





**CNRI Handle System®** (Naming and Resolution System)\*

(1) An end user uses a web browser to search Verity indexes for Digital Objects in the collection.

**Defense Virtual Library** Architecture

(6)

(5)

(3)

Web Browser (Client)\*

(Resource Discovery

 Metadata Databases Catalogues, Guides, etc.)\*

Search Engines

- (2) The Verity search results are returned to the web browser and displayed to the user.
- (3) The user clicks on a highlighted Handle to send a query to the Handle System to get the location of that Digital Object.
- (4) The Handle System responds to the Client with the location of the Repository.
- (5) The Client queries the Repository for the Digital Object.
- (6) The Digital Object is returned to the Client and displayed to the user.
- \*The Defense Virtual Library is a specific example of a generic Digital Object Architecture, the pieces of which are a Client, a Resource Discovery method, a Naming and Resolution System, and a Data Collection and Storage mechanism.
- For additional information about Digital Object Architecture, see the article by William Y. Arms in *D-Lib Magazine*, February 1997, http://www.dlib.org/ dlib/february97/cnri/02arms1.html. For information about Verity, see http://www.verity.com/ and for information about the CNRI Handle System, see htp://www.handle.net/.



### Defense Virtual Library Fact Sheet November 2000 http://dvl.dtic.mil/

#### **The Partners:**

- Defense Technical Information Center
- Defense Advanced Research Projects Agency
- Corporation for National Research Initiatives

### **Objectives of the DVL Program:**

- Put in place new ways to manage new types of digital information. Still and moving images and sound, as well as text, have been implemented to date.
- Identify the metadata required for long-term management of digital objects -- not just for resource discovery but also for protection of intellectual property and preservation across changing technologies.
- Use standard Internet browsers.
- Use Uniform Resource Names (Handle System) instead of URLs (Uniform Resource Locators) for long-term management of digital information objects.
- Use applicable standards and best practices -- CORBA, MARC, and AACR2.
- Implement advanced commercial search engine technology (Verity).
- Serve as a testbed for DARPA-funded research in computer architectures using DTIC data.

# Contents of DVL as of November 2000:

- DTIC technical report citations mapped to MARC-like display.
- DTIC technical reports viewable as full text in PDF.
- Metadata for still image, sound and moving image files created according to AACR2/MARC standards.
- Still images in GIF and JPEG formats.
- Sound files for music and oral history excerpts playable in Real Audio and WAV formats.
- Full length moving image files and clips playable in Real Media and MPEG formats.

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