



Exsys Corvid represents a proven approach to knowledge automation expert systems based on a close examination of what is needed to build and implement decision-making systems in today's Internet-oriented world. Corvid is designed to allow system developers to easily capture knowledge, build powerful interactive advisory applications and deliver them online (Internet, Intranet, wireless) - quickly and effectively producing significant return on investment.

Exsys Corvid is designed to assure success of your Knowledge Automation Expert System projects through:

- Understandable, Systematic Rule-Based Logic
- A Practical, Efficient Development Environment
- Easy, Cross-Platform Java-Based Web Deployment

Make Your Web Site Smart

A company's Web site has become the main communications route in reaching new and existing customers, answering questions and providing support internally and externally. Web sites provide plenty of data, but most real-world questions require more than data - they require knowledge and customized answers. Site visitors can easily be overloaded with too much data. They're required to read, understand and evaluate this information in order to make informed decisions. Studies show that more and more site visitors would prefer to talk to human experts capable of answering their questions.

But providing one-on-one access with a business's experts is very difficult, time consuming, and expensive - and doing it in real-time is prohibitive.

The realistic solution is to provide automated sessions that emulate "consultations" with human experts. Exsys Corvid provides unique, interactive systems that deliver individualized decision-making knowledge from a Web page, or as stand-alone systems. The system asks users questions, and based on their answers, intelligently asks follow-on questions - not asking anything irrelevant, or forgetting to consider anything potentially important. At the end of a session, conclusions and recommendations specific to the user's situation are displayed via a Web page. Not a search engine pointing to a myriad of links, or a guess based on past cases, or a page full of FAQs - But specific problem-solving answers for each visitor.

The site visitor is provided with the answers they need, whenever they need them - 24/7 - to make purchasing decisions, fix problems or resolve issues. Instead of having to read pages of data, and deciding if they have everything they need, if it is current and correct, and if they understand it well enough to act on it - they just answer the questions asked by the system, and are given a complete logically reasoned solution.



A Web site is a company's "virtual representative" - make it friendly, helpful, interactive, and most importantly - **SMART!**

BusinessLaw.gov
Legal and Regulatory Information for America's Small Businesses
SBA

Please answer the following questions regarding the position of employment:

	YES	NO
Will the alien employee be transferred to the U.S. from the sponsoring employer's related entity abroad?	<input type="radio"/>	<input type="radio"/>
Will the alien employee fill a nursing position in the U.S.?	<input type="radio"/>	<input type="radio"/>
Does the position require artistic or athletic performance?	<input type="radio"/>	<input type="radio"/>
Does the position require the services of a religious professional?	<input type="radio"/>	<input type="radio"/>
Will the alien employee's services be cultural in nature?	<input type="radio"/>	<input type="radio"/>
Does the sponsoring employer operate a place of employment in the U.S. temporarily for which the services of an alien employee are needed as a replacement?	<input type="radio"/>	<input type="radio"/>
Is the intended employment agricultural in nature?	<input type="radio"/>	<input type="radio"/>
Is the primary purpose of the employment for the alien employee to be trained in the U.S.?	<input type="radio"/>	<input type="radio"/>
Is the alien employee regarded as outstanding in his or her field?	<input type="radio"/>	<input type="radio"/>
Is the alien employee a citizen of Canada?	<input type="radio"/>	<input type="radio"/>
Is the alien employee a citizen of Mexico?	<input type="radio"/>	<input type="radio"/>
Is the alien employee a citizen of Ireland?	<input type="radio"/>	<input type="radio"/>

Next

systems that use key words to guess at what information might be relevant to a user. A Knowledge Automation Expert System has logical rules that enable it to systematically and accurately determine the best recommendation. The user is provided with specific answers tailored to their situation, with all relevant factors considered.

Knowledge Automation Expert Systems

An expert makes a decision by considering many things. Through experience and "know-how" an expert learns which factors are potentially relevant, the meaning of certain elements or circumstances (who, what, where, why, when), and how they should be combined and weighted to reach a recommendation. Knowledge Automation Expert Systems are programs that emulate this decision-making process. They allow the individual steps in solving problems to be described in rules.

An Inference Engine then uses the rules to automatically determine what information is needed, the implications of various facts, and arrives at a logically reasoned conclusion.

Exsys Corvid's Knowledge Automation is a unique technology of directly delivering expert knowledge via expert systems that can be accessed via a Web Browser. It provides a way to interact with a site visitor in a way that emulates the conversation they would have with a human expert to answer their questions. This is the only practical way to directly deliver expert decision-making knowledge to Web site visitors.

