are first streamed from these applications, prepared in temporary files on disk, and then inserted or updated in the database en masse, rather than individually.

Note: Make sure you have sufficient temporary disk space when loading data from either Ariba Buyer and Ariba Category Management.

Data Loading Batch Size

The `System.Analysis.DataLoading.BatchSize` parameter specifies the number of database records written to or updated in the Ariba Analysis database with a single `COMMIT`.

The default is 20 records.

Disabling Fact Look-ups

If a data load event's `Operation` type is `Load` (not `Update`), the following parameter prevents look-up of facts:

```
BuyerPOLoad = {
  ...
  DisableFactLookups = true; }
```

Use this parameter to get better performance for initial loads. Disabling fact look-ups prevents unnecessary processing, because with operation type `Load`, fact records are being newly created and hence cannot be looked up. Facts only need to be looked up when operation is of type `Update`.

Microsoft SQL Server Requires Manual Dropping of Tables

The `initdb -emptydb` option to drop all known tables from a database does not work with Microsoft SQL Server. You must manually drop the tables.

Minimal Database Initialization for Checking Integration

To check integration of Ariba Analysis with other Ariba applications, it's useful to be able to start Ariba Analysis without first doing a full load of all data.

To initialize the database for integration testing, use the following command:

```
initdb -initdb -file LoadDB.basic.txt
```

For full database initialization, use the same command as in previous releases:

```
initdb -initdb
```

Miscellaneous Data-Loading XML Changes

This sections lists miscellaneous changes to data-loading XML in this release:

extraClause Attribute Now Deprecated

The `extraClause` attribute is now deprecated and not usually needed. For sorting or grouping, see "orderByClause for AQL, SQL, and Interface SQL Stages" on page 33.

enabled Attribute for <analysisMapping> Element

On the `<analysisMapping>` element, the new optional `enabled` attribute is a Boolean that allows you to use a field from a data source (for data transformation, for example) and optionally apply the incoming field to an Ariba Analysis field. Sometimes you might need a value from a source system to derive some other data, but ultimately not need the value to map to a field in Ariba Analysis.

For details with an example, see the appendix of the new *Ariba Analysis Data Load Guide*.

orderByClause for AQL, SQL, and Interface SQL Stages

For the <aqlStage>, <interfaceSqlStage>, and <sqlStage> elements, Ariba Analysis adds the value of the new orderByClause attribute to the database SELECT statement in the source Ariba application to sort the selected data. Column names are specified in dot notation. You can also specify multiple column names.

groupBy for AQL, SQL, and Interface SQL Mappings

The optional groupBy attribute on the <aqlMapping>, <interfaceSqlMapping>, and <sqlMapping> elements specifies the grouping order for the selected data. For example:

```
<field name="ConfirmationTime">
  <aqlMapping selectField="OrderConfirmation"
    groupBy="PurchaseOrder.OrderedDate"/>
</field>
```

This attribute is used in conjunction with a groupByFlag attribute on the elements for the corresponding AQL, SQL, or interface SQL stage.

tableName Attribute not Needed for Interface SQL Stage

The formerly required tableName attribute on the <interfaceSqlStage> element is no longer required.

If you need to refer to the actual name of the interface table in your queries, use the :InterfaceTable reserved word.

UnionWithDataLoads in DataLoadEvents.table

The new UnionWithDataLoads keyword allows you to take advantage of data selection already described in other data load definitions. This keyword can be used only with data-loading definitions relying on the <aqlStage/> or <sqlStage/> elements, not CSV files or interface tables.

