TIBCO BusinessEvents™

Release 4.0 Documentation Plan

Revision	Author/Date	Comments
1.5	9/29	Update to BE-BW integration, new approach, new developer.
	9/30	Added cluster subscription feature notes.
1.4	9/8/09	Pattern Language new feature - Ashwin to
	8/19/09	write up details.
	8/18/09	Decision graphs will be BPM functionality introduced in 4.0 in a limited way.
		Decision projects removed; functionality will be in BE; new design docs; description of perspectives and mention of customizing perspectives to be added.
1.3	8/5/09	Changed GA, Beta, and updated various details.
1.2	7/16	Added about building and using shared libraries - beginning info.



Revision	Author/Date	Comments	
1.1	6/19	Added info gathered at 6/18 doc outline review: Query Composer, domain models for ontology items, new visualizations for ontology and rules, new deploy-time configuration UI.	
1.1.1	7/8/9	Added bit about domain model	
1.0	Jackie Pascoe	Added features from cancelled 3.0.2 release	
	6/8/09	and those provided in Gabe's list. Changes are to be expected, however.	
1.0.1	6/10/09	Added info about Corona resources documentation - from AMX 2.0	
0.2	Jackie Pascoe	Moved some items to 3.0.2 doc plan	
0.1	Jackie Pascoe	Initial setup	

Important Information

SOME TIBCO SOFTWARE EMBEDS OR BUNDLES OTHER TIBCO SOFTWARE. USE OF SUCH EMBEDDED OR BUNDLED TIBCO SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED TIBCO SOFTWARE. THE EMBEDDED OR BUNDLED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER TIBCO SOFTWARE OR FOR ANY OTHER PURPOSE.

USE OF TIBCO SOFTWARE AND THIS DOCUMENT IS SUBJECT TO THE TERMS AND CONDITIONS OF A LICENSE AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED SOFTWARE LICENSE AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER LICENSE AGREEMENT WHICH IS DISPLAYED DURING DOWNLOAD OR INSTALLATION OF THE SOFTWARE (AND WHICH IS DUPLICATED IN LICENSE.PDF) OR IF THERE IS NO SUCH SOFTWARE LICENSE AGREEMENT OR CLICKWRAP END USER LICENSE AGREEMENT, THE LICENSE(S) LOCATED IN THE "LICENSE" FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME.

This document contains confidential information that is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of TIBCO Software Inc.

TIB, TIBCO, TIBCO Adapter, Predictive Business, Information Bus, The Power of Now, TIBCO ActiveMatrix BusinessWorks, are either registered trademarks or trademarks of TIBCO Software Inc. in the United States and /or other countries.

All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only.

THIS SOFTWARE MAY BE AVAILABLE ON MULTIPLE OPERATING SYSTEMS. HOWEVER, NOT ALL OPERATING SYSTEM PLATFORMS FOR A SPECIFIC SOFTWARE VERSION ARE RELEASED AT THE SAME TIME. SEE THE README.TXT FILE FOR THE AVAILABILITY OF THIS SOFTWARE VERSION ON A SPECIFIC OPERATING SYSTEM PLATFORM.

THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. TIBCO SOFTWARE INC. MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS DOCUMENT AT ANY TIME.

THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "READ ME" FILES.

Copyright © 2004-2009 TIBCO Software Inc. ALL RIGHTS RESERVED.

TIBCO Software Inc. Confidential Information

9/30/2009 02:26 pm

Contents

Project Plan	1
Audience Analysis	1
Teams Associated with the Product	1
Specifications or Other Information Availability	2 ∈
Release and Documentation Milestones	2 0
Deliverables	3 60
Graphical User Interface	4 (1)
Error Messages	4 👸
Content Included from Other Products	
Location of Review Documentation	5 on
Localization	
Product Packaging	6 2
New Features and Open CRs	8
Major Product Changes	8 m
Platforms and Third-Party Software	9 6
New Features to be Documented and Changes that Affect Documentation	10
Decision Manager	19
Miscellaneous Properties Etc	23
Hotfix Related Changes	23 🔟
Deferred Features	
Open Documentation CRs to be Addressed.	
Documentation Review Schedule	26
Review Stages	
Review Schedule	26
Risks and Dependencies	27

Project Plan

This section introduces the documentation planned for the product. It identifies the audience, team members, documentation milestones and deliverables. Localization plans for the product are also listed, if applicable.



Additional features and doc changes are listed in the doc plan for 3.0.2. That release has been cancelled. Much of the 3.0.2 work is done but none of it has been reviewed other than in section reviews. The 4.0 review will encompass that work. A detailed review guideline doc is available. However, some of the changes will be changed again.and the review of those changes can go ahead at a suitable time.

