



ATLAS SYSTEMS

TRAINING & LIBRARY SOLUTIONS

In a Nutshell:

Ares Reporting Overview (With minimal Direct SQL Querying.Sigh.)

Ares Reporting Overview

“It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts.”

— Arthur Conan Doyle



Ares Reporting Overview

- Methods of Ares Reporting:
 - SSRS (SQL Server Reporting Services)
 - Custom Query
 - ODBC Link-Based Methods (Open Database Connectivity)
 - Direct SQL Querying

- But first things first:
How do we get there?



Ares Reporting Overview

- Database Connection SQL Logon

- Hosted: For all hosted Ares systems (and a few self-hosted ones), we will set up and assign you a username and password to access the reports.

- These credentials are then used to access the database, regardless of your reporting method.

- Self-hosted: If you're self-hosting and setting up your own means to access your Ares data for reporting (by whatever method), make **ABSOLUTELY** sure that the SQL Logon being used to connect to the database is **READ ONLY**.

- Collecting data for analysis does process.

- **Safety (and Data Integrity) First.**

If you take nothing else away from this reports mini-presentation, take **THIS**.

Programs like MS Access, Excel, SSMS, etc. **WILL** alter your data if permitted to and instructed to, however accidentally.



ALERT

CONDITION: RED

Ares Reporting Overview

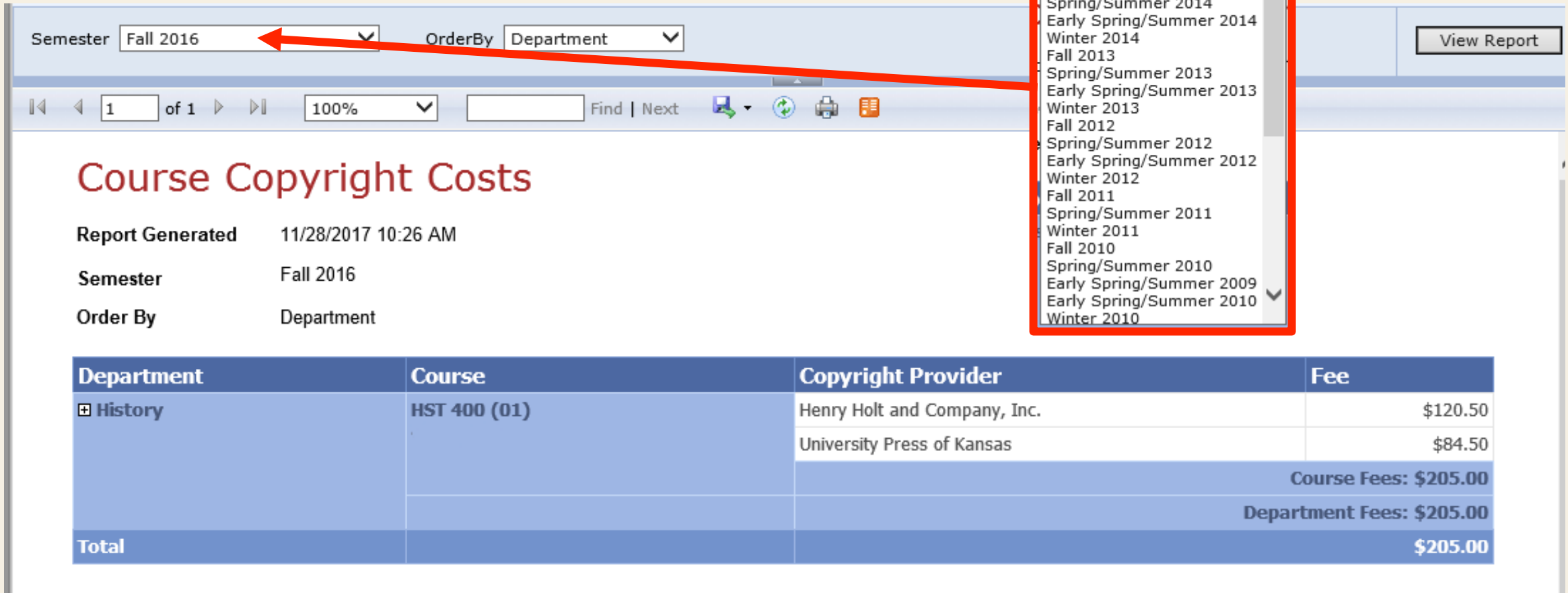
- SSRS (SQL Server Reporting Services)
 - Default Ares Web Reports