The value of UnionWithDataLoads must be the name of a data load definition as declared with the name attribute on the data-loading XML element <dataLoad>, or a comma-separated list of such names. For example, consider the following data load event:

```
ERHeaderViolationCountViolationLoad = {
          DataLoadName = BuyerERHeaderViolationCountViolation;
          UnionWithDataLoads =
  "BuyerERHeaderViolationCountLineViolation,BuyerERHeaderViolationCountItemiz
  edViolation";
          Threads = 4;
          Operation = Update;
    };
```

The `UnionWithDataLoads` value operates on data that is a union of data selected by the three data-load definitions:

```
<dataLoad name="BuyerERHeaderViolationCountViolation">
<dataLoad name="BuyerERHeaderViolationCountLineViolation">
<dataLoad name="BuyerERHeaderViolationCountItemizedViolation">
```

Systems of Units Of Measurement

In this release, Ariba Analysis comes with default primary and secondary standard systems of units of measurement (UOM):

Primary	Secondary
Metric System	**US Common System**
SI, or *Système internationale d'unités*	originally based on UK Imperial System
Example units	Example units
gram and kilogram	ounce (each) and pound
deciliter, liter, decaliter	pint, quart, gallon
centimeter, meter, kilometer	inch, yard, mile

Although you can set up as many systems of measurement as you need, be aware of their potential impact on database performance. Each system of UOM requires an extra column in the database.

For more information about Units of Measurement, see the new *Ariba Analysis Data Load Guide*.

Common Commodity Codes

This release of Ariba Analysis is in keeping with the standardization and normalization of common commodity codes in Ariba Buyer and Ariba Enterprise Sourcing. For example, Ariba Analysis ships with a new hierarchy on the Parts dimension: UNSPSC.

Ariba Analysis has been enhanced to support multiple commodity domains:

- The Ariba common commodity codes, based on the Ariba Buyer/Ariba Enterprise Sourcing system domain (the default commodity hierarchy visible in the user interface).
- Support for multiple commodity domains by partition.
- Support for ERP commodity hierarchies.

In addition, specialized mapping classes and look-up tables have been included in Ariba Analysis to support your need to map across domains and source systems.

For more information about commodity codes and mapping, see the *Ariba Analysis Data Load Guide*.

Administrative Changes and Improvements

This section details changes in the area of the administration of Ariba Analysis:

Ariba Update Tool

Software upgrades to Ariba Analysis now rely on the Ariba update tool. The *Ariba Update Tools Guide* is available for downloading from `https://Connect.ariba.com/`.

New Permissions

Ariba Analysis 3.0 introduces some new permissions:

- `AnalysisScheduleReport`: schedule reports.
- `AnalysisPublishReports`: share reports with other users.

In the user authentication source for Ariba Analysis 3.0, assign these permissions to the appropriate users. The user authentication source is either Ariba Buyer or Ariba Enterprise Sourcing, unless Ariba Analysis is standalone, in which Ariba Analysis itself is the user authentication source. For more information about user authentication sources and these new permissions, see the *Ariba Spend Management Integration Guide*.

Dashboard Templates by Role

You can createSpend Management Dashboard templates for specific business functional roles that include content relevant to their specific functions. This feature makes spend management information readily available to the people in those business functions.

For more information about dashboard templates, see the new *Ariba Analysis Advanced User Guide*.

reports User Renamed ashell

The user who owns the prepackaged analytical reports was formerly the `reports` user. This user name has been changed to `ashell`. The default password for the `ashell` user is as follows:

User name	`ashell`
Default Password	`ariba`

Common Default Password for Administrative Users: ariba

The default password for Ariba Analysis administrative user names is now the same password:

`ariba`

The following are the affected user names.

User Name	Description
`aribasystem`	The Ariba Analysis administrator user name
`TemplateUser`	User on whose dashboard new users' dashboards are based. **Note:** By default the name of `TemplateUser` is set to `aribasystem`.
ashell	User who owns the Ariba Analysis report models.

Changed Command Names, Lowercasing

The names of the commands to start and stop Ariba Analysis have changed as follows. Other changes are simply lowercase command names.

