Defense Technical Information Center: Overview and What’s New

Military Librarians Training Workshop
11 December 2019
Roberta Schoen
## Mission

DTIC aggregates and fuses science and technology data to rapidly, accurately and reliably deliver the knowledge needed to develop the next generation of technologies to support our Warfighters and help assure national security.

## Vision

DTIC will be the organization of choice for, and pre-eminent provider of, technical research, knowledge management, collaboration and analysis within the Department of Defense.

## Lines of Business

<table>
<thead>
<tr>
<th>Collection</th>
<th>Dissemination</th>
<th>Information Analysis Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect, preserve, and manage defense technical information</td>
<td>Facilitate DoD RDT&amp;E information discovery and collaboration</td>
<td>Provide technical data and analysis</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Information Technology</th>
<th>Resources</th>
<th>Program Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure hosting of DoD information and applications</td>
<td>Manage financial and human resources</td>
<td>Supports software development, testing, and acquisition</td>
</tr>
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</table>
DTIC’s Unique Mission

- DTIC is the only organization chartered to meet the information needs of all users across the DoD, industry, federal government and citizen science – Effective Sharing to Verified Authorized Users

<table>
<thead>
<tr>
<th>Information Level</th>
<th>Publicly Accessible Information</th>
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<th>Limited to DoD &amp; DoD Contractors</th>
<th>Limited to Federal Government</th>
<th>Limited to DoD</th>
<th>Industry Proprietary Information</th>
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There are two main areas on the homepage:

- Search bar and Links to DoD tools

**DoD has fourteen primary tools:**

- Search
- Journal of DoD R&E
- DoDTechSpace
- DoDTechipedia/Defense Communities
- Research Projects (URED)
- DoD IACs
- Budgets & Projects
- Submit to DTIC
- DoD Grant Awards
- International Agreements Database
- DoD Chief Technology Officer Modernization Priorities
- Acquisition Information Repository (AIR)
- Defense Innovation Marketplace
- PubDefense
- Innovators Information Repository
R&E Gateway Search
Separate fields plus pull-down filters for:

1. Select **Collection**
2. Select **Communities of Interest**
3. Select **Modernization Priorities**
4. Select **Distribution**
5. Select **Classification**
6. Select **Full Text only** or **SBIR**
1. Click the green + to add a document to My Saved Research.

2. Select **Save Current Page Results** and click **Save** to save all of the results on the page.

3. Select **Save My Search** and click **Save**.

4. Enter title in the **Save As** field.

5. If desired, set **Schedule Frequency** to On and select a frequency.

6. Click **Save**.

**Note:** Use **Refine Search Results** options to refine the current search query.
To view and export saved search results:

1. Click **My Saved Research**.
2. Click **Export**.
Research Budget and Progress Information (RBPI)
There are four components to Research Budget and Progress Information (RBPI):

- SEARCH, EXPLORE, ANALYZE, and REFERENCE

• Each RBPI component can be accessed in two ways:
  - RBPI Homepage buttons
  - RBPI Menu bar

• The current fiscal year **DoD Congressional Budget Data Reports** are also available on the RBPI Homepage.
  - Select a report year by clicking the **Year** dropdown list
  - Select the report title link to download a PDF of the entire report
  - Select links under the headings **RDT&E**, **Procurement**, **O&M**, and **Personnel** to download PDFs (full text) or Excel files (data listed by number) of those specific sections of each report
There are four resources available to assist users with using RBPI and understanding the budgeting process:

- Glossary
- User Guides
- Budget Timeline & PPBE Process
- Feedback

Each resource can be accessed in two ways:

- RBPI Homepage Reference button
- RBPI Menu bar → click REFERENCE
Collaboration Tools
DoDTechipedia is a wiki tool which allows users to create spaces to:

– Share information.
– Store documents and other files
– Collaborate with colleagues (government personnel and contractors)

• The main navigation for the site is accessible from every page in the blue bar across the top

**Note:** Documents stored and discussed on DoDTechipedia must be limited to the unclassified DoD Distribution A and C. The Defense Communities site allows for collaboration on DoD Distributions A, B, C, D and E.
DoDTechSpace is a business networking tool used to connect and collaborate with colleagues via:

- Discussion
- Content creation
- Coordinating projects

- The main navigation for the site is accessible from every page in the blue bar across the top