Audience Analysis

This section explains the audience for the documentation, their background, their comfort level with the technology they are using, and how much they understand the jargon used in the product.

The primary audience is developers.

The secondary audience is business users who are business analysts.

IT administrators are a third audience, not seen as having central importance.

Teams Associated with the Product

The following people are associated with the product:

Area	Name	Office
Product Management	Jitesh Patel	Palo Alto
Development	Suresh Subramani	Palo Alto
	Gabe Grigorescu	Palo Alto
	Bhalchandra Gokhale (Bala)	Pune
	Team members:	Palo Alto, UK, Minnesota, Pune
	http://wiki.tibco.com /BEWiki/Contacts	(Wiki page is not always current)

Area	Name	Office
Quality Assurance	Indranil Banerjee	Palo Alto
		See appendix for team.
Support	Navin Shetty	Palo Alto
	Mani Subramanian, Saurabh Mittal, Sethu Natraj	Palo Alto
	Anwar Khan, Art Stefanopoulos	UK
	Nick Padilla	Australia
	Ralph, Ryan	China
Documentation	Jackie Pascoe	Palo Alto
	Carrie Sheaffer (as available)	Colorado

Meetings Support, Thursday at 2. QA, Thursday at 3.

Specifications or Other Information Availability

Early work: See http://svn.tibco.com/be/trunk/leo/docs for a high level feature list.

Current product plan (out of date 9/9/22) here: http://svn.tibco.com/be/trunk/prodmgmt/ProjectPlan

Release and Documentation Milestones

The major milestones planned for the product are listed in the next table. The documentation freeze is normally two weeks prior to the GA release date. Books will not be updated after the documentation freeze date.

Milestones	Dates
First installer build	Full installer not yet available 8/5
First cut of UI	
Code/Feature Freeze	not available

Milestones	Dates
UI Freeze	not available
Documentation Freeze	not available
Final Build or Packaging Date	not available
GA Release	November (end Q4)

Beta Releases

End of September, AT&T

Deliverables

The following books make up the product's documentation. \boldsymbol{TBD} if context sensitive help is provided in $4.0\,$

Book Name	Page Count in Previous GA Release	Context Sensitive Help	Format
Installation	83	No	PDF, HTML
Getting Started	131	No	PDF, HTML, Eclipse
Architect's Guide	N/A	No	PDF, HTML
(Glossary)	7		
Developer's Guide ¹	312	Yes	PDF, HTML, Eclipse
Functions Reference	N/A	No	HTML, Eclipse
Java API Reference	N/A	No	HTML, Eclipse
Query Developer's Guide	70	No	PDF, HTML, Eclipse
Decision Manager	134	Yes	PDF, HTML, Eclipse

Book Name	Page Count in Previous GA Release	Context Sensitive Help	Format
Views	N/A	TBD	PDF, HTML, Eclipse
Administration ¹	188	Yes	PDF, HTML, Eclipse
Cache Configuration Guide	N/A	No	HTML, Eclipse
Release Notes	56	No	PDF

^{1. 3.}x *User's Guide* is split up into 4.0 *Architect's Guide*, *Developer's Guide* and *Administration*. Developer's guide also absorbs rule language topics from the defunct *Language Reference* guide.

Graphical User Interface

The User Experience group is not involved in designing the graphical user interface. The writer will participate in the user interface review, if any. The UX style guides published by the User Interface group are known to the development team. See:

http://wiki.tibco.com/UserExperienceWiki/UI_Style_Guides_and_Production_Files

The development team adheres to Eclipse standards.

Error Messages

Error messages are added and changed during product development. Developers own error messages and write initial error message descriptions. Writers edit the descriptions and use a utility to parse error message files so they can easily be included in a book.

All messages will be externalized in 4.0 and the technical writer will review them and correct for language.

Content Included from Other Products

The following content written for other products is included the product's documentation set:

- Information on JMS message headers from EMS documentation. Copied and modified - for different names and so on were needed.
- Decision manager features will appear both in BusinessEvents Studio and in Decision Manager application.
- It's possible some Hawk details may be used. Not clear yet.

Location of Review Documentation

Section review documentation will be made available in http://insidecontent1/tech-pubs/share/jpascoe/BE/4.0-docs.

Formal reviews will be done using Adobe shared review mechanism.

Localization

This section indicates whether all strings are externalized into properties files. This allows the strings to be easily edited by the writer.

- Error messages are externalized into properties files.
- UI labels and messages are externalized into properties files.

Product Packaging

Preliminary information, out of date. August 5 - design work and packaging discussions still underway.