Old Command Name	New
analysisStart	startanalysis
analysisStop	stopanalysis
nodeManagerStart	nodemanagerstart
resetDatabaseOwner	resetdatabaseowner
serviceInstall	serviceinstall

Old ScheduledTasks.table Renamed: DataLoadTasks.table

The global scheduled tasks table, *AnalysisServerRoot*/config/ScheduledTasks.table, has been renamed as follows:

AnalysisServerRoot/config/DataLoadTasks.table

This file name has been changed because the work it does relates to data loading events that the administrative user explicitly runs. In addition, this release of Ariba Analysis contains a configuration file truly dedicated to scheduling tasks: ScheduledTasks.table.

ResetDimFields Task

The data loading task formerly known as ResetSupplierRank has been generalized and renamed ResetDimFields. The task is still used primarily for resetting supplier ranking.

The ResetDimFields task takes two primary arguments: ResetFields and ResetValue.

```
ResetSupplierRank = {
   ScheduledTaskClassName = "ariba.analytics.tasks.ResetDimFields";
   DimensionClass = "ariba.analytics.dimension.Supplier";
   ResetFields = "SupplierIdRank,SupplierNameRank";
   ResetValue = "Low Activity Suppliers ...";
   };
```

New ScheduledTasks.table

The new *AnalysisServerRoot*/config/ScheduledTasks.table is for tasks that you can schedule to run at certain times.

With this release, there are three scheduled tasks:

- ArchiveLog: to run periodically at night to decrease the size of active log files and archive old logs.
- FailedDocumentMessages: to resend any status update messages to Ariba Category Management that might have failed to be transmitted.
- LoadDBDonePoller: to monitor the progress of data loading and invalidate the report cache when data loading is complete.

For more information about the ScheduledTasks.table and its tasks, see the *Ariba Analysis Configuration Guide*.

New Tasks for Dimension Versioning

Two new data-loading tasks in the release support dimension versioning:

- "LoadFromStaging Task: Transfer Versioned Records" on page 39
- "PopulateStaging Task: Convert Dimension to Versioning" on page 40

For background, see "Slowly Changing Dimensions: Versioning Data Values" on page 27. For more information see, the *Ariba Analysis Configuration Guide*.

LoadFromStaging Task: Transfer Versioned Records

You need to run the LoadFromStaging task only if you have enabled slowly changing dimensions.

During data loading, versioned data is stored in staging tables. At the end of data loading, use the LoadFromStaging task to transfer versioned data from staging tables to affected dimensions. You must run the LoadFromStaging task before you load any data into fact tables.

PopulateStaging Task: Convert Dimension to Versioning

`PopulateStagingTables` creates the staging tables needced to convert an existing dimension into a versioned dimension.

New Parameters

This release introduces new parameters in config/Parameters.table for a wide variety of purposes:

Parameters for Controlling Data Export Behavior

This release includes new parameters in `config/Parameters.table` for controlling the behavior of data export:

Disabling Excel Download

Some organizations might want to disable automatic launching of Microsoft Excel during data export from Ariba Analysis. They might want to comply with a security policy about the automatic launching of applications from web browsers.

To disable the automatic launching of Excel, set the `ExcelExportDisabled` parameter in *`AnalysisServerRoot`*`/config/Parameters.table`. Users can still save downloaded data as comma-separated values (CSV) files.

```
Application {
  Analysis {
    ExcelExportDisabled=true ;
    }
  }
```

Note: If Excel downloading is disabled, users cannot upload Excel templates.

Overriding Delimiter in CSV Files per Locale

When data are exported from Ariba Analysis to a personal computer, the default field delimiter in a comma-separated value (CSV) file is a comma. However, different locales require different field delimiters. You can specify the delimiter you want for a locale with the `CSVDelimiters` parameter. For example, to specify that a semi-colon be used for the Swiss locale, set the following:

```
Application = {
  Analysis = {
    CSVDelimiters = {
       de_CH = ";" ;
    }
  }
}
```

For any locale not specified, the comma is the default delimiter.

Note: This parameter has no effect on CSV data loading into Ariba Analysis and only concerns data export.