**Note:** DoDTechSpace is safe to use because all posted information is protected behind a DoD firewall.

- Two-factor authentication security - required to enter (Card & Pin)
- No Public Affairs Officer (PAO) approval required
Defense Innovation Marketplace

- Public website for DoD R&E Business Opportunities
  - DoD R&E Strat Guidance Docs
  - R&E-related solicitations, events
- Most current Technology Interchange Meetings
- Independent Research & Development (IR&D) Secure Portal
  - IR&D project summaries for S&T/R&D and acquisition personnel

https://defenseinnovationmarketplace.dtic.mil
Authorized/cleared industry, government, or DoD personnel with potential technology solutions to support the challenging technological needs of current and future warfighters are invited to take advantage of DTIC’s Combatant Command (CCMD) Classified Reading Room.

The CCMD Classified Reading Room features two secured workstations for viewing sensitive requirements of participating CCMDs.

Submit a Visitor Application Form at [http://www.dtic.mil/dtic/services/research.html#readingroom](http://www.dtic.mil/dtic/services/research.html#readingroom) to gain invaluable insights on the top priorities and current capability demands of the CCMDs.

Visitor applications must be received 10 days in advance of desired appointment date.

Applicants must have an active security clearance of SECRET or higher and be a U.S. citizen.

Questions? Send an email to dtic.belvoir.pm.mbx.ReadingRoom@mail.mil.
International Agreements Database (IADB)

- Leading role in Pentagon’s efforts to leverage global research
- Search 4,000 proposed, existing, and passed DoD International Agreements
- Critical international S&T knowledge needed to prepare materials for engagements with Allied and Partner Nations
- Efficiencies gained from aligning resource efforts with international partners for research and new technologies
- Trip Reports Accessible via IADB
Submission of Documents to DTIC
New Processing Flow for TR - Input to Online in 3 Days

- **Inputter**
  - Content Management System
  - Selection *(basic check for scope & distribution)*
  - Within 3 Days
  - Online
  - Researchers

- **MetaTagger**
  - automatically adds subject tags
  - AD# sent immediately

**Notification of Selection**

*Enrichment / QA occurs after content is posted online*
Document Submission

Contribute your S&T reports.

It’s a one-stop solution to getting your research discovered and shared.

Give your DoD-funded research the prominence it deserves.

Submit your publications to DTIC at http://www.dtic.mil/dtic/submit/ and get started today!

For questions or assistance, email DTIC at dtic.belvoir.ecm.mbx.acquisitions@mail.mil or call 1-800-225-3842 (option 6).
Why Submit to DTIC?

• **Cost Savings**
  - Reduce costs, leverage results, eliminate duplication, save time & money for DoD-funded projects

• **Preservation**
  - Enduring availability to S&T knowledge = enduring potential for future innovative capability

• **Access**
  - 24/7 availability to largest body of S&T and R&E knowledge in DoD
  - Facilitate sharing, while safeguarding national security, through a multi-level secure system for controlled dissemination

• **Visibility**
  - Reports and Journal Articles are available to DoD colleagues enabling sharing and transferring of STINFO in pursuit of future capabilities
  - Leveraged research can result in innovative work leading to future technological advancements
  - Facilitate intellectual property management of federally funded public domain and government purpose rights works = transparency for taxpayers, visibility for researchers—more readers, higher citation impact

• **Compliance**

• Submit to DTIC Enterprise Content Management System:
  https://discover.dtic.mil/submit-documents/

*Capability for the Warfighter; now and for the future*
Information Analysis Centers
Information Analysis Centers (IACs)

Operates three domains (Cyber Security, Defense Systems, and Homeland Defense) and manages scientific and technical information across 22 technical focus areas (TFAs).

TECHNICAL SUPPORT SOLUTIONS

Answers technical inquires, provide access to the S&T community’s Subject Matter Experts, conduct technical training, and develop technical products

• **TECHNICAL INQUIRIES**
  Provides up to four hours of free Technical Inquiry research to answer users’ most pressing technical questions. To do so, the DoD IAC leverages its extensive Subject Matter Expert (SME) network, which includes engineers and scientists.

• **TECHNICAL TRAINING**
  Provides in-depth technical training on current topics of particular interest in the DoD S&T Community led by domain subject matter experts.