This section explains which product components are packaged into editions or suites. Some components may be productized in the future and must be documented in a self-contained manner.

Decision Manager could become a product that can be used for different products - we'd provide an API. For example BRM,

Query could also be a stand alone product at a future point.

NOTE: Syndera as a product is discontinued - components are integrated into Business Events (see New Features and Open CRs on page 8).

Below is out of date.

Inference Edition ("BE lite")

- Server—The BusinessEvents runtime engine.
- Studio (Eclipse replacement for "Workbench—A TIBCO Designer™ palette of BusinessEvents resources.")
- ? TIBCO ActiveMatrix BusinessWorks[™] 5.x Plug-in
- Query
- Views (From Syndera Insight)
- Management Console (as an example feature only in 4.0)

Enterprise Suite

- Server—The BusinessEvents runtime engine.
- Studio (Eclipse replacement for "Workbench—A TIBCO Designer™ palette of BusinessEvents resources.")
- ? TIBCO ActiveMatrix BusinessWorks $^{\text{\tiny TM}}$ 5.x Plug-in
- Query
- Views
- Management Console (as an example feature only in 4.0)
- Decision Manager

Decision Manager

- Eclipse application
- Rules Management Server
- API for integration with BusinessEvents and other products.

New Features and Open CRs

This section lists each major feature to be documented for the release. It identifies where the feature will be documented and the source material provided by each developer that describes the feature.



Reminders

- Beginning with the 4.0 release, hotfix readmes and other readme files will use the standard TIBCO naming format.
- Release notes are purged of 3.x and earlier content

Major Product Changes

Change from Application to Platform Software Category

Event processing and decisioning, formerly the focus of the BusinessEvents software, may not be used at all in some applications. The various components and features are to be documented as separately and independently as possible so that users can use them to achieve unforeseen goals. Docs will discuss some use cases, but users will come up with their own ways to use the software too.

Major Product Components Introduced and Dependencies Removed

New components - details in other parts of doc plan:

- BusinessEvents Studio Eclipse IDE
- Decision Manager (DM) is now Studio based. No decision project separate.
 DM features will be in Studio and also in DM.
- BusinessEvents Views (with dashboard agent)
- Enterprise Monitoring and Management Console
 - Deployment and admin UI (Maybe two, maybe one)
 - Web-based Monitoring UI, plus config in XML files.
 - Will use Hawk extensively. Not bundled.
- BusinessEvents will use the universal installer.
- Dependencies on TRA, TIBCO Designer, Rendezvous and BusinessWorks are removed. People who want to use the RV channel must have a full RV license.

Note: A good bit of the design-time and deploy-time activity in 3.x uses existing TIBCO products with existing product documentation, and did not have to be documented in the BusinessEvents doc set. That content will have to be written for the new 4.0 release user interfaces.

Port to Eclipse—Addition of Context-Sensitive and Dynamic Help (maybe)

The design-time UI is ported to Eclipse in this release.

If time permits, BusinessEvents 4.0 documentation will pilot use of Eclipse-based context sensitive help and dynamic help, greatly enhancing access to documentation in this release.

Integration of Syndera Components into BusinessEvents: BE Views

The Syndera product will no longer be offered. Certain components will be integrated into BusinessEvents:

- Insight is repackaged as BusinessEvents Views.
- Architect (some portions) is used as appropriate in BusinessEvents Studio (Eclipse) It will be a different plug-in. We may change some vocabulary. Unclear as yet - will get more info.
- Syndera presentation server (I think that's the component) is repackaged as a new kind of BusinessEvents agent: "Dashboard Agent." Unclear - need more info.

Platforms and Third-Party Software

Below from 3.0.2 plan - likely will be more. Not shown here are removal of dependencies from other TIBCO software - BusinessWorks, TRA, Designer, Administrator.

New Platforms

Red Hat Linux 5.2, 4.7

Status Added to release notes, readme.

New Third Party Software

Oracle 11g

Status Added to release notes, readme.

Database for Backing Store

Initially Oracle and SQL Server. Versions tbd.

New Features to be Documented and Changes that Affect Documentation

This section lists the features to be documented in the release. The features listed correspond to those listed in the product's PRD. (PRD not available.)

BusinessEvents Studio: Replaces and Extends Designer

Replacement for TIBCO Designer. Summary of features in Studio (More detail for larger features in sections following.)

- All existing BE Workbench and other related documentation will need to be rewritten for Studio: channels, destinations, concepts, scorecards, events, rules, rule functions, functions. Much content re-use but all has to be carefully updated for new UI, procedures, and terminology of new components.
- Import 3.x Designer projects supported.
- Studio will incorporate all Decision Manager functionality (and decision projects will not be used).