Character Encoding in CSV Data Export

Microsoft Excel has known issues with reading comma-separated value (CSV) files encoded in UTF-8, especially if the file has non-English characters like umlauts and accents. The parameter `CSVExportEncoding` can be used to control the default character encoding for data exported in CSV files. Any of the following IANA-supported character encoding names is allowed:

- ASCII
- ISO-8859-1
- Big5
- GB2312
- KS_C_5601-1987
- UTF-8
- Shift_JIS

For example, the following entry in `config/Parameters.table` sets the character encoding to UTF-8:

```
Application = {
  Analysis = {
    CSVExportEncoding = UTF-8 ;
  }
}
```

Parameters for Report Cache and Background Limits

This release includes new parameters in `config/Parameters.table` for controlling the report cache:

For a brief discussion of the report cache, see "Report Caching" on page 18.

Maximum Cells and Entries for In-Memory Cache

The size of the Ariba Analysis in-memory report cache cannot exceed the limits set by the parameters `InMemCacheMaxTotalCellLimit` and `InMemCacheMaxTotalEntriesLimit` in `config/Parameters.table`.

The default setting is as follows:

```
System.Analysis.Cache.InMemCacheMaxTotalCellLimit = 1000000 ;
System.Analysis.Cache.InMemCacheMaxTotalEntriesLimit = 100 ;
```

Maximum File Cache Limit

The size of the Ariba Analysis file-system-based report cache cannot exceed the limit set by the parameters `InMemCacheMaxTotalCellLimit` and `InMemCacheMaxTotalEntriesLimit` in `config/Parameters.table`.

The default setting is as follows:

```
System.Analysis.Cache.FileCacheMaxTotalEntriesLimit = 150 ;
```

Screening Cache Entries

The CacheIfLessThanPercentageOfCellLimit parameter specifies that a query will be cached only if its row count as a percentage of the InMemCacheMaxTotalRowLimit is less than the value of CacheIfLessThanPercentageOfCellLimit.

This prevents a single large result set (such as line-item detail, for example) from clearing out a number of cache entries so that the InMemCacheMaxTotalRowLimit threshold can be enforced.

By default, the parameter is set as follows:

```
System.Analysis.Cache.CacheIfLessThanPercentageOfCellLimit = "12";
```

Disabling the Report Cache

You can completely disable to the report cache with the CacheDisabled parameter in config/Parameters.table.

By default CacheDisabled is as follows:

```
System.Analysis.Debug.CacheDisabled = "false";
```

To disable the cache, set CacheDisabled to true, and restart Ariba Analysis.

Background Query Timeout

The timeout for database queries for reports run in the background cannot exceed the the limit set by the parameter BackgroundQueryTimeOut in config/Parameters.table.

The default setting is as follows:

```
System.Analysis.OLAP.BackgroundQueryTimeOut = 20 ;
```

This value is the number of seconds that can elapse before a database query times out.

Parameters for Dashboard Row and Column Limits

This release includes new parameters in config/Parameters.table for controlling the number of rows or columns displayed for an analytical report or summarized view that a user adds to the Spend Management Dashboard:

```
System.Analysis.OLAP ={
   MaxRowsOnDashboard = 20;
   MaxColumnsOnDashboard = 5;
}
```

Parameters for Limiting Chart Data Points and Series

The following new parameters limit the amount of data in an Ariba Analysis chart.

