Multi Dataset Analysis and Rollup Tool (MDART)

John Sandoval
Kristin Burnum
Joseph Brown
Pacific Northwest National Laboratory
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MDART: Outline

- MDART Overview
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  - MTS Cache Database
  - Workflow Editor
- MDART In Action
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  - Workflow Example – Joseph
- Help
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  - Workflow Examples
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- Questions
- Acknowledgments
  - Matt Monroe

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MDART Description

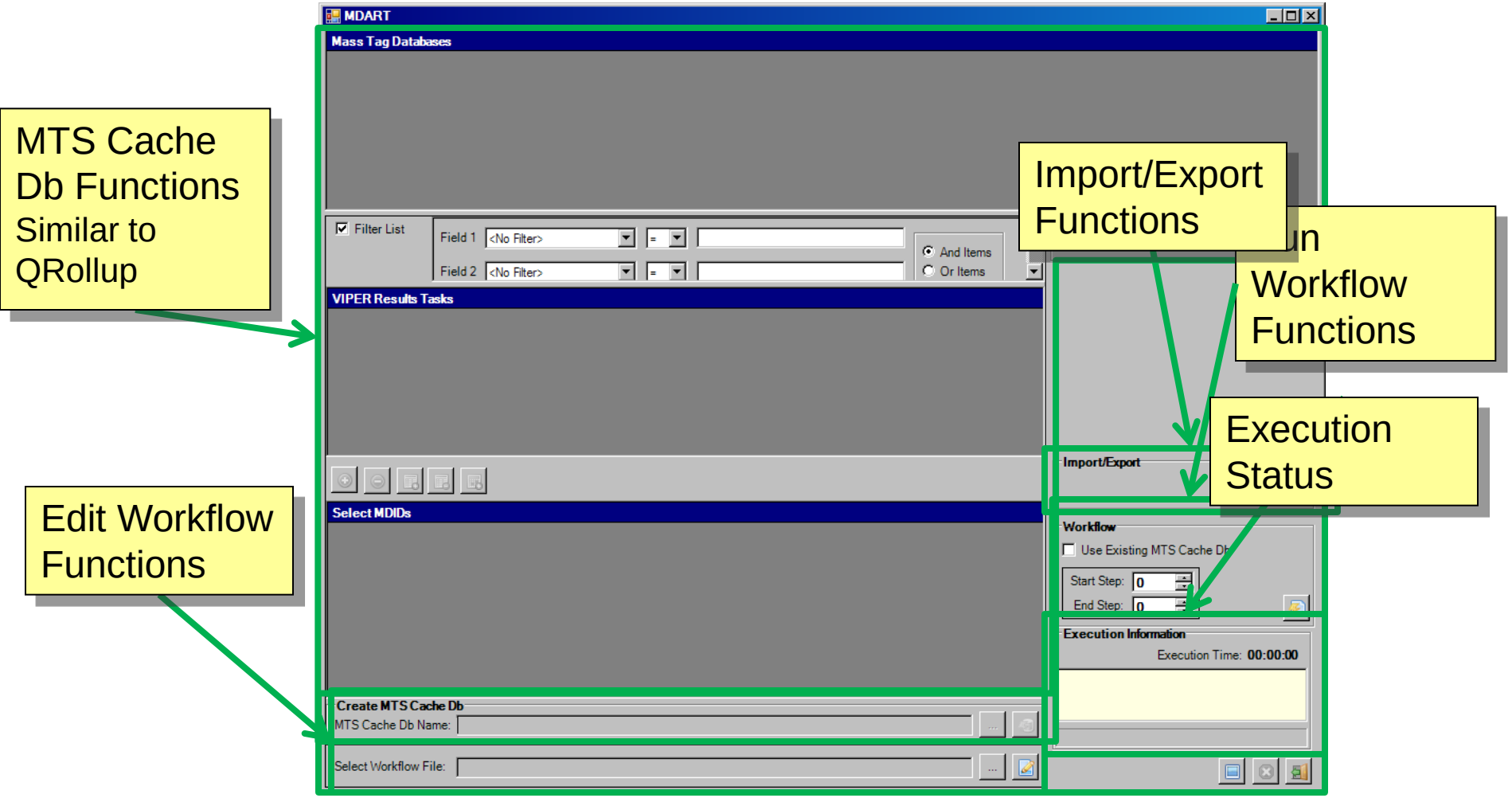
- MDART is a tool that allows a user to:
  - Create a SQLite Cache database using LC-MS or LC-MS/MS
  - Select an existing SQLite Cache database
  - Generate a workflow
  - Run a workflow
  - Export results

