

Right Hemisphere® Business Applications Electronic Parts Catalog

- Automatically publish 3D interactive content for parts and assemblies into web-based Electronic Parts Catalog
- Automatically transform native CAD data into lightweight 3D models, generate multiple product views with callouts, and publish each part and assembly to Adobe PDF
- Integrate with PDM/PLM systems to streamline the maintenance of Parts Catalogs as engineering designs or assembly configurations change
- Integrate with MRP/ERP systems to publish accurate service BOM's, as well as provide automated parts ordering capabilities for end-users

Improve customer service at lower cost

Improving your customers overall experience in terms of product function, cost, and service has a high impact on customer satisfaction, brand loyalty, and ultimately product, service, and aftermarket revenue. Enabling engineers, service technicians, and parts managers to quickly identify, find, and order replacement parts or aftermarket accessories results in faster part ordering with fewer errors, increased product up-time, lower repair and spare part inventories, and quicker supply chain response time.

Delivering high-quality, accurate, and up-to-date parts catalogs for today's highly configurable complex products when the product ships is challenging and increasingly costly. The Right Hemisphere Electronic Parts Catalog application addresses these challenges by enabling companies to build cost-effective web-based electronic parts catalogs unique to each customer configuration based on the original CAD data and service BOM information.

Increase profit margins of service and support operations

Increase Service Effectiveness

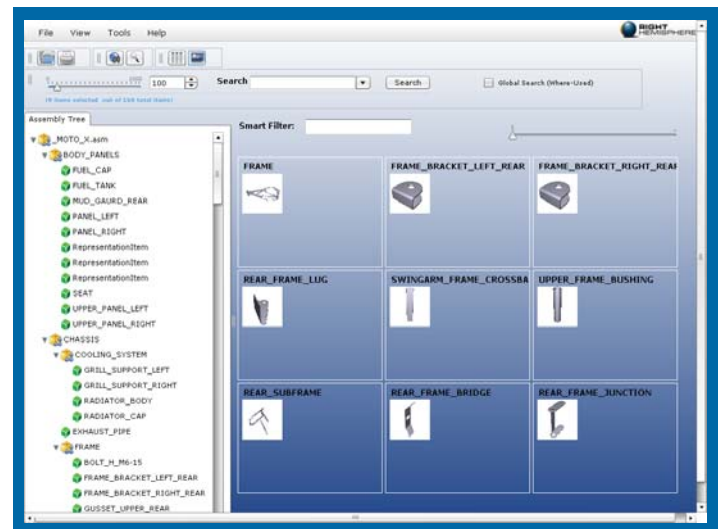
Right Hemisphere's Electronic Parts Catalog increases the effectiveness of engineers, service technicians and parts managers by enabling them to quickly locate relevant parts information, including pricing and inventory, and to navigate between parts lists, interactive engineering models, and detailed service information.

Improve Order Accuracy

Right Hemisphere's Electronic Parts Catalog improves order accuracy by displaying only the parts information for a particular configuration of equipment and by directly integrating with inventory, procurement and order management processes.

Increase Parts Revenues

Right Hemisphere's Electronic Parts Catalog allows manufacturers to generate additional spare parts revenue from after-sales service and maintenance by seamlessly embedding design revisions, cross-sell and up-sell kits within the parts catalog.



Easily browse and search for parts in a web-based Electronic Parts Catalog.

Reduce Service and Support Costs

Right Hemisphere's Electronic Parts Catalog dramatically reduces the manual effort required to create and maintain parts catalogs, thereby reducing service costs over the lifecycle of a product. Additional cost savings may be realized by eliminating the CAD licenses typically used for the Parts Catalog creation process.

Strengthen Channel and Customer Relationships

Right Hemisphere's Electronic Parts Catalog strengthens customer and channel relationships by delivering an Electronic Parts Catalog with flexible hosting and delivery options, automated dynamic updates, robust access control and powerful personalization capabilities.

Easily Deployed, Accessible, and Accurate Parts Catalogs

A Web-based Adobe Flash user interface for the Right Hemisphere Electronic Parts Catalog allows an end-user to locate desired content using keyword searches on part attributes/metadata, or by browsing through an Assembly Tree or Component List. Users are able to locate parts and assemblies across multiple Parts Catalogs.