- `Application.Analysis.MaxChartDataPoints`: The maximum number of data points allowed on an Ariba Analysis chart. The default is `Application.Analysis.MaxChartDataPoints = 50;`
- `Application.Analysis.MaxChartDataSeries`: The maximum number of data series allowed on an Ariba Analysis chart. A data series is the number of values to be included from a column field on the pivot table. For example, the years 2002, 2003. The default is `Application.Analysis.MaxChartDataSeries = 5;`
- `Application.Analysis.MaxUIStringLength`: The maximum length of any string displayed in the Ariba Analysis user interface. Any string exceeding this setting is truncated. The default is `Application.Analysis.MaxChartDataPoints = 50;`

Parameters for Line-Level Details

Two new parameters control the number of line-level detail records (lowest level transaction data) returned by the database:

- `System.Analysis.OLAP.LineLevelQueryRowLimit`: The maximum number of transaction records returned by a query. The default is `System.Analysis.OLAP.LineLevelQueryRowLimit = 8000;`
- `Application.Analysis.OLAP.MaxLineLevelRowsPerLevel`. The maximum number of transaction records returned by a database query for any single level in a hierarchy. The default is `Application.Analysis.OLAP.MaxLineLevelRowsPerLevel = 100;`

Parameters Controlling Automatic Restart

This section describes changes to how you control the automatic restarting of Ariba Analysis.

Daily Restart Now Disabled by Default

With this release, the automatic restarting of Ariba Analysis has been disabled. The default values are null, which disables the automatic restart.

```
System.Analysis.Server.RecycleWindowStart = “”;
System.Analysis.Server.RecycleWindowEnd = “”;
```

Weekly Restart: RecycleDayOfWeek

Controls the day of the week when Ariba Analysis restarts itself. Valid values for `RecycleDayOfWeek` are either the word `Everyday` or the names of the days of the week: `Monday` through `Sunday`.

If `RecycleDayOfWeek` is null, Ariba Analysis restarts itself daily.

Note: The time of the restart is set by the parameters `RecycleWindowEnd` and `RecycleWindowStart`. The `RecycleDayOfWeek` parameter is ignored if the parameters `RecycleWindowEnd` and `RecycleWindowStart` are null.

Updated Documentation, Help, and Quick Tours

For this release, all Ariba Analysis documentation, online help, and Quick Tours have been updated with new technical details and augmented with answers to questions posed by consultants in the field and by customers:

- *Ariba Analysis Installation Guide*
- *Ariba Analysis Configuration Guide*
- *Ariba Analysis Customization Guide*
- *Ariba Analysis Data Load Guide*
- *Ariba Analysis Advanced User Guide*
- online help

This release of Ariba Analysis also includes several new guides.

Ariba Analysis Configuration Guide

The *Ariba Analysis Configuration Guide*. This guide is similar to the administration guide in the first release of Ariba Analysis. It contains details about administering and configuring the application:

- Structure of Ariba Analysis directories
- Layouts and definitions of configuration files
- Commands: `initdb`, `runtask`, `addSourceSystem`, and more
- Scheduled tasks
- Parameters in `Parameters.table`

These topics were formerly discussed in the *Ariba Analysis Customization Guide* but have been moved to the *Ariba Analysis Configuration Guide*.

Ariba Analysis Data Load Guide

This guide consolidates all information about Ariba Analysis data loading, including configuration, execution, and customization.

Ariba Analysis Advanced User Guide

This guide discusses concepts and procedures too complex for easy explanation in the online help, such as the following:

- Dashboard templates by role
- Multi-fact reports
- Compound reports
- Microsoft Excel template customization
- Report and template models

Changes to the *Ariba Analysis Customization Guide*

The *Ariba Analysis Customization Guide* now deals almost exclusively with Ariba Analysis metadata XML. The prepackaged reports (now called "report models") are fully described in the new *Ariba Analysis Advanced User Guide*.

Quick Tours

All Quick Tours (video clips for self-training) have been updated for this release.

In addition, a new Quick Tour demonstrates how to use Ariba Analysis, Ariba Category Management, and Ariba Enterprise Sourcing in combination for Supplier Performance Management.

Chapter 3
Migration from Ariba Analysis 2.1 and 2.5.x

Migration to Ariba Analysis 3.0 from Ariba Analysis 2.1 or 2.5.x uses the standard Ariba migration harness documented in the *Ariba Buyer Migration Guide*.