- Potential Uses
  - Label data (O16/O18)
  - Intensity data
  - Spectra counting
  - Any other repetitive database mining

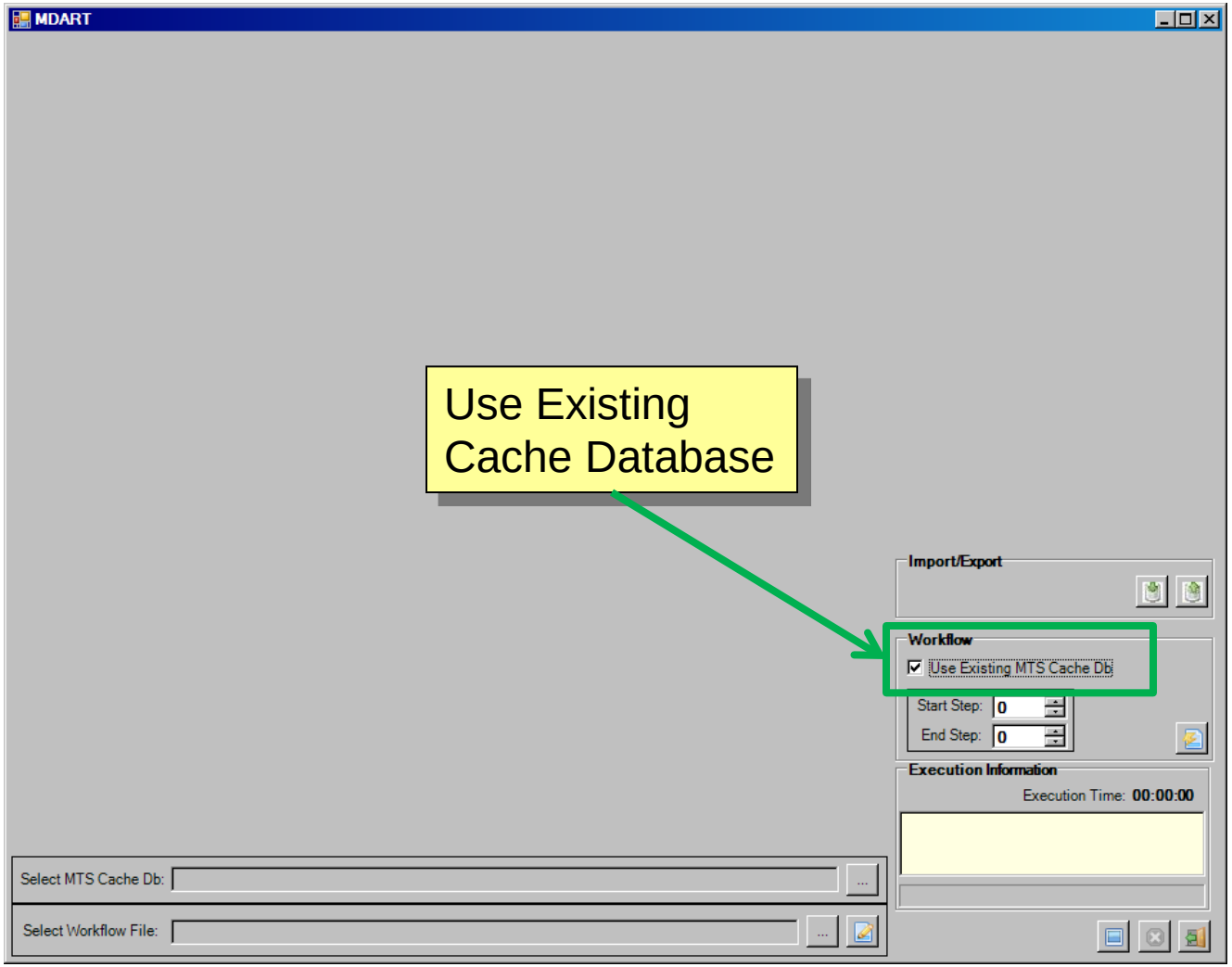
MDART Advantages

- Advantages of using MDART vs Other Databases
  - Portable
    - Unlike SQL Server, you can take your database with you
    - Collaborators and co-workers can be sent workflow and data
  - Handles large amounts of data
    - Unlike Access, you can have multiple tables with millions of records
  - Queries are fast
    - Queries run very quickly even with large tables
  - Easily view workflow steps
    - Export the workflow directly to Excel