Individual Reports

The screenshot displays the SSRS web interface for a folder named 'Ares'. The breadcrumb path is 'Home > Sandbox > Kevin's SSRS Reports'. The folder name 'Ares' is prominently displayed. A search bar is located in the top right corner. Below the folder name, there is a toolbar with options: 'New Folder', 'New Data Source', 'Folder Settings', and 'Upload File'. The main area shows a grid of report icons, each with a small bar chart icon. The reports listed are: 'CourseCopyrightCosts', 'HardCopyReserveltems', 'PurchasedOnDemand', 'CoursesWithNoItems', 'MultipleCourseCodes', 'ReserveltemsByDepartment', 'DocumentTypeBreakdown', 'OverallUsageByMonth', and 'ReserveltemsByInstructor'. A red box labeled 'Individual Reports' has three red arrows pointing to the 'CoursesWithNoItems', 'MultipleCourseCodes', and 'ReserveltemsByDepartment' reports. The bottom right corner shows a zoom level of 100%.

Ares Reporting Overview

- SSRS (SQL Server Reporting Services)
 - Default Ares Web Reports



The screenshot displays the Ares Reporting interface. At the top, there are two dropdown menus: 'Semester' (set to 'Fall 2016') and 'OrderBy' (set to 'Department'). A red arrow points from the 'Fall 2016' dropdown to a larger, expanded dropdown menu on the right. This expanded menu lists various semesters from 'Winter 2017' at the top to 'Winter 2010' at the bottom, with 'Fall 2016' highlighted in blue. Below the dropdowns is a 'View Report' button. The main content area features the title 'Course Copyright Costs' in red. Below the title, there are three rows of report metadata: 'Report Generated' (11/28/2017 10:26 AM), 'Semester' (Fall 2016), and 'Order By' (Department). At the bottom, there is a table with four columns: 'Department', 'Course', 'Copyright Provider', and 'Fee'. The table shows data for the 'History' department and 'HST 400 (01)' course, listing two copyright providers: 'Henry Holt and Company, Inc.' with a fee of \$120.50 and 'University Press of Kansas' with a fee of \$84.50. Summary rows show 'Course Fees: \$205.00' and 'Department Fees: \$205.00', with a final 'Total' row showing '\$205.00'.

Semester OrderBy

1 of 1 100% Find | Next

Course Copyright Costs

Report Generated 11/28/2017 10:26 AM
Semester Fall 2016
Order By Department

Department	Course	Copyright Provider	Fee
History	HST 400 (01)	Henry Holt and Company, Inc.	\$120.50
		University Press of Kansas	\$84.50
			Course Fees: \$205.00
			Department Fees: \$205.00
Total			\$205.00

Ares Reporting Overview

- SSRS (SQL Server Reporting Services)
 - Default Ares Web Reports



The screenshot shows a web browser displaying an SSRS report. The report title is "Overall Usage by Month" in red text. Below the title, it says "Report Generated 11/28/2017 10:16 AM". The report content is a table with three columns: "Year", "Month", and "Count". The data is for the year 2017, with rows for each month from February to November, plus a "Total" row for 2017. A final "Total" row is at the bottom of the table. The browser interface at the top shows navigation controls, a page number of 1 of 1, a zoom level of 100%, and search options.