The Ariba Analysis migration harness migrates the following:

- Metadata XML: database schema.
- Data-loading metadata XML definitions

The migration harness does **not** migrate configuration files (such as `Parameters.table`) user data and report definitions, and dimension data sources. In addition, some metadata XML and data loading XML improvements cannot be automated because they require understanding by a human being.

High-level Steps for Migration to Ariba Analysis 3.0

Migration consists of the following high-level steps:

1. Dump user data and report definitions from the old installation.
2. Dump dimension data sources.
3. Install and configure a new Ariba Analysis 3.0 instance.
4. Use the migration harness to migrate from the old instance to the new.
5. Make any necessary manual changes that cannot be automated.
6. Initialize the database of the Ariba Analysis 3.0 instance.
7. Verify the data after migration.

Step 1: Dump User Data and Report Definitions

Be sure to shut down your old Ariba Analysis installation before dumping any data.

Preserve a copy of the your old installation's user and report data and dimension data sources. Use the following command:

```
AnalysisServerRoot/bin/runTask -task DumpSystem
```

The `DumpSystem` task is defined in the `config/DataLoadTasks.table`, as follows:

```
DumpSystem = {
  ScheduledTaskClassName = "ariba.analytics.tasks.SystemDump";
    Operation = "Export";
    Directory = "systemDump";
     };
```

Note: You will reload the output from `DumpSystem` into the new installation as part of initializing the database for Ariba Analysis 3.0. See "Step 6: Initialize the Ariba Analysis 3.0 Database" on page 54.

For more information about the `DumpSystem` task, see the *Ariba Analysis Configuration Guide*.

Step 2: Dump Dimension Data Sources

Be sure to shut down your old Ariba Analysis installation before dumping any data.

Preserve a copy of your old dimension data sources to be reloaded during database initialization. Use the `DumpDataSources` data load task. The following is from the Ariba Analysis 3.0 `config/DataLoadTasks.table`:

```
AnalysisServerRoot/bin/runTask -task DumpDataSources
```

```
DumpDataSources = {
  Directory = "sample/dumpDataSources";
  Operation = Export;
  ScheduledTaskClassName = ariba.analytics.tasks.DataSourceDump;
  };
```

Step 3: Install and Configure Ariba Analysis 3.0

Install Ariba Analysis 3.0.

Configure your new Ariba Analysis 3.0 instance exactly as your old 2.1 or 2.5.x instance.

For complete information about installing and configuration Ariba Analysis 3.0, see the *Ariba Analysis Installation Guide*.

Step 4: Use the Migration Harness

This section does not include all details about options and features of the harness, but focuses on only the most pertinent, succinct steps and information necessary to complete the migration to Ariba Analysis 3.0. For background information about the Ariba migration harness, see the *Ariba Buyer Migration Guide*, specifically the following sections:

- Chapter 5, "Running the Task Harness," except the last section.
- Appendix D, "Command Reference."

▼ To migrate your old Ariba Analysis instance:

1. In your new Ariba Analysis 3.0 instance, start the migration harness. The following is a single command:

   AnalysisServerRoot/bin/bin/migrationharness -previous *oldAnalysisServerRoot* -dumpDir *pathToDumpedUserOutputFromStep1*

   By default, the *pathToDumpedUserOutputFromStep1* is as follows:

   oldAnalysisServerRoot/dumpUsers

2. Once the harness has started, in the harness command prompt, enter the following

   ```
   r a
   ```

   Note: The `r a` command is the most efficient way to use the migration harness. The tasks in the migration harness are order-dependent. If you run them out of order, you will see error messages.

Step 5: Make Manual Changes

The migration harness cannot account for changes due to improvements in Ariba Analysis 3.0 or due to values specific to your configuration. These changes require human expertise.

This section includes the following topics:

New Permissions

Ariba Analysis 3.0 introduces some new permissions:

- `AnalysisScheduleReport`: schedule reports.
- `AnalysisPublishReports`: share reports with other users.