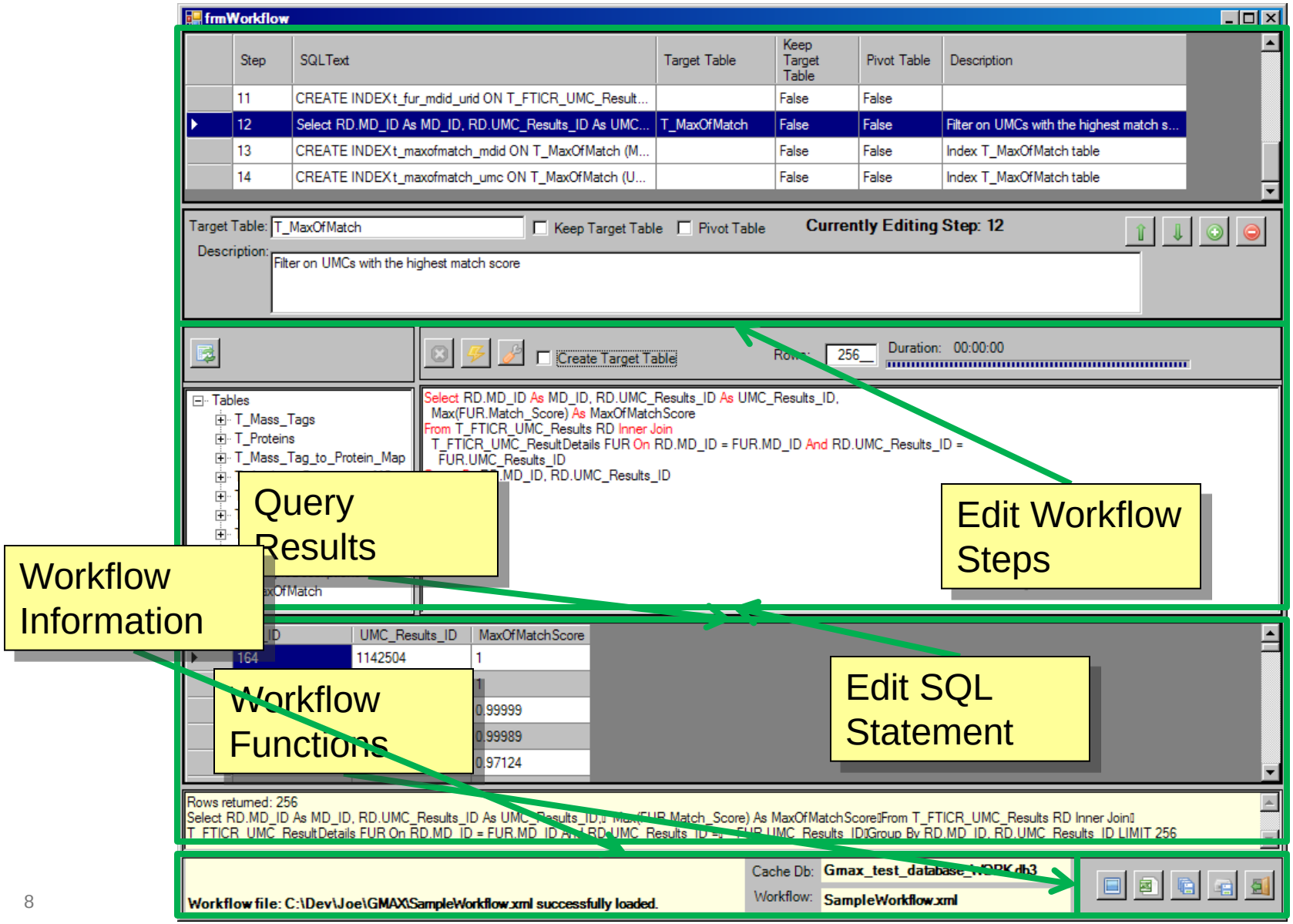
MDART Main Screen



MDART Use Existing Cache



MDART Workflow Editor

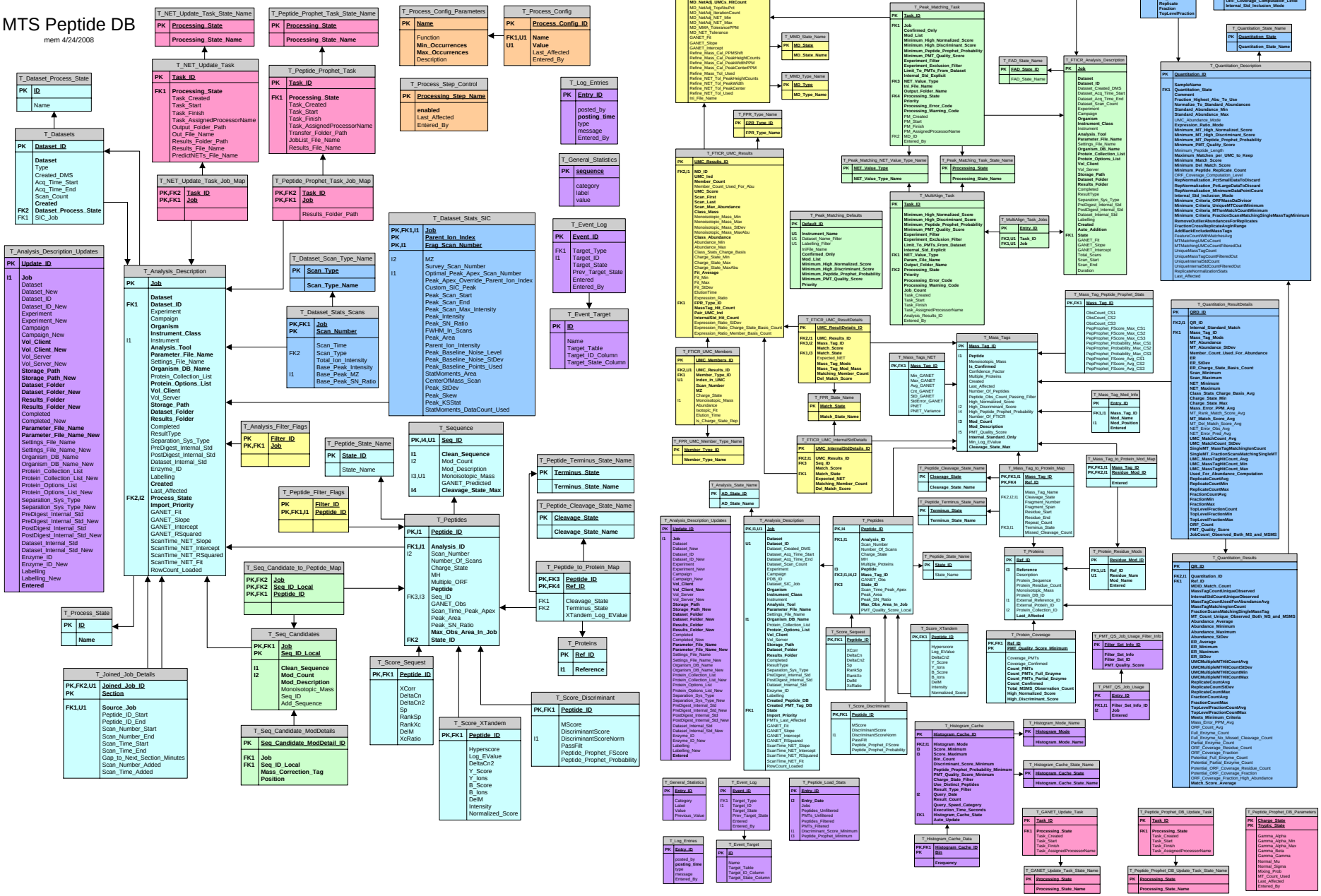


MTS Peptide DB

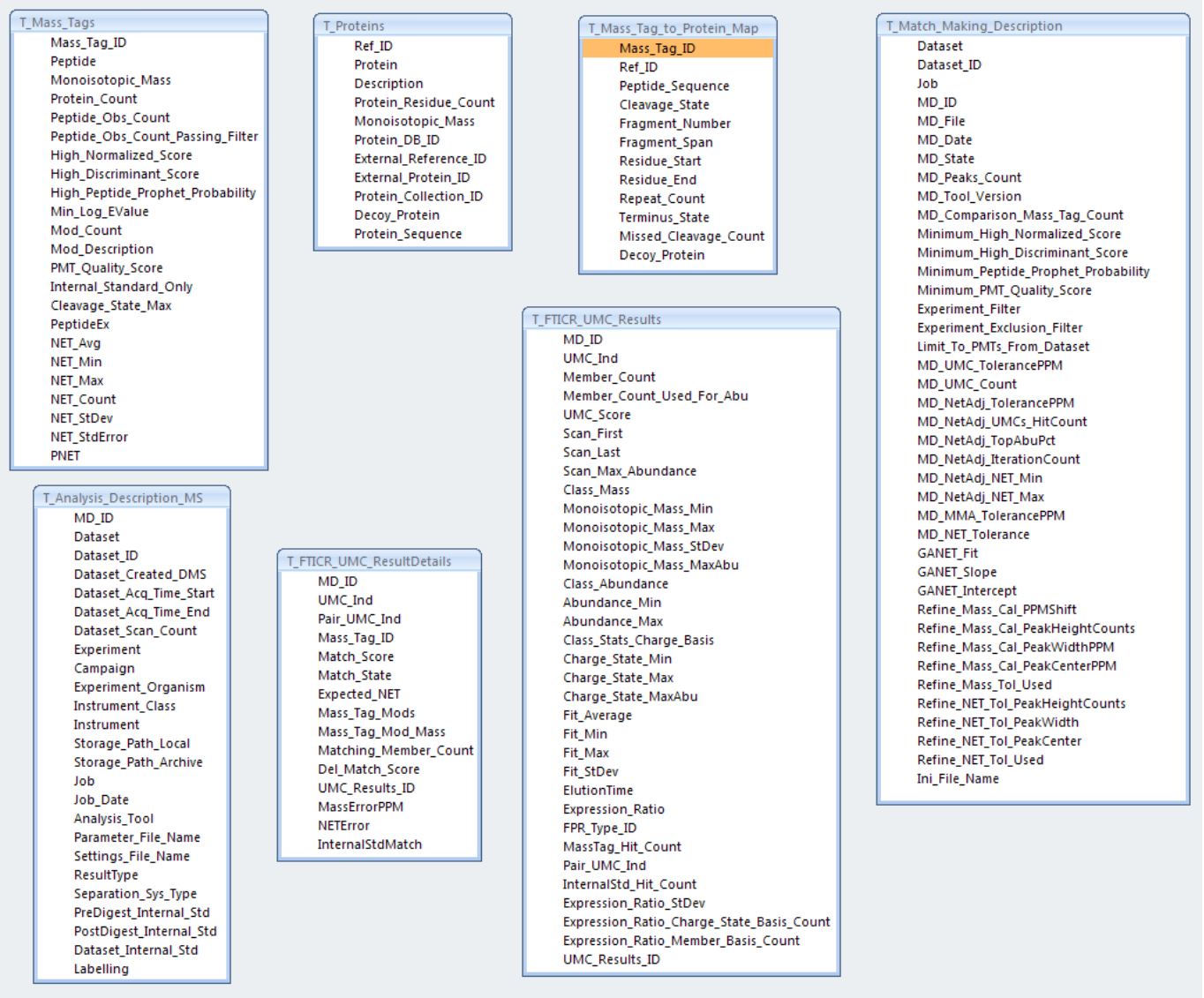
mem 4/24/2008

MTS PMT Tag DB

mem 4/24/2008



MTS Cache Database



MDART Things to know

- Cache working database
  - Database name _WORK
  - Keeping/using working copy
- Cache result database
  - Database name_RESULT
- Backup files
  - Workflow name_bu
  - Keeping/using backup
- Exporting
  - Database name.accdb (Access 2007)
  - Tab/Comma delimited
- Importing
  - Access 2003 and Access 2007

MDART Functions

- MTS Cache Db
- Workflow
  - Steps
    - Adding, removing, rearranging
  - Manipulating Data
    - Removing and updating records
    - Creating temp table
    - Creating crosstab table
  - Reporting
  - Saving
  - Running
- Importing/Exporting