• **TECHNICAL PRODUCTS**
  Develops a wide variety of technical and informational products to provide the DoD S&T community a deeper understanding of emerging technologies and research. These products include State of the Art Reports, quarterly journals, infographics, digests, and a multitude of research materials.
Our team of specialists helps researchers, engineers, scientists, and program managers utilize existing STI to drive innovation across the DoD with technical analysis and development of materiel solutions to advance the DoD’s warfighting capabilities.

- **ASSISTED ACQUISITION SOLUTIONS**
  Provides turn-key solutions to program needs by assisting in the development of customer requirements, processing all financial documents in an auditable environment, and monitoring contract performance.

- **RESEARCH AND DEVELOPMENT SOLUTIONS**
  - Provides access to R&D contract vehicles to perform research & analysis at any magnitude (from a few thousand to hundreds of millions of dollars) across the range of DoD R&D interests at a low rate of 0.8% (FY20).
  - Supports DoD’s critical requirements at all levels of research and engineering.

Visit the IAC website for more details: [https://DoDIAC.dtic.mil/](https://DoDIAC.dtic.mil/)
Journal of DoD Research and Engineering
Journal of DoD Research & Engineering:

- Semi-annual publication
- Published at the classified/controlled unclassified level
- Fully supported by Dr. Michael Griffin, Ms. Mary Miller and the office of the ASD(R&E)

Researchers, scientists, and engineers working in our labs on limited & classified projects have little opportunity for peer-reviewed status of their work.

This peer-reviewed DTIC published journal provides a protected venue for the DoD S&T community to share their work.

Looking for support from the Communities of Interest, S&T Deputies, and Defense Labs:

- Articles from our researchers, scientists, and engineers
- SMEs who can provide peer review support
- Senior leaders interested in Advisory Board opportunities
To submit C/CU articles or to become peer reviewer to the Journal of DoD Research & Engineering, visit the following web pages for instructions.

Unclassified:
https://www.dodtechipedia.mil/

Classified (SIPR):
https://dodtechipedia.smil.mil/
IIR & Global Research Watch Program

• **Innovators Information Repository**
  – Goal: Increase transition of innovative technologies to systems of record
  – Beta application available to registered DTIC users
  – Access to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards

• **Global Research Watch Program**
  – Goal: Awareness of new technology innovation detailed in open source material to benefit US capability and ability to deter adversary capability
  – Partnering with the USD R&E Strategic Intelligence and Analysis Cell (SIAC)
  – SIAC evaluating Commercial Off the Shelf (CoTS) analytics and horizon scanning and acquiring source data
  – Beta targeted for FY20, core capability in FY21
Public Access
Public Access Mandate

• Office of Science and Technology Policy (OSTP) Memo: “Increasing Access to the Results of Federally Funded Scientific Research,” 22 February 2013
  – All public scholarly journal articles must be available and free to the public following a 12-month embargo
  – New projects must create a Data Management Plan (DMP) that identifies data sets that will be produced and if and where they will be preserved and accessible
  – Data sets from research should be made public (exceptions for national security, economic security, privacy, etc.)

• DoD requirement is in DoDI 3200.12 “DoD Scientific and Technical Information Program (STIP)” 12/17/2018
  – Send Journal Articles to DTIC (final peer-reviewed manuscript is preferred)
  – Create DMP at the beginning of each project

• Draft language set for future update to DoDGARS for grantees
DTIC Wants Your Journal Articles

• Ensure that all journal articles include a funding acknowledgement when submitting to publishers
  – Intramural example: “This material is based on work supported by the Air Force Research Laboratory.”
  – Extramural example: “This material is based on work supported by the U.S. Army Research Laboratory and the Army Research Office (W911NF-11-1-0071).”

• Submit the Author’s Final Peer-Reviewed Manuscript to DTIC at time of acceptance for publication
  – Include DOI and journal citation metadata
  – DTIC will ensure a 12-month embargo before posting the manuscript on our public site
PubDefense

Join the Defense Technical Information Center (DTIC)

As we shape the future of public access to federally-funded scientific research

For more information:
• https://publicaccess.dtic.mil
Submissions of Journal Articles

**DoD Journal Article Submissions**

- CAC-holders input at https://discover.dtic.mil/submit-documents/

- OR

- Multi-Agency Article Submissions
  
  Non-CAC-holders input at https://www.osti.gov/elink/agency-submission
Data Management Plans
Data Management Plans for Research Projects

• Data sets are valuable resources
  – DoD investments in data set generation easily runs into hundreds of millions of dollars
  – There is concern that much of the data from research is lost or preserved in an unusable form
  – The goal is to derive maximum benefit from data sets we create, to be able to validate conclusions, and speed innovation