In the user authentication source for Ariba Analysis 3.0, assign these permissions to the appropriate users. The user authentication source is either Ariba Buyer or Ariba Enterprise Sourcing, unless Ariba Analysis is standalone, in which Ariba Analysis itself is the user authentication source. For more information about user authentication sources and these new permissions, see the *Ariba Spend Management Integration Guide*.

Configuration Files

Change your Ariba Analysis 3.0 configuration files to match necessary values from your old instance:

- Merge parameters from your old `Parameters.table` into the new.
- Merge information from `ConnectionInfo.table` for any external ERP connections.
- Merge entries from your old `ScheduledTasks.table` into the new.
- Merge entries from your old `DataLoadEvents.table` into the new.

ReportsUser Name Change

By default in Ariba Analysis 3.0, the `ReportsUser` unique name is `ashell`, the owner of the report models that come with Ariba Analysis. If you rely on using the default `ReportsUser`, change `reports` to `ashell`. For more information about `ashell`, see the *Ariba Analysis Configuration Guide* or earlier sections of this guide.

▼ **To set the correct ReportsUser:**

```
Application = {
  Analysis = {
    ReportsUser = {
        UniqueName = "yourReportOwnerUserNameHere";
        PasswordAdapter="PasswordAdapter1";
        };
  }
```

Parameter Rename: Currencies

The Ariba Analysis 2.1 `SupportedCurrencies` parameter is named simply `Currencies` in Ariba Analysis 3.0.

Metadata XML Changes

This section describes manual changes you might need to make in metadata XML. It includes the following topics:

New Commodity Dimension

Ariba Analysis 3.0 introduces a new Commodity dimension that is in common across all Ariba Spend Management applications. For more information, see the *Ariba Analysis Data Load Guide*.

If you formerly used `DirectCSVLoad` to populate the Commodity dimension, in Ariba Analysis 3.0 set the `DestinationName` in the `DataLoadEvents.table` file to `ariba.analytics.dimension.ERPCommodity`.

Example

```
DirectCommodityLoad = {
  DestinationName = ariba.analytics.dimension.ERPCommodity;
  DataLoadName = "DirectCSVLoad";
  DataSourceParams = {
    Filename =
    "config/sourceTypes/Global/sourceSystems/Default/data/dimensions/Commodi
    ty.csv";
            };
  Threads = 4;
  };
```

constraintHierarchy

Ariba Analysis 3.0 introduces the metadata XML `constraintHierarchy` for the `ClassProperties` of a dimension. (For more information, see the *Ariba Analysis Customization Guide*).

The `constraintHierarchy` attribute must be set to either a valid hierarchy of a dimension or to null. If a hierarchy referred to by this attribute is deleted by a metadata XML extension, metadata XML validation fails.

Example

In Ariba Analysis 3.0, because the Management hierarchy is a constraint on the UserData dimension, the following `deleteHierarchy` causes metadata XML validation to fail:

```
<inDimension name="ariba.analytics.dimension.UserData">
  <deleteHierarchy name="Management"/>
</inDimension>
```

Solution

The `ariba/variants/Plain/extensions/SpendAnalysis.aml` file defines the constraint. To prevent metadata XML validation from failing, you might decide to set the `constraintHierarchy` to null in a metadata XML extension:

```
<inDimension name="ariba.analytics.dimension.UserData">
  <deleteHierarchy name="Management"/>
    <inField name ="ClassProperties">
       <properties constraintHierarchy=""/>
    </inField>
```

```
</inDimension>
```

Amount Ranges

You have several design decisions vis-a-vis changes to Amount Range dimensions. For background, see "Amount Range Changes" on page 29.

Study the examples provided in the extension file `SpendExt.aml`, make your design choices, and modify your metadata XML accordingly.

Data-loading XML: Interface Tables Not Used

Ariba Analysis 3.0 does not use interface tables for loading data to some dimensions. (For more information, see the *Ariba Analysis Data Load Guide*).