Subscribe to Cluster

Deploytime setting was in advanced BAR settings in 3.0.2

Subscrption preprocessor - also adavnce BAR setting

Possibly function to load without asserting - may be workaround not clear. Effect

Use case for function not clear - Text from hotfix 7 - removed because not published feature:

1-A7R8FT

It was not possible to load an object that had the Subscribe Cluster flag set (in the BAR resource) without asserting it. Now a function is available for use in the subscription preprocessor so that the object is loaded only, and not asserted (loading does not assert or trigger rules). The function is clusterSubscriptionLoadOnly(). Use it in the subscription preprocessor for the object.

Shared/Project Libraries/resources

To replace Designer feature - but simpler. Build library. Import library.

Status Ready to doc Sept 28

Shared Resources - Developed by BE

Nicolas

Carrie could document this part.

Replaces the resources in Designer such as JDBC Connection and so on.

- EMS/RV
- HTTP
- Security
- JDBC (DB)
- Global Variables
- INDI

Status not ready. If not ready in time, will use DABS as a fallback.

Catalog Functions - new implementation

Status TBD - feature available now.

Codegen Changes and Database Concepts

Pranab

UI will change because of underlying refactoring.

Change to insert SQL file. Stored procedure line added.

Now support SQL Server

Status In development - nearly ready.

New Graphs and diagrams

Hitesh (Gabe)

Various diagrams:

- Dependency graphs supported for project artifacts.
- Sequence diagrams supported for rules and events.
- Concept View, Event View New UML diagram support for concepts and events, with some functionality such as delete, change concept inheritance, edit by double click.and links; rename objects; modify inheritance structure. In future versions, will have full editing capability. (concept one replaces 3.x concept view)

- Project Analyzer replaces Rule Analyzer. Various improved diagramming options and other improvements. For example, double click to open the form editor for a component.
- New diagramming editor for state machines

Carrie is documenting diagram options and controls reference

Status In progress. Carrie documenting diagram options

Domain Model Support - Added for all Entity Types

Info from Gabe: In 4.0 it'll probably be only by DTs, concepts and events. In **4.0.1** it can be used by project validation, and also in rules while writing code, when you do code complete, it can suggest what values to check against if there is a domain model associated with it. You create domain models, then you can associate with properties. 1 model can be associated with multiple properties.

Status: Draft mostly complete. Association not yet documented.

Rule Editor

Form and source based options. Refactoring, syntax, resolution error detection, xslt mapper (not there yet). Various features such as text folding, outlining (draft doc done)

Status Draft mostly complete.

State Machines separate from Concepts - Linked by association

Also from hotfix3, 1-9PDW2Q Standalone State Machines and Rules

Rules can be in folders. State machines can be in folders.

search on standalone. Quite a lot of doc changes for these two changes.

Add/Remove Associations - for SM/concepts Domains/entity properties

TBD

NOTE: above may be similar also for decision manager tables relationship with VRF.

Custom Functions New Mechanism

New custom functions UI and support for custom functions (see Studio4.0-CatalogFunctionsDesign.doc in studio docs area of svn)

Status draft complete.

Rule Debugger - New/Improved component

Pranab, Sridhar

8/5/09 Pranab says not yet ready for documentation. He'll let me know.

Now part of Studio. Code level debugging for Rules, Rule Functions, Event expiry Actions. The following buttons are on debug tool bar: Start, Stop, Resume, Step Over, Step Into, Step Out, Thread Dump.

Status In Development.

Project Validator (was Analyzer) - New/Improved component

Raju

Most of framework in place, not all validations working. UI in place. Jide controls from old rule analyzer so doc content can be reused.

Status TBD / Need details. Carrie may do this part.

Soap and HTTP Channels, WSDL Import and Export

Bala and Vrishali dev. also Shiv.

HTTP channel, sets up a web server. Send receive events, server/client. Also SOAP support. Not used like a regular channel. Web services. For soap, BE can have a role as an intermediary ("part of pipeline") as well as ultimate receiver. ActiveMatrix web service.

HTTP channel and destinations. Support for Tomcat 5.5, and HttpComponents for fast HTTP Server. Server Mode and Client. Supports serving static pages for Tomcat implementation - needs a web root. Serialization - REST, SOAP. Could do SOAP over IMS.

Various new functions to support this feature - headers, rows, payload, etc. Raw HTTP channel too.

WSDL - Import concrete or abstract WSDL, and convert to project resources.

New event type **SOAPEvent**. SOAP 1.1 support at minimum. Document style/literal (not RPC).

Rule Functions that have signature SOAPEvent in and Out can be exported through channel as concrete WSDL.