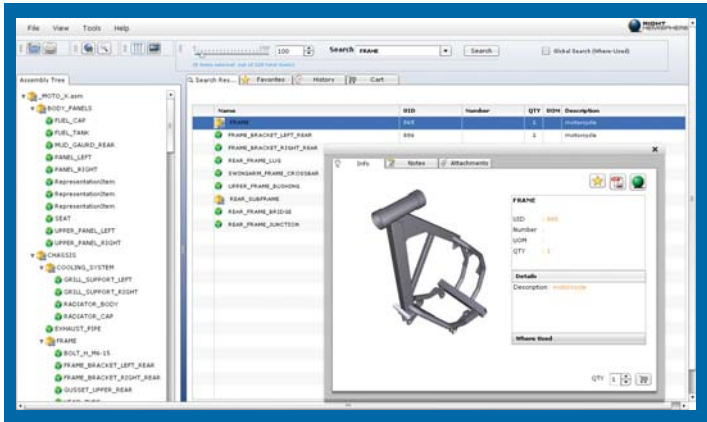
Each page of the Right Hemisphere Electronic Parts Catalog is a PDF document consisting of an interactive 3D object window, Parts List, and associated metadata fields. Each PDF document is automatically built from a template so that all pages have a standardized format.

The advantages to delivering a web-based Electronic Parts Catalog built upon the RH5 platform with Adobe PDF:

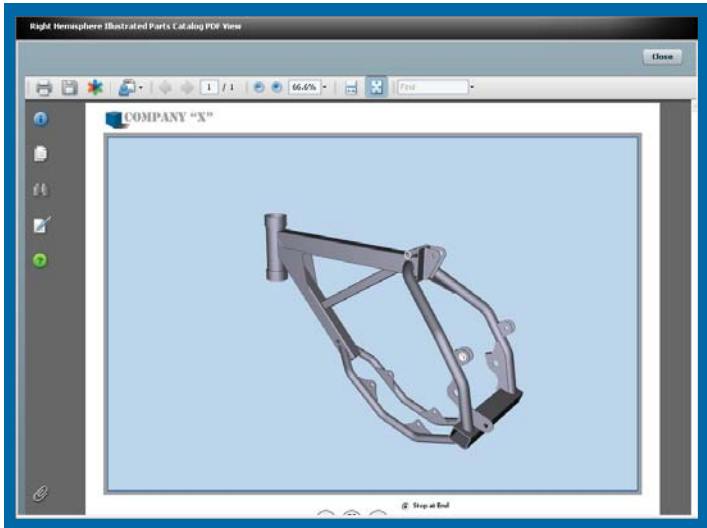
- Electronic Parts Catalogs can be viewed using any desktop computer with the ubiquitous Adobe Reader and Adobe Flash Player within a web browser. A company is no longer dependent on proprietary applications.
- Integrates part and assembly information from CAD, PLM, and other enterprise applications into a single, unified, and consistent format.
- Adobe PDF supports interactive 3D with snap-to views. No longer does a manufacturer have to manually produce 2D drawings. Users can simply click a button to snap the 3D model to a top, front, side, ISO, or sectioned view of the assembly or part.
- With Right Hemisphere's Deep Server and Adobe's Intelligent Document Platform, Parts Catalogs are automatically updated in the field as changes are approved and implemented.
- PDF-based Parts Catalogs can be securely distributed using the Adobe Livecycle Policy Server.
- Parts Catalogs may be printed to hardcopy using integrated Adobe batch-print functionality.

By leveraging Right Hemisphere's Deep Server and Adobe's LiveCycle Server technology, the Right Hemisphere Electronic Parts Catalog Solution can merge dynamically updated product information with customer support, maintenance and e-commerce applications, providing significant benefits to original equipment manufacturers (OEM), operators and service providers.

