Product Suite Overview

The R4i Product Suite helps you create, manage and leverage information vital to building operation and maintenance tasks of complex assets



create.manage.leverage

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The **R4i Common Source Database (CSDB) Server** enables organizations to create, manage and publish maintenance and operational content electronically (as Interactive Electronic Technical Manuals) or in hard copy as PDFs.

The R4i CSDB product suite is for customers that need:

- Technical information to comply with industry specifications such as ASD S1000D, ATA iSpec 2200, MIL-STD and others.
- To re-use information across multiple platforms or projects.
- To extend beyond traditional paper documents in the field.
- To deliver content to multiple devices or formats including paper, web, touch devices, integrated in systems, on-line and off-line.

Easy to install and fast to configure, the R4i CSDB is rich with features that ensure authors are as productive as possible. Features to assist this are:

- **Task management** allows managers to assign users with work and associated files from the CSDB.
- **Tasking** allows users to view the tasks that they have been assigned, including the associated files.
- **Document Compare** allows you to see the differences between selected internal versions of Data Modules.
- Manage Templates provides the ability to store the IETM structure in the CSDB.
- Search and Replace allows the ability to replace text contained within the Data Module. This does not affect elements, only text within the element.
- Resources Store allows you to store files that are used for the creation of your IETMs, including banners, generic images, cover pages, and other supporting files.
- **Recycle Bin** allows management to restore files back into their original location within the CSDB that users deleted.

The R4i CSDB Server, via the desktop client software, controls the version, publishing, maintenance, and management of project data.

This includes four powerful tools:

- R4i Data Module Manager
- R4i Fault Code Manager
- R4i Viewer for Windows
- R4i MobieTP for Android and IOS (see more information below S1000D IETM Viewers).

The R4i CSDB supports all SGML and XML issues of the ASD S1000D Specification.



R4i Binder product suite is a powerful suite of productivity tools for building customized manuals, handbooks, operating procedures and more. The product suite includes R4i Binder Professional, R4i Binder Standard, R4i Binder Server/Client and R4i Binder Personal Edition for those customers that do not have an R4i CSDB Server.

R4i Binder Professional

R4i Binder Pro is a flexible 'drag and drop' system that enables you to build complete PDF Books that include cover pages, hyperlinked Table of Contents (TOC) and a hyperlinked Index. R4i Binder Pro publishes SCORM Packages from your content stored within the R4i CSDB. It accesses ASD S1000D, ATA iSpec 2200 and other SGML and XML content held in the R4i CSDB Server's database and processes the content using XSL-FO stylesheets.

R4i Binder Standard

R4i Binder Std allows users to quickly and economically generate books and change packages for review - without the ability to formally 'release' the PDF version. As with R4i Binder Pro, R4i Binder Std can process XML and SGML content from any structure. To setup, manage and release an authorised version of a book, R4i Binder Pro is required.

R4i Binder Personal Edition

R4i Binder PE takes all of the latest features of R4i Binder Pro system and allows it to run stand-alone on a PC without requiring the R4i CSDB Server system. It can easily transform any SGML or XML content stored in the DMView, into a hyperlinked PDF with automatically generated Front Matter, Back Matter, List of Effective Pages and Table of Contents.

R4i Binder Server

R4i Binder Server has the same easy to use interface as R4i Binder Pro but with the power of server-side processing. Users can monitor job processing and have experts review PDFs directly from the R4i Binder Client.

With unlimited users on your Server license, you are in control of who can view, build and/or release books.

Change Packaging Module for R4i Binder Suite

To extend the reach of R4i Binder, a Change Packaging module is also offered. This allows your authoring team to create change/revision packages in a matter of minutes, compared to the weeks that it can take to manually produce these changes.

You can create change packages with or without Change Mark-Up in content, with the Binder 'Differencing' Engine, and output changes pages automatically, with or without change bars displayed (depending on style preferences).



The **R4i Viewer** is an intelligent content access tool that provides operators and maintainers with an interactive and unified view of manuals, e-learning courseware and maintenance job tasking.

Generated data packages from the R4i CSDB Server are in turn 'read' by the R4i Viewer.

Two versions of the Viewer are available - a smart installable IETM Viewer for Microsoft Windows and a 100% browserbased Viewer that works without Active-X or Java plug-ins. Both are licensed as free to distribute for R4i CSDB Server customers.

The R4i Viewer supports the dynamic presentation of SGML, XML and PDF formats, as well as audio, video and written content.

Features include:

- The facility to generate an Interactive Electronic Technical Manual (IETM) change package, based on the CSDB internal version number or the Issue Number within the S1000D compliant Data Module.
- Advanced control of the IETMs (or Technical Orders) interaction and presentation to the maintainer.
- Auto-generated acronyms, support equipment and consumables using content derived from your Procedural Data Modules.
- Content control and technical information security via data encryption and IETM expiry.
- Advanced search and book marking capabilities.

R4i Viewer is utilized by leading organizations and Defense Department's around the world, including, the U.S. Air Force, the Italian Air Force and the Australian Department of Defence.



R4i Writer is the most advanced XML Authoring Tool for Technical Writers required to create mission critical content. Write S1000D compliant data modules faster with drag and drop references, automatic hotspots and document previews.

R4i Writer is optimized for the S1000D data formats and installs "Ready to Write" with schemas and stylesheets for all versions of S1000D 2.0 and above.