If you use `interfaceSqlMapping` in some data loading extensions, data loading metadata XML validation fails.

Solution

If an interface table is still of value for the dimensions in your implementation of Ariba Analysis 3.0, you have two choices:

- Refer to the new Ariba Analysis 3.0 data load definitions and add data load extensions to use interface tables. Data loading definitions from which interface tables have been removed are as follows.

Data Load Definition	Affected dimension
`BuyerContract`	`ariba.analytics.dimension.Contract`
`BuyerSupplier`	`ariba.analytics.dimension.Supplier`
`BuyerPartPO`	`ariba.analytics.dimension.Part`
`BuyerPartInvoice`	`ariba.analytics.dimension.Part`

- Add it to the data-loading extensions that require it.

Step 6: Initialize the Ariba Analysis 3.0 Database

After the earlier steps and before verifying the data, initialize the Ariba Analysis 3.0 database:

```
AnalysisServerRoot/bin/initdb -initdb
```

Note: Database initialization does the following:

- Changes the database schema based on your metadata XML.
- Loads user data and report definitions.
- Loads dimension data sources.

Step 7: Verify the Migrated Data

Verifying the migrated report data consists of the following steps:

1 Dump the report data from the old instance and the new instance into CSV files, using the `DumpReport` scheduled task.

2 Use the `diffcsv` comparison tool to pinpoint any possibly mismatched data.

Note: Ensure that the data in both the old and new instance is the same. For example, do not verify the old **production** Ariba Analysis data against the new Ariba Analysis **development or test** data.

DumpReport Scheduled Task

Use the `DumpReport` scheduled task to extract report data from the database into CSV files for all users in both the old and the new instance.

Note: `DumpReport` is new with Ariba Analysis 3.0. However, it is available for Ariba Analysis 2.5 in Ariba Analysis 2.5 Service Pack 9.

You can dump report data for a single user. By default, CSV output is written to the *`AnalysisServerRoot`*`/dumpReports` directory. The following example is from the Ariba Analysis 3.0 `DataLoadEvents.table` configuration file:

```
DumpReports = {
  ScheduledTaskClassName = "ariba.analytics.migration.DumpReport";
  User = "userLoginNameHere";
  Directory = "dumpReports";
  };
```

diffcsv Comparison Tool

To verify that your data has been migrated correctly, use the `diffcvs` comparison tool. `diffcsv` deterministically matches record-ids in both the old and new data. The comparison tool processes all CSV files in the specified directories.

Syntax

```
bin/diffcsv <option> <option> ...; where <option> is:
  [-dir1 <directory containing csv files>]
  [-dir2 <directory containing csv files>]
```

```
[-file1 <csv file>]
[-file2 <csv file>]
```

`diffcsv` writes a summary for all reports to the logfile `logs/migration/diffcsv/changedRows.txt`.

Determining Successful Data Migration

Examine the logfile from `diffcsv`. A successful data migration is indicated by an empty logfile.

Possible Unsuccessful Migration

A non-empty logfile indicates problems in data migration. In the case of mismatched data, `diffcsv` writes lines to the logfile. These lines are similar to the UNIX `diff` command. Example:

```
Added rows to d:\tmp\csv-jp\user.csv:
( "1986,1754,Jim Miller,PasswordAdapter1,PasswordAdapter1" )
Removed rows from d:\tmp\csv-jp\user.csv:
( "1986,1754,Jim ,PasswordAdapter1,PasswordAdapter1" )
```

Third-Party Software

Apache Software

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org.apache.bcel 5.0

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org.apache.commons.collections 2.1

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org.apache.lucene 1.2

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org.apache.oro 2.0

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org.apache.poi.hssf 1.5.1

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org.apache.regexp 1.2

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org.apache.soap 2.2

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org.apache.tomcat 3.2.4

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org.apache.xerces-1.4

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com.jclark 1.0

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Infozip.zip 2.3

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