Two new chapters in *Developer's Guide* in 4.0. (I'll also break up the existing single chapter on channels, which is 28 pages long and covers RV and JMS channels. Instead there will be one chapter per channel: RV, JMS, HTTP.)

Status HTTP and SOAP draft done with questions, especially about HTTPS.

Profiler - New/improved Component

No details yet on 4.0 changes

Sridhar and Kai (plus Suresh and Ashwin for framework)

Kai says she will start work on 4.0 at end of July.

3.0.2 feature notes (note it won't be in Visual VM in 4.0!): Will integrate our UI into Visual VM - pending legal approval. Plug-in to Visual VM. Our JMX output. Support standard Java JMX features - Heap, CPU usage, Threads etc. Coherence and BE metrics. Rule profiling as now plus will attach to running BE engine; runtime profile - attach/detach invocation. Logging framework and log viewer. Rule function and catalog function profiling. Profiling filters - rule set, rule, rule functions. Export - CSV/DB/XML output.

Status TBD.

BusinessEvents Views—New Component

Anand. Carrie to do this part.

The Syndera Insight component is to be lightly repackaged as a BusinessEvents component. The component is written using Flex, Flash, and HTML (Web) technologies.

8/5/09 - not so lightly repackaged - much more work is TBD.

- Separate option in the installer.
- New book adapted from OEM book. Title Views (title tentative).
 Documentation is to be put into TIBCO look and feel for inclusion in the documentation set, but otherwise not edited.
- Designtime features are in Studio.
- UI is standalone, Flex-based dashboard visualization with some user customization.
- Dashboard agent I think it's like a query agent pumping info to the insight UI.
- jaas based authentication and authorization. Persistence. Data filtering. Customization of visualization.

Enterprise Management and Monitoring Console—New Component

Anand Patil, Mark Wiley. Kai Pang for Management aspects.

This component will eventually be a complete replacement for TIBCO Administrator.

Will be used to manage and monitor deployed (and deployable) BusinessEvents agents. Provides monitoring and management facilities across the cluster.

Used for managing BE lifecycle and gaining visibility into status and performance of running deployment. Topological view of host and agents in cluster (cache, inference, query, dashboard, management). Provide JMX statistics for each agent (JVM heap, threads, object, throughput/latency, cache metrics, network statistics). Discover topology of cluster. Well defined cache entries for metric, JMX nodes. Life-cycle management of other agents. Supports hot deployment of EARs.

In 4.0 can be used for hot deployment. Not yet clear what management is available in 4.0 - mostly a viewer.

Status: 6/8: Draft of example doc in Word pulled into FrameMaker. Needs screenshots and the object view section and info about configuring alerts.

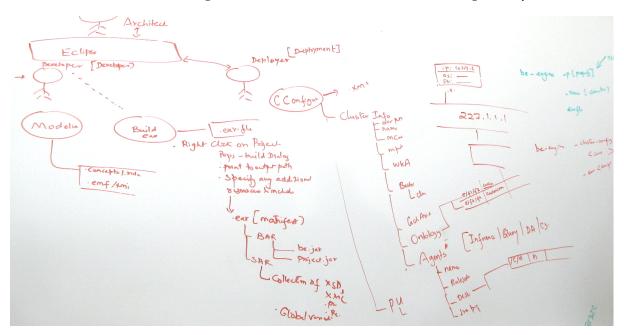
New Deployment UI

Nicolas. Pranab and Sridhar may also help.

IN 3.x when you build an archive you also set a lot of options. now you won't do that - those options will be set using this deployment UI. Archive building is simple.

Output goes to a CDD file - cluster deployment descriptor file. File is getting to be ready. UI tbd.

6/18 Suresh gave whiteboard overview and talk (recording is in my share):



New Topology File 9/17/09

Will be a graphical cluster topology tool. Given input of a CDD file (see above), you map processing units to hosts. Output is a file for EMM. EMM will flag any discrepancies.

Multithreaded (Concurrent) Rete Network (Runtime Enhancements)

Performance enhancement that will affect design time activities. Same engine multiple threads modifying different objects (lock). Can be in memory, not restricted to cache mode.

Basically it seems to mean multiple RTCs for one Rete (not multiple rete networks in an engine)

Ashwin says functionality will be mostly not visible to users.

Scope TBD.

Object Management Enhancements

Cache-aside support for Coherence - Use our JDBC code to get more control over writes to backing store, bypassing Coherence. we can batch the inserts. Deleted entities etc. Also more performance metrics. Writing from working memory to database, without first writing to cache. (Ashwin)

- Multi-site cluster support for Coherence (Unclear) seems to be about one project can belong to multiple clusters; and multiple projects can belong to one cluster - Nicolas.
- Support for ActiveSpaces as well as existing Coherence
- New JDBC Backing store, as well as existing Oracle-only backing store

Content goes in *Administration Guide*.

