

SQL-Based Queries the Specific-Query

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SQL-Based Queries

- New Type of Query
- Suppliments
 - General-Query
 - Simple-Query
- Blends Features of Each



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General-Query

- Client/Server Call: rc/rsGenQuery
- Used Extensively
 - Clients, Server, Micro-services
- Conceptually Simple
 - No SQL or Schema Knowledge Needed
 - Request Columns, Specify Constraints, Get Rows
- ICAT Code Generates SQL
 - Applying Access Control in SQL
- Similar to an SRB Call



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Simple-Query

- rc/rsSimpleQuery
- Used for Admin Functions Only
 - Designed for iadmin
- Pre-defined SQL
- Returned in Various String Formats



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New Specific-Query

- rc/rsSpecificQuery to Execute
- Only Admin Defined SQL
- Admin Must Ensure SQL is Safe
 - Object Information Access Control
 - Only Appropriate Columns/Rows
 - No Updates on ICAT Tables
- Optional Input Parameters
 - Bind Variables: No SQL Insertion
- Allows Full SQL Capabilities



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SQL-Based Queries

- New iadmin Command to Add/Rm
- Caller Includes SQL or Alias and Parameters (if any)
- ICAT Verifies SQL is in Table
- Preset Queries to List Queries
 - 'iquest -sql ls'
- Results Returned in GenQuery Form
- Iquest --sql 'SQL' or Alias [Parms]



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Additional Information

- irods.org
 - SQL-Based Queries
 - Release Notes 2.5
- 'iquest -h'
- 'iadmin -h'



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