Welcome!

Welcome to IRI Workbench, the graphical integrated development environment (IDE) built on Eclipse™ for IRI software. IRI Workbench is a familiar, unified user interface for:

- IRI CoSort, for big data transformation, reporting, and hand-offs
- IRI FACT (Fast Extract), for VLDB table unloads to flat files
- IRI NextForm, for data-type, file-format, and database-table migrations
- IRI FieldShield, for masking PII in files and tables
- IRI CellShield Enterprise Edition, for masking PII in Excel
- IRI RowGen, for synthetic test data generation for DBs, files, and reports
- IRI DarkShield, for masking PII in semi-structured and unstructured sources
- IRI Voracity, for data discovery, integration, migration, governance and analytics

IRI Workbench provides multiple ways to design and run jobs, as you build and manage the metadata around them, and the solutions you need. Specifically, you can use it to generate, modify, execute and share the data definitions and job scripts that back-end IRI products use. You can also use its built-in data discovery and metadata management tools, and extend the capabilities of your enterprise information infrastructure through a myriad of Eclipse plug-ins.

The job scripts for all IRI products (except FACT) are based on the CoSort Sort Control Language (SortCL) program. SortCL is a fourth-generation language (4GL) designed to be self-documenting and edited by hand. IRI Workbench's combination of:

- new job creation wizards
- job section and feature dialogs
- syntax-aware script and form editors with outlines
- visual workflow and transform mapping diagrams; and,
- coming support for AnalytixDS mapping manager definitions

mean you do not have to learn SortCL unless you want to; you can create scripts automatically. Note also that IRI Workbench is currently provided at no charge to all IRI customers, regardless of their standalone product license(s), and is purely optional. *You do not need to use the GUI to design or run the jobs for your product.*

Note that support for the workflow and transform mapping diagrams requires a Voracity subscription, and AnalytixDS mapping manager requires separate installation and support.

First Steps

Your back-end product(s) should first be installed and licensed in command-line (CLI) mode according to the email instructions and/or install guide that accompanies your download. You will not be able to execute jobs without first obtaining and entering your license keys through that setup process. You will be able to verify the back-end executable licenses you have from within IRI Workbench.

Because the latest version of Workbench supports the latest features of the back-end products, IRI recommends that you upgrade your Workbench version when you upgrade your back-end product. Otherwise, the scripting functionality supported in your version of IRI Workbench may lag behind or not be supported in your underlying product. Check IRI Workbench help menu and release notes for more information, and email support@iri.com for information about what you have installed if you are not sure about compatibility.

Once you have the right CLI and GUI software installed and licensed, the best place to begin creating jobs is with the Getting Started tutorial specific to the product you have licensed. You can access that and find sample jobs from IRI Workbench Welcome screen's 'Getting Started' section, or from the help menu.

More about IRI Workbench

IRI Workbench allows you to work in the ways with which you are most comfortable. User-friendly metadata and job creation wizards, script dialog and form editors, a syntax-aware script editor (as well as dynamic job outlines linked to both the script editor and the graphical diagrams) let you determine how much, or how little you want to rely on the GUI for product coding and maintenance. And because these same job scripts are designed to run on the command line, in executable scripts, from application programs, or in third-party workflows, you do not have to execute them from IRI Workbench.

You can also modify the screen perspective and properties to customize your desktop and shortcuts. You can exploit team plug-ins for job version control and the text search function to conduct metadata impact analysis. Use the Project Explorer to access and store metadata, job scripts, data files and other local resources. Use the Remote Systems Explorer to access

resources from machines across your network. And once your ODBC connections to relational sources are in place, use the data source explorer to access and view your database tables.

Note that it is easy to confuse the terms 'IRI Workbench' with 'Eclipse Workbench', especially because Eclipse provides a lot of help content specific to its IDE (which they simply call 'Workbench') that you can find in the Welcome section and on-line help documentation within this IRI Workbench. IRI Workbench is a PlugIn for the Eclipse Workbench. Eclipse users should find many features with which they are already familiar in IRI Workbench. However, Eclipse functionality irrelevant to IRI product operations was deliberately left out for those not familiar with, or needing the extra features of, Eclipse.