Status: awaiting administration UI.

JDBC Backing Store Support

Vincent > India team Bala, Shiv

Changes to schema - better structure. (and schema generation but not much). New deployment support with Alter scripts. New scripts for archiving, migrating. Import/export - standard DB functionality. Add support for SQL Server and MySQL. Need to find out about "Use of TIBCO drivers is to be discouraged." Schema update may not be in 4.0

new XML config for mapping BE words that are database reserved words like "start" "end" to other terms.

Migration utility provided for moving from Oracle to JDBC backing store

Oracle 10g, 11g, Microsoft SQL Server 2005 (Versions TBD)

Later - MySql 5., Sybase TBD - Vincent following up.,

Content goes in *Administration Guide*.

Status Drafted.

Query Enhancements

Ashwin

Unclear if or when the 4.0 features will be done.

- Query language will be enhanced to support Tangosol coherence functions
- Language enhancements: Subselects, filters, joins, aggregates, complex correlations

FIBCO CONFIDENTIAL

- Nested queries
- Query Rete/working memory (tentative for inclusion in 4.0)
- Query Events (ESP queries) (3.0.2 feature documented)
- *New Query Composer UI (details unknown Cancelled for 4.0)*

New book, title: *Query Developer's Guide*. Some content taken from 3.x *Language Reference*, some from user's guide.

BusinessEvents-BW Integration - Doc and Feature Enhancements

Ryan

3.0.2 updates: Doc enhancement: communication with outside world when BE is the container. Also feature enhancement: Callback rule function working as a preprocessor. Not clear - did not get details in 3.0.2 timeframe.

In 4.0, no bundled BW. BW and BE must both run in Business Studio, using DABS. BE setup in DABS must be documented, and the integration content needs to be updated for this (and for any other changes as noted in 3.0.2 updates)

Status Early planning September 29, 09

All Examples Require Updating

- All examples have to be imported into Studio and redocumented.
- Examples used in Getting Started (and other examples) provide configured TRA files. They need to be replaced.

Hawk libraries updated in 3.0.2 - update of microagent methods deferred

Not sure if any updates are needed but it should be checked.

Threading Model content expansion

Enhancement request from Suresh: Need documentation of execution model threading. May be 8 pages. Depends on getting content.

(input around 22 minutes into C:\Documents and Settings\jpascoe\My Documents\BE\planning\4.0-docplan\090113-voice-images\090113-suresh-doc planning02.MP3.

Provide Cache-only Mode Example (New request - Paul Vincent)

Requested by Paul Vincent/Hardik Mehta

Add a winscript for launching be engines (New request - Paul Vincent)

My other suggestion for the examples was a Win script to launch the engines -Paul Vincent (he said he was thinking of building one).

Pattern Language (rough title) 9/8/09) Ashwin working on this new feature

Ashwin will provide all input docs for this new feature. Not clear on scope as yet.

Decision Manager

Aditya

Decision graphs

BPM type functionality - will be introduced for business users. Will be in Studio and in DM. A bit like state machines, decision tables. XPDL import/export; event-driven BPM; BPMN 1.1 modeling. BPM execution. Separate installer option.

Decision Trees

Right click on a table, will be able to generate a decision tree (mostly view only). Can simplify the tree (fold nodes up or expand them).

Status TBD

Decision graphs

BPM type functionality - will be introduced for business users. Will be in Studio and in DM. A bit like state machines, decision tables. XPDL import/export; event-driven BPM; BPMN 1.1 modeling. BPM execution. Separate installer option.

New Command-line Interface for Decision Project Tasks NIXED - no more decision projects.

A new command-line interface is provided for decision project generation, update, table import, table export, table compilation, and loading tables into a BusinessEvents engine. This interface allows for automated testing. Table import supports same merging capabilities as the GUI. (Raju)

Status: Drafted.

Migration Action in RMS for Impact of New HTTP Channels

Affects Release notes, Install Guide (Migration), and Decision Manager guide.

Aditya

RMS uses an HTTP channel. "The **existing RMS** users can always be asked to change the name of the driver class (Point to the right package structure), and the serializer both in drivers.xml. One care has to be taken though which is that if the HTTP channel's entry exists in 2 drivers.xml which will be the case post 3.0.2, existing RMS users will have to make sure they either use the global drivers XML or at least use the same fully qualified class names for the above 2 in the RMS drivers.xml. Without this there can be unexpected results since both the XML files will be available to the class loader."