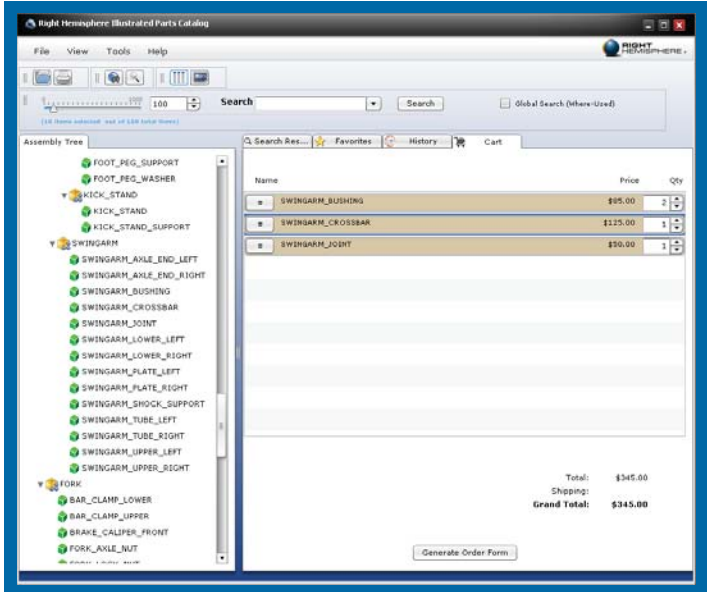
The Right Hemisphere Parts Catalog Solution can be integrated with ERP applications containing inventory, pricing, order management and procurement information, allowing the parts requisition process to be timely and seamless with the rest of the ERP infrastructure and corporate business processes.



Quickly identify parts and view relevant part information to improve part ordering efficiencies.



Automatically create 3D PDF documents for each part that can include model views, PMI, and step animations.



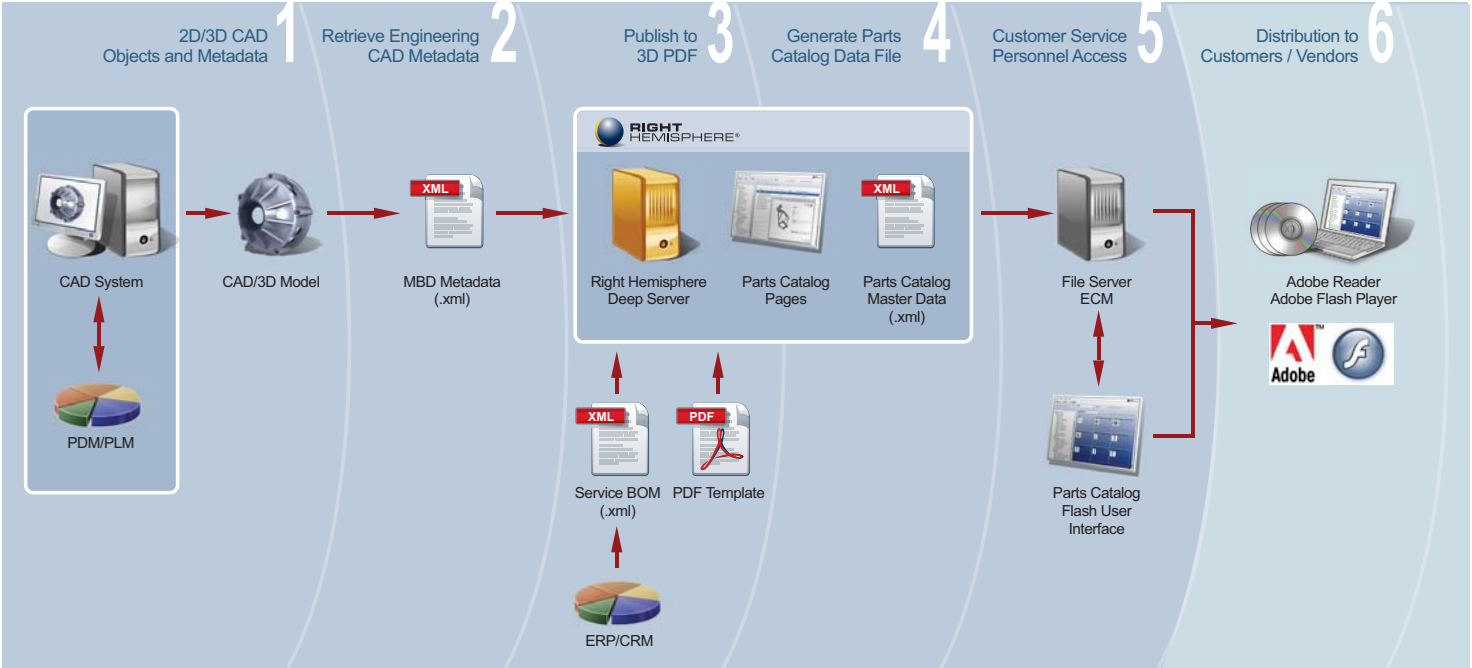
Add parts to a shopping cart integrated to the ERP system for maximum part ordering efficiency.