Fully integrated with the R4i CSDB, writers can now easily create high quality operational and maintainer information for PDF, HTML and IETM delivery.

• Comment (Modules) can be viewed directly in R4i Writer, while authoring the associated Data Module.



Expedite and streamline the IETM review process, with R4i ReViewer - a clever review tool inside the R4i Viewer. Gain speed with document review, change, audit ability and traceability.

R4i ReViewer is a built-in tool set that activates with a license key in the R4i Viewer software. It allows engineering, logistics and Project Office personnel to check and review content within the full context of an IETM. This non-proprietary review system removes the need to email PDFs of entire chapters or specific pages (with little context), to customers or subject matter experts for review.

Instead, send a complete set in a working interactive IETM where reviewers can electronically mark changes and make comments, and send back. This speeds up the review process, as it is easy and fast for reviewers to use with no need to manually mark-up paper printouts.

R4i ReViewer leverages key viewer technology including IETM expiry and content encryption. It also includes a CGM viewer and customizable IETM user presentation.

Benefits of using R4i ReViewer include:

- Reviewers have access to the entire IETM (online into the CSDB / CDMS or offline).
- Reviewers work in context.
- Fast turnaround.
- Reviewers can quickly and easily make their notes against the data modules on screen and return them back with the IETM content, or "submit" immediately if running in online mode.
- Electronic tracking of all requested changes Document history. Gain a full history of internal and customer comments that are tracked in the CSDB.
- Drag and drop or copy and paste Images, DMs and External Technical Publications from the CSDB into the current document being authored as references.
- Data Module look-up for referencing Common Content in the CSDB (CIR/TIR).
- Data Module look-up for insertion of Applicability mark-up.
- Graphic insertion with hotspot look-up.
- One button click for common authoring insertion (ordered lists, unordered lists, character entities / symbol palette).
- Document preview of how the data module will look when published in your IETM.



The design and production of an asset starts with engineering information in the form of drawings, Bill of Materials and supporting technical information. As soon as the design is approved, technical writers, illustrators and engineers need to collaborate to produce intelligent parts information that is supported by in depth operating and servicing information.

Traditionally spread sheets hold parts information while illustrations are stored in repositories or on network drives. The collation, editing and publishing of the required data can be complex and time consuming.

R4i Illustrated Parts Data Manager automates the process of parts data creation, speeding time to market and eliminating human error from the parts data production cycle. Designed to connect to disparate information systems, Microsoft Excel spread sheets and SQL Databases. IPD Manager authors simply map the data fields to their required export data sets.

Non-proprietary XSL stylesheets then generate IPD manuals or S1000D Data Modules with linked illustrations. This interactive content can then be produced as PDF. HTML or checked into the R4i CSDB Server® for inclusion in the R4i Viewer® package.



DM publish. distribute. control.

The R4i Viewer and R4i MobieTP IETPs can optionally be distributed and managed via the R4i Content Distribution Management System (CDMS). The R4i CDMS resides between the CSDB and the IETM user and manages R4i MobieTP software upgrades and IETP package downloads.

The R4i CDMS application is an optionally licensed component in the R4i Product suite. The CDMS application comprises a management console, a server component, and distributions nodes.

The R4i CDMS receives published publications from R4i CSDB Server. Administrators can define the publication properties of the IETM including online and offline access.

Easy to use, the R4i CDMS enables publishing teams the flexibility to publish, update and revoke IETMs directly generated from the technical repository.

Benefits of CDMS:

- Reduce IT staff load •
- **Total Control**
- Easy IETM access •

Stage IETMs

- **Content Security**
- **IETM Updates**
- Access from all devices

Maximum Availability



engage. collaborate. enable.

The R4i LTS tool is able to extract Logistics Support Analysis (LSA) or Logistics Product Data (LPD) information and dynamically generate engineering approved ASD S1000D compliant content.

Before the development of an asset or piece of equipment, engineering teams may go through an analysis process and then prepare their data in Logistics Support Analysis (LSA) or Logistics using database solutions such as OmegaPS.

With an OmegaPS database being able to conform with the latest industry data structures of SAE GEIA-STD-0007 and ASD S3000L, the R4i LTS tool is able to extract expected information directly from OmegaPS or through an SAE GEIA-STD-0007 compliant data exchange file, and dynamically generate engineering approved ASD S1000D compliant content.

Once in S1000D format, the other tools in the R4i Product Suite can be utilized to deliver to a data delivery, HTML IETM, PDF or advanced IETPs with the free MobieTP and R4i Viewer. The same content can also be delivered into SCORM based e-Learning solutions and controlled distribution to touch devices via R4i CDMS, the Content Distribution and Management Server.



Leverage technical and operational content with R4i MobieTP, the mobile IETP Viewer App for Android and iOS devices.

MobieTP frees technicians, operators and crews from desktop PC's and bulky laptops at minimum cost to an organization.

The R4i MobieTP Viewer for Android and iOS utilizes single source IETP packages generated from the R4i CSDB Server. Optimized for small screens and large fingers, the native MobieTP Viewer is simple to use and can access content in both online and offline modes.

For more information and to learn more about the R4i Product Suite, visit us at www.pennantplc.com or email us at sales@pennantplc.com to schedule a demonstration.