Note: Any actions for change due to state machine change in a 3.0 hotfix?

Database Concepts Now Work in Decision Manager

Raju Mishra

- Decision Manager can now handle database concepts (extended properties).
- A GUI is provided so that users can populate domain models from databases, with database concepts. Uses a new preference to enable this. (not property bui.domainModel.fromDBConcept that idea superseded).

Status TBD.

Authentication and Security Improvements

- Decision Manager can now use SSL to communicate with RMS. A configuration wizard is provided in Decision Manager, and some additional RMS properties are used. (Aditya) 1-8ZMN3Z
- You can now configure RMS to work with different LDAP servers, for authentication of users. (Aditya)

Decision Table Export and Import Improvements

- Users can now export decision table test data results. Column headers are now exported when exporting test data results.
- Users have the option to export domain models to Excel and to import them from Excel. Excel spreadsheets now make use of domain models, if defined: they are displayed in drop-down lists. (Raju)
- Users can now merge data from Excel into existing tables (Ryan)
- Users can now overwrite an existing table when importing from Excel. (Ryan)

Table Analyzer

- Create test data, analyze completeness, overlap, redundancy of table rows;
- check against domain models or all possible values
- Show coverage sliders
- Fixit option
- Shows gaps and duplicates in rows.

Other Decision Manager Enhancements

- All DM content now goes into Studio with a subset in the DM book itself.
- No more decision projects
- APIs for DM now exposed (not sure if they'll be packaged separately, i.e. a different Javadoc, for componentization of DM.
- 1-9TVYHX read the users.pwd entire file location from java.property.rms.auth.file.location in the tra (Drafted)
- NEW Decision table UI TBD in Jide by new JIDE guy 8/5/09
- Decision Manager remembers the last folder from which a project was opened. 1-7U8YMA
- A new menu option, File > Switch Project, enables users to select from the last four projects opened.
- Decision Manager can automatically open the last project used on startup. This feature is controlled by a user preference.
- A new menu option, File > Rename, enables users to rename a decision table.
- Users are now warned before committing a project that has validation errors.
- The currently logged in user, login status, and the project path are now shown in the Decision Manager status bar.
- Decision Manager users can check a check box to save their password. The username and password combination (of the last successful login) is stored, with the password encrypted.
- 1-9CVRBE when a decision table is locked, it now has a visual indication. (Might also have some other changes in Domain Model display - different CR)
- Users can now use arguments that are primitives in the same way you can use arguments that are entity properties in decision tables. For example, you can drag such arguments to the Conditions and Actions areas to add columns to a decision table.

- **Decision tables now have a priority setting**. The priority setting enables Decision Manager users to control the order of decision table invocation, for virtual rule functions (VRF) that have multiple tables. (Alan)
- Single row execution: A new checkbox for a decision table lets the user decide whether table should continue to execute after it finds one set of conditions that is true, or stop when it finds the first set of true conditions. Something about row priority is involved. All actions for one row.(Alan)
- A new DateTime calendar wizard has been added to help users set DateTime properties in decision table cells. To use the wizard, a user mouses over the cell and clicks.
- A Constraints Pane has been added to the Decision table view to allow for table analysis and test data generation. (WIP)
- A new tab is added to the Properties view (in addition to cell and row properties). It shows table properties.

Note: Must be able to share content between Studio and DM.

RMS Enhancements

- SSL capable.
- Deploy approved tables to running engine (no need for jconsole).
- 3.x way of deploying decision table classes remains plus above new way.
- Recompile all tables.

Domain Model Related Improvements

Domain model now a first class citizen and can be used for Studio ontology entities, associated with them.

- A new access control permission determines whether users are restricted to choosing from available domain values in a cell, or whether they can also add other values. A checkbox in the domain model editor enables users to decide whether they want to allow entry of values other than the domain model values or not. Users can only use this checkbox if they have the appropriate permission. (Aditya) Another new permission controls whether Decision Manager users can make entity property modifications in decision table actions. (verify not sure it's two things)
- Show Domain Description in Cells new check box in New Decision Table Rule Function dialog (which should be changed to New Decision Table). May change. Domain model descriptions used in cells instead of actual domain model values more user friendly in some cases. Not clear if per table control as yet.

Miscellaneous Properties Etc

This section is a catchall in case small items get lost. May be duplication in other parts of the doc - this is a "failsafe" type section.

'be.dbconcepts.dburi.query.reuseRefs' -. Also may be some other dbconcepts related properties. Bala, email out to him for info 8/13/09

Hotfix Related Changes

Hotfix 4 Items

1-9TWAR6 Cache Coherence.C_CacheLoad* functions were asserting objects and triggering rules.