• Data management planning should be an integral part of research planning
  – Extramural research, Data Management Plan creation normally occurs between the proposal stage and accepted funding stage of the project
  – Intramural research, Data Management Plans are part of the project planning process
  – Data Management Plans should be updated as necessary over the life of the research
  – Normally 2-3 pages in length

• It is much harder to consider documentation and preservation of data at the end of a project
Some Elements of a Data Management Plan

• Types of data, software, and other materials to be produced
• Version of the data (raw, cleaned-up, analyzed, final tables)
• How the data will be acquired (measured, existing data set, etc.)
• How the data will be processed
• File formats and naming conventions that will be used
• Standards to be used for data and metadata format and content
• Appropriate timeframe for preservation
  - The plan may balance between the relative value of data preservation and other factors such as the associated cost and administrative burden
  - If, for legitimate reasons, the data cannot be preserved or made available for public access, explain
DoD Implementations of DMPs

• Different disciplines have different requirements (e.g. medical vs. geological vs. weather)

• **Air Force**
  – AFMCI 63-1201 “Implementing Operational Safety, Suitability and Effectiveness (OSS&E) and Life Cycle Systems Engineering (LCSE)”, 28 Mar 2017
    • Addresses Data Management and Data Management Plans
  – AFRL is currently working on more specific guidance

• **Army**
  – (SAAL-ZT) Memo “Coordinating and Disseminating Technical Documentation Resulting from Army Intramural and Extramural research” Oct 2018

• **Navy**
  – Working on guidance

• DTIC is creating an online DMP template to help researchers create a DMP
Data Sets
Why save/share research data?

• Replicability and extension of research
• Reuse for new discoveries lead to new and unanticipated discoveries
• Check new hypotheses
• Allows other researchers to understand your results, becomes more relevant
• Safeguards your investment of time and resources while preserving your research contribution for you and others to use
• Data archiving provides insurance against loss by the data collector

Be a catalyst for research and discovery by sharing your data.
• 2019 NDAA gave DTIC the mission to collect or point to R&E data sets

• Two-pronged approach: public and limited data sets
  – **Public**: Find and link to public data sets associated with journal articles in PubDefense
  – **Limited**: Create a Data Catalog for discovery of data sets, host smaller sets (< 2G) at DTIC
Data Catalog

– Proof of concept of metadata and saving data sets to the Cloud
– In FY20, Search of Data Catalog, as part of DTIC search
Working Together

• DoD is new to collection of research data sets for reuse
• We’d like to work with you on intramural research issues, and eventually extramural research
• We’ve created knowledge pages on data sets and DMPs in DoDTechipedia
  https://www.dodtechipedia.mil/dodwiki/display/DBRAG/DBRAG+Data+Working+Group
• We’d like your input on
  – DoD-funded public datasets
  – Limited access DoD data sets for the Data Catalog
Smart Tools
Smart Tools Overview

- Smart Tools is a user interface (UI) framework providing easy, front-end access to a suite of tools, the first of which is the SmarTag application.

Green is currently available, Red is coming soon
Smart Tools Overview

- As tools become available, access tabs will be added to the Smart Tools Menu.

SmarTag

Using SmarTag, users can easily submit documents to the DTIC Metatagger application, which semantically analyzes a document and then outputs ranked tag listings of concepts and topics summarizing the main themes of that document. At the SmarTag user interface, users can either upload a document or paste document text directly into the "Paste Text here..." box and then click the "Generate Tags" button.

▲ Upload Files

or

Paste Text here...

DTIC Thesaurus ▼

Generate Tags Clear
• Smart Tools (SmarTag) calls the Metatagger to generate the highest scoring terms
Smart Tools Overview

- Smart Tools (SmarTag) also generates scores for Thrust Areas, COIs, Fields & Groups, JCAs, and PIIs.

### All Distribution Codes

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### All Thrusts

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<tr>
<td>Biotechnology and Synthetic Biology</td>
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</tbody>
</table>

### COI All

- Field and Group Topics
- JCA1
- Personally Identifiable Information - PII
• Smart Tools will also provide links to other tools such as the Ontology Repository, which will allow organizations to share and store their ontologies for the long-term and which originated from a request from AFRL.
For more information, come to DTIC’s Boot Camp.

https://discover.dtic.mil/training/
Questions/Comments?