System Overview

The Parts Catalog solution is a turnkey solution with minimal configuration required. It consists of Right Hemisphere’s Deep Server and a Parts Catalog workflow package to ensure customers benefit from Deep Server’s features and functions in an extremely short startup timeframe.

The overall system architecture consists of the following major components:

- *Right Hemisphere’s Deep Server* to translate CAD data into a 3D model, and populate the 3D PDF Parts Catalogs with the 3D product geometry, product structure and metadata.
- *Adobe Flash Player* web browser plug-in for Parts Catalog Search User Interface
- *Adobe Reader* for end-user viewing and interaction with Parts Catalog pages.



Integration Services

The Right Hemisphere Electronic Parts Catalog Solution can be integrated with other enterprise Business Systems, and is offered by Right Hemisphere as an added service. For example, integrating the Right Hemisphere Electronic Parts Catalog system with an MRP system would allow a company to publish a catalog inclusive of service parts only, rather than the entire engineering BOM.

Implementation Overview

The high level overview of the Electronic Parts Catalog implementation process is:

- **Initiation** – Joint information gathering and goal assessment to ensure a fast install and mapping to the workflow input of the Electronic Parts Catalog solution.
- **Deployment** – System Integrator pre-configuration of a new Electronic Parts Catalog server. Completion of Electronic Parts Catalog server installation, training, deployment, and testing of the server within the customer’s corporate network environment.
- **Transition** – Review of the Electronic Parts Catalog server operation and customer acceptance.
- **Production** - Assessment and customer signoff.

Features

- Self-contained and distributable on CD for offline and online use
- Non-proprietary Adobe viewing technology
- Interactive 3D controls in PDF including pan, zoom, rotate, show/hide components
- Various model render modes in PDF (solid, transparent, line illustration, etc.)
- Bi-directional interaction between 3D model and BOM information in PDF
- Advanced searching capability with ability to search by keyword or attribute across multiple catalogs
- Assembly Tree browser with Drill-down capability
- Saved Searches, Favorites Lists and User Notes
- Shopping Cart functionality with order form that integrates with back-office inventory and pricing systems
- Attach/associate supporting documentation
- Full printing capability for hardcopy distribution
- Automated CAD translation and optimization technology supports all major CAD systems including:
 - CATIA V4
 - CATIA V5
 - Pro/ENGINEER
 - UG
 - SolidWorks
 - Inventor
 - AutoCAD 2D

Minimum System Requirements

Server Software Requirements

- Windows 2003 Server OS
- Microsoft IIS
- MS SQL Server 2000
- Right Hemisphere Deep Server
 - Service Bureau Process
 - Electronic Parts Catalog Process
 - CAD translation modules as required
- Right Hemisphere CAD translation modules appropriate to customer CAD type
- Right Hemisphere PDF Publishing module
- Right Hemisphere Electronic Parts Catalog software

Client Software Requirements

- Adobe Reader 8.1
- Adobe Flash Player 9
- Microsoft .NET 2.0

Part Information Data

- XML formatted bill-of-material containing
 - Assembly information
 - Part Instance data (name, source, version)
 - Part metadata
 - Part geometry reference
 - Part Transformation Matrix data
- 3D CAD models
 - CAD geometry files

About Right Hemisphere

Right Hemisphere is the leading provider of enterprise product communication and collaboration solutions enabling manufacturers to optimize their global product development launch and support processes.

Organizations have invested in operational processes and IT systems to improve product lifecycle efficiencies, yet delivery of precise and up-to-date product information to the extended enterprise in a timely, efficient and usable form is difficult today.

Right Hemisphere maximizes knowledge transfer efficiency of product information to downstream stakeholders by automatically publishing product information readily available in CAD, PLM, and ERP systems into common document formats and business applications.

Learn more about Right Hemisphere at www.righthemisphere.com