More about the Metadata (Scripting Language)

As you gain experience with IRI Workbench, you will eventually want to know more about the metadata language behind the tools and controlling the data processing operations. SortCL is a simple syntax for defining source and target metadata, and the mappings (transforms) between them. Most CoSort users will already be familiar with SortCL. For new users, prior experience with mainframe sort languages or SQL is helpful, but not necessary. It is easy to learn the language, and some users still prefer scripting to the GUI.

SortCL's definition language (DDL) aspect, and its Data Definition File (.DDF) format, is common to all IRI products, and supported by leading metadata exchange providers. The field layouts for your files and tables can thus be defined in any IRI product and used by any other. IRI Workbench requires the definition and specification of metadata in the DDF format so that each product can find and act upon the fields in your data sources.

IRI Workbench encourages, but does not require, the use of centralized metadata. IRI suggests you to separate your data from your applications through centralized DDF files so that if your layouts change, you have to modify the metadata in only one place, rather than within multiple jobs. You can do this with any of the DDF editors provided in IRI Workbench. However, to maintain compatibility with existing CoSort SortCL jobs, and because it may be impractical when there is little or no field layout required, DDF file specification is not required.

SortCL's data manipulation language functions, and its .SCL format, are the basis for CoSort, FieldShield, NextForm, and RowGen job scripts; the only difference between them is what functions may or may not be supported. Because SortCL is the "mother language" and is included in every CoSort or Voracity package license, those users can perform the functions of all these tools (except FACT) without having to acquire additional back-end product licenses from IRI. Consultants should also realize, therefore, that SortCL knowledge will be useful in supporting all IRI tools and in wrapping value-added services around any or all of them.

Take Advantage of Other Eclipse Plug-ins

Because IRI Workbench is built on Eclipse, a wide array of plug-ins that play well with both are available. Here are examples of provided or available facilities you can use to enhance your data and enterprise information management infrastructure for free:

BIRT, the Business Intelligence and Reporting Tool, provides visual analytics for applications, including data prepared by IRI software. BIRT provides both basic reporting features, additional data source accessibility, and a charting engine. BIRT users can use the piped output (/OUTILE=stdout) from SortCL-compatible jobs at reporting time to rapidly display BI from IRI-filtered, transformed, and masked subsets.

DTP, the Data Tools Platform, enables the immediate use of RDB and other JDBC-available sources. The tools included provide features such as: in-memory representation of database definitions, query models, result sets, and objects; specifications for connectivity to data source drivers; data source management (e.g. adding and removing tables from a database); and, the ability to reformat, map and/or translate data, and act as an ETL tool. IRI Workbench users can also use DTP to view table data and use its schema for job definition.

RSE, the Remote System Explorer, provides access to, and management of, remote computer systems transparently in Eclipse. In IRI Workbench for example, RSE allows users to source, target, and transfer files between hosts, perform remote searches, execute commands, and work with processes via protocols including dstore, SSH, SSL, and FTP connection types.

EGit, the Eclipse provider for the Git version control system allows a development team to simultaneously work on a project remotely, and to browse and check out projects, as well as secure, share, and track the lineage of IRI metadata and master data assets in network or cloud repositories. Also available for similar purposes are Subversion (SVN) and CVS.

Give Us Your Feedback

IRI software and this Eclipse-based workbench is the ongoing product of many years of customer input. What you share with us about your experience will directly affect the changes, fixes, and improvements we make to this platform – changes

you will see reflected when you click Upgrade. Please email support@iri.com with any problems you encounter, as well as any comments and feature-function suggestions you have for our developers. We look forward to your success with the tools, and to finding out how we can improve them for your use. Thank you in advance for all the valuable input you can provide!