CIRDS: CTP Integrated Research and Data System

Mark Gingrass1, Christine Wang1, Wei Chen2, Geetha Potluri2, Alex Abramson2, Nirmala uralkrishna2, Wei Wu3
FDA/CTP/Division of Research Science Informatics1, SAIC2, MarkLogic3

Introduction

- CIRDS is developed with a unified Web-based interface for users to support exploration, searching, and citing of heterogeneous data sources and content
- CIRDS is upgraded to ingest and accommodate new data sources to enrich its local data and document repository for the scientific community
- Development of CIRDS responds to numerus features and enhancement requests from CIRDS and Industry Document Analysis Tool (iDAT) users
- CIRDS has been revised to demonstrate the viable accommodation of iDAT data as the web-based user interface of iDAT is scheduled to be decommissioned

Features and Methods

- Unified UI displays all the data sources (pre/post search)
- Powerful search capability with customizable synonyms list and flexible options including Clipboard and Collections, etc.
- Effective system monitoring, management and security
- Highlighted search results with ability to Save and Export to MS Excel or Endnote.
- Developed a streamlined data ingestion process
- Employed MarkLogic as the integrated document search management system
- Adopted role-based user management

Architecture and Ingestion Workflow

- Ingestion of multiple heterogenous data sources including iDAT, Research Tracking System (RTS), Tobacco Constituent Knowledge Base (TCKB), University of California, San Francisco Truth Tobacco Industry Documents (UCSF)
- Accommodation of more than 15 million records
- Positive feedbacks from CIRDS and iDAT userbase
- Secure data transfer channel
- Robust application with the functionality to support every-day needs of its user community.