Knowledge Automation is conceptually very different from search engines or "case-based"

Variables

New Copy

after_calibration_reading_is_ok
align_sensor_and_magnet
all_leds
all_wires_good
bit_appears_when_connected_but_fits
battery_clip_problem
black_and_white_wires_from_sensor
calibrate_using_the_odometer
check_line
check_ground
check_power_line
check_sensor_magnet_alignment
check_the_following_symptoms_for_tx
check_vss_ground
defective_wires_selection
dip_switch_configuration
do_you_have_all_electrosim
do_you_have_VMS
dot_does_not_appear_questions1_is

Find

Name
 Prompts / Values
 All fields

Sort

Alphabetically
 Order Created
 By Variable Type
 By Type + Alpha

Question Defaults
Previous All
Done

Prompt To Be Options Link Ask With Also Ask Servlet

Main Prompt

After calibration/recalibration, the DriveRight

External Source for Prompt Text

Database Cmd URL/CGI POST Apple Pascal

Alternate Prompts

Key Variable

Prompt # 2

Static List Dynamic List Continuous Collection Confidence

Value # 1

Sheet Text: P_is_reading_correctly

Full Text: is reading and displaying data correctly

External Source for Value Text

Database Cmd URL/CGI POST Apple Pascal

Servlet - Use HTML, in:bulk

Use instead of Value VALUE_EXTRA_TEDT

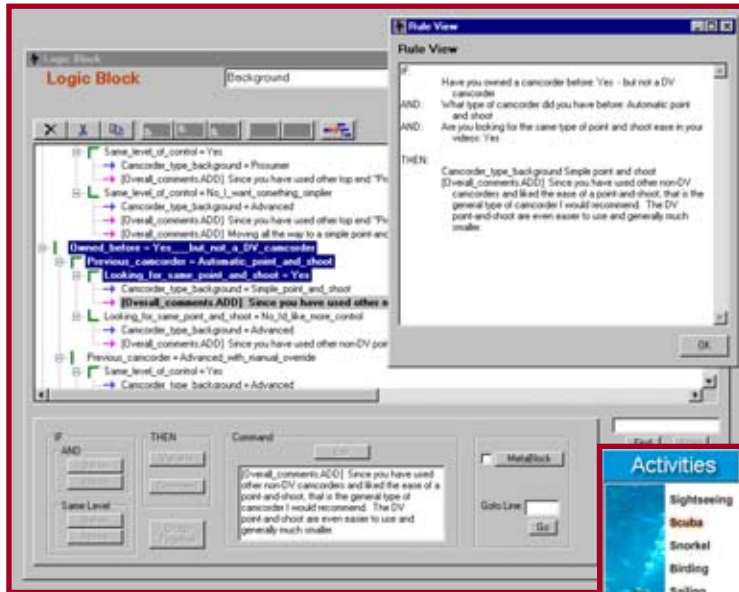
Alternate Value Text

Alternate # 2

Corvid Rule-Based Logic

For over 26 years Exsys Inc. has worked with many developers to successfully build Knowledge Automation Expert Systems. Consistently, rule-based logic has proven to be the most effective, and understandable approach for thousands of applications, and a wide variety of expertise domains. Most decisions are thought of and described by people as, "If... Then..." type logic. This is exactly the same way the rules are built in Exsys Corvid.

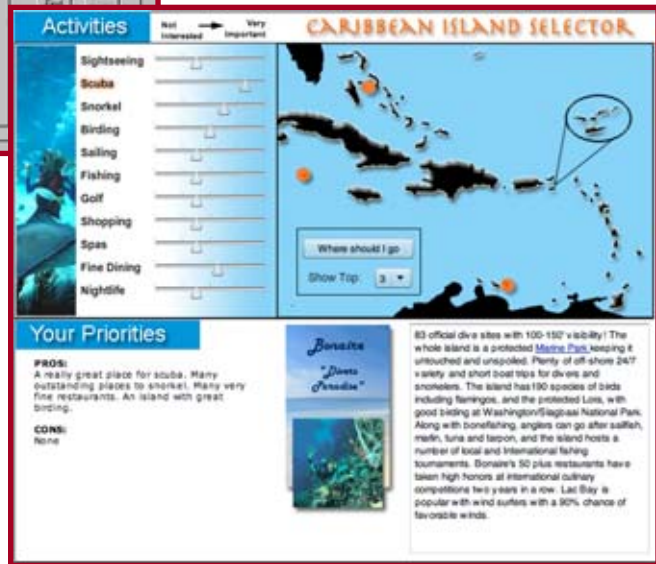
Exsys Corvid enhances the traditional rule-based approach with an "object structured" use of variables supporting methods and properties. This provides many of the benefits of object-oriented programming without requiring the developer to change the way they think and describe their decision-making steps and problem-solving logic. The result is a very flexible and powerful development environment that can be quickly and easily learned.



These types of systems are very effective for product selection expert systems, which choose the best item(s) from a product line, based on an individual's needs and requirements. They can be easily updated directly in the spreadsheet without having to rebuild or alter the system logic. Unlike databases that may not produce any results if the criteria do not exactly match the user's needs, Corvid product selection systems will always recommend a "best fit".