The functions load cache-only objects into working memory but don't fully assert them. The Rete join structures are updated, but rules are not triggered by the presence of the entities loaded using these functions.

Search for "CacheLoad" in UG. One place.

Hotfix 3 Items

1-9S2KJN - preprocessor failure, retry or not. Retry on Exception field

Added section to simple event resource reference, and event preprocessor sections. Search for "Retry on Exception" in UG.

1-9RYREM Controlling the Start of a State Machine.

(3.0.1 HF3) It is now possible to control the start of a state machine independently from the creation of the concept.

Search for name of New check box - Auto Start State Machine - in Concept Config and also in state modeler chapter, procedure. New function: Instance.startStateMachine()

1-9PDW2Q Standalone State Machines and Rules

Rules can be in folders. State machines can be in folders.

search on standalone. Quite a lot of doc changes for these two changes.

1-90BI1X - Locate rule functions used in rule editor

Search for "Locating Rule Functions Used in Rules" to locate the Tip for this in UG.

1-9N8LSR (1-9LQQJ1 correction) be.dbconcepts.dburi property behavior correction

Now BusinessEvents makes connections for database concepts only when they are specified as the value of the be.dbconcepts.dburi property.

Search for be.dbconcepts.dburi in UG

1-992R4P JMSReplyTo changes. also 1-98Z4YO and 1-8TA5SI

We should document the fact that users should use Event.routeTo instead of Event.replyEvent in case they do not want to use the original event on which the request came in. And more.

Status TBD -Need input from Kai.

Hotfix 2 Items

1-9M28XD Prevent cache servers connecting to channels

Search for be.engine.cacheServer.channel.disable in UG

1-9LQI27 Property for Checking Duplicate IDs Across the Cluster (Also 1-9HX30J in HF1)

With Cache object management, extIds must be unique across all concept and event instances.

Search for this string in User's Guide: "extId value must be unique". (two places.) Also search for Agent.AgentGroupName.checkDuplicates to see the related property details.

1-9M28SW REGISTRATION.COLLISION RVCM advisory messages

Text for this seems to be about setting up the RVCM resource.

To prevent this issue, you must add global variables to the CM Name or CMQ Name, and to the ledger file name if a ledger file is used for RVCM, to ensure the uniqueness of these names. %%EngineName%%, %%ChannelName%%, %%ChannelURI%%

Status: TBD - It isn't clear to me if this is for BE docs.

Hotfix 1

1-9JFGF2 Deleted Entities - Manual Cleanup Option

Search for "Handling Deleted Entities" in user's guide - there is perhaps some info missing, as marked. Please provide if you can.

1-9G6VVA - Adding Multiple Usernames for the Backing Store

Search for this string in appendix for Oracle backing store: Using your database product, you can configure additional users to access the database, in addition to this user.

Question: I'm not sure if it also applies to JDBC backing store.

Deferred Features

BusinessEvents Portal

Nicolas

A web-based user interface to access the runtime engine (via an HTTP channel). It enables users to change data-driven rule parameters, concept properties, and scorecard properties. Found out about it 4/29/09

Status TBD May be postponed.

Open Documentation CRs to be Addressed

The next table lists and describes each documentation CR currently filed against the product's documentation.

Open CR	Description
1-9F7EMJ	Need more about starting tests in examples
	Status Updated one example with more startup info.
1-9JZVFF	Need to document that Coherence queries will not work in Query Agent
	Status: Drafted

Note: Following up on this possible change: Also we can no longer use Coherence functions in the Rules and they can be used only in the preprocessor. (from Saurabh, 3/6/09). Email to Suresh and Gabe today.

Documentation Review Schedule

This section provides the detailed review schedule.

Review Stages

The document passes through the following types of reviews:

- Developer review: Each developer looks for technical accuracy of the documents for a particular feature.
- QA and Support review: QA and Support looks for discrepancies in the document. If a book contains tutorials, QA verifies that the tutorials work as documented.
- Peer review: Another writer looks at information flow and language use.

Review Schedule

The following table lists the review schedule. It is subject to change depending on information availability.

Review Type	Feature	Reviewer	Start Date	End Date
Developer				
QA and Support				
Peer	All features			

Risks and Dependencies

The following outlines some of the risks and dependencies associated with this project.

- Delays in providing internal documents, specifications, working UI prototype.
- Delays in reviews.
- Changes to the product feature set late in the product cycle. In particular, if there are changes to the UI after the UI freeze date, the documentation freeze date will be adjusted accordingly.
- Communication gap between Tech Pubs and the product team.
- Problems due to lack of resources or software licenses.