Corvid Development Environment

Exsys Corvid uses **Logic Blocks** – a unique way to define, organize and structure rules into logically related blocks. Logic Blocks are made up of one or more tree-structured diagrams. The logic may be a complex branching tree that systematically covers all possible input cases, or a simple diagram that correlates with a few rules – it all depends on what the problem calls for. This allows a single block to be organized to have all the logic for an aspect of a problem in a single structure.



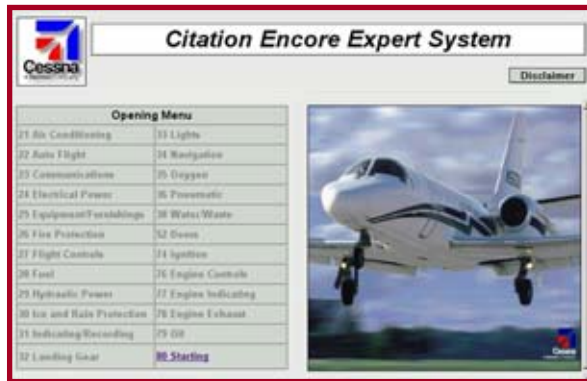
A complete system may utilize many Logic Blocks that organize and modularize the rules. Separate blocks can be developed by different project teams or groups of domain experts and merged into a single system.

Rules can be simultaneously viewed with their full English text, and seen in the context of the overall structure of the Logic Block. This simplifies system development, and the logic is easy to visualize and understand.

Logic Blocks are very versatile and can be run via forward or backward chaining. They can even be associated with a spreadsheet, which applies the logic in the block sequentially to each row in the file. This allows the rules to contain "generic" logic, which is applied to item or situation-specific data.

Logic Blocks are created and maintained in a visual, intuitive development environment that is easy to learn and use. The fundamental IF/THEN rule representation reflects the way experts describe how to make a decision, and the Logic Blocks provide a way to organize rule structure.

Most systems are designed using a few basic dialog box controls. Online tutorials enable you to build simple systems within a few hours. A 3-day training class is available to help get your Knowledge Automation Expert System project off to a fast start. The classes are held at the Exsys Training Facility, we can arrange for Web conferencing or on-site instruction. You will learn all of the skills needed to handle even complex systems. Prototyping, "pilot project" assistance, and full system development, knowledge engineering and integration services are also available.



Getting Knowledge Automation Expert Systems on Your Site

The Web is now the primary conduit to customers, prospects and employees, and Exsys Corvid allows the delivery of and access to interactive online advisory systems. The ability to offer interactive Knowledge Automation Systems on a Web site presents numerous profitable and cost-saving strategies, and competitive advantages, which cannot be achieved by any other technology. These systems act as top-level “virtual salespeople” and online support experts that provide customized answers and recommendations for individual visitors.

Exsys Corvid provides 3 ways to deliver systems – Java Applets, Java Servlet or Adobe Flash. Applets run on the client’s browser and are very easy to add Corvid systems to a Web page. Since it runs on the client machine it uses minimal server resources and is highly scalable even on smaller servers. The system user interface is designed using special Corvid commands, which support many types of controls, graphics, HTML links and image maps.

The Corvid Servlet Runtime on a server allows the same system logic to be delivered via dynamically generate HTML pages that ask the user for input and present results - all with an interface and

format that can match the look and feel of your Web site. User interaction screens are designed using HTML templates that allow the full power of HTML, Java Script, XML, etc. to be used for sophisticated interfaces. The Corvid Servlet Runtime also allows the Corvid Inference Engine to use an Adobe Flash user interface for highly interactive RIA systems that make Flash more powerful than ever before.

Both the Corvid Applet and Servlet Runtimes provide full database integration with any ODBC compliant database. Reports can be dynamically constructed and attractively displayed. An open interface allows customer-created functionality to be added to the Inference Engine, with access to Exsys Corvid data via a built-in API. This allows Corvid to be expanded to meet any special needs or interfaces your Knowledge Automation Expert System project may need. Systems can also be distributed or downloaded as stand-alone applications. They can be run on any platform that supports Java, allowing them to be invisibly integrated into many information system architectures.

Exsys Inc.

Exsys Inc. brought practical expert system development to the PC in 1983, and was the first company to bring such systems to the Web in 1996. Exsys has decades of experience in proven realistic, practical Knowledge Automation Expert System development software and services. Exsys software is the longest lived such product on the market, with continuous use by firms, government agencies and multiple industries worldwide, including over 50% of the Fortune 100 businesses.

Contact an Exsys representative today for a free 30-Day Exsys Corvid Evaluation, and to discuss the many Knowledge Automation Expert System possibilities – Go beyond just providing information - make your Web site...**SMART.**