Year	Month	Count
2017	February	24
	March	14
	April	13
	May	98
	June	41
	July	35
	August	31
	September	1,637
	October	2,098
	November	1,615
	Total	5,606
Total		5,606

Ares Reporting Overview

- SSRS (SQL Server Reporting Services)
 - Default Ares Web Reports

Semester: 2016-2017 Summer OrderBy: Document Type

1 of 1 100% Find | Next

Document Type Breakdown

Report Generated 11/28/2017 10:24 AM
Semester 2016-2017 Summer
Order By Document Type

Document Type	Reserve Count
HardCopy	180
MP3	2
PDF	1648
Powerpoint	1
WebLink	1411
Word	35
Total Items: 3277	

Ares Reporting Overview

- SSRS (SQL Server Reporting Services)

- Default Ares Web Reports
- Custom Web Reports

Order By Item

Yes, you can customize the baseline SSRS reports and/or create new ones.

1 of 1 100% Find | Next

Document Type Breakdown

Report Generated 11/28/2017 1:16 PM

Semester 2017/2018FW

Order By Document Type

Document Type	Item Format	Reserve Count
HardCopy	Book	283
PDF	BookChapter	17
PDF	Article	331
WebLink	Article	235
Windows Audio-wma	Article	1
Word	BookChapter	1
		Total Items: 868

Active Items that have been Cloned

Report Generated 11/28/2017 1:43 PM

Order By Item ID

Item ID	Title	Course	Cloned
61899	Alumina	ARH4800.007F17	1
61901	Benedetto Bordon	ARH4800.007F17	1
61903	Illuminating the Renaissance	ARH4800.007F17	1
61904	Journal of the Walters Art Gallery	ARH4800.007F17	1
61905	Lives of the Most Eminent Painters, Sculptors, and Architects	ARH4800.007F17	1
61906	Looking at Italian Renaissance Sculpture	ARH4800.007F17	1
61907	Miniatura	ARH4800.007F17	1
61911	Structure of the Visual Book (3e)	ARH4800.007F17	1
61912	The Art Bulletin	ARH4800.007F17	1

Ares Reporting Overview

Fun Stuff (SQL Query)

SSRS Reports
are created

The screenshot shows the Microsoft SQL Server Report Builder interface. The main window displays a report titled "Purchased on Demand" with a table containing two columns: "Report Generated" and "[Generated Date]". The "Query.CommandText" field is highlighted, containing the following SQL query:

```
= "SELECT I.Title, Count(*) as Count FROM Items I INNER JOIN ItemTracking IT ON I.ItemId = IT.ItemId INNER JOIN Courses C on I.CourseID = C.CourseID WHERE IT.Status = 'Awaiting Acquisitions Fulfillment' AND I.CurrentStatus not like 'Item Cancelled%' AND C.Semester = @Semester GROUP BY I.Title ORDER BY " & Parameters!OrderBy.Value
```

At the bottom of the interface, there are sections for "Row Groups" and "Column Groups". The status bar at the bottom indicates the current report server URL: <https://sqlreports3.atlas-sys.com/reportserver>.

Set expression for: Query.CommandText

```
= "SELECT I.Title, Count(*) as Count FROM Items I INNER JOIN ItemTracking IT ON I.ItemId = IT.ItemId INNER JOIN Courses C on I.CourseID = C.CourseID WHERE IT.Status = 'Awaiting Acquisitions Fulfillment' AND I.CurrentStatus not like 'Item Cancelled%' AND C.Semester = @Semester GROUP BY I.Title ORDER BY " & Parameters!OrderBy.Value
```

No, really. This query-driven Data Set specification is where it actually gets interesting.

This pulls in the data to be looked at, and refined, by the rest of the SSRS report.

Ares Reporting Overview

- Custom Query
 - Within the Ares Client

Standard Item Search Options

The screenshot displays the Ares Client interface. At the top, there are tabs for 'Home', 'Process', and 'System'. Below these, there are search sections for 'Search Items' and 'Search Courses'. The 'Search Items' section includes fields for 'Item ID', 'Item Information', and 'Course Information', along with a 'Search' button. The 'Search Courses' section includes fields for 'Course ID', 'Course Information', and 'Instructor Information', also with a 'Search' button. A red box highlights these search sections, with an arrow pointing to the text 'Standard Item Search Options'. Below the search sections, there is a 'Requests (6005 items)' list with various categories and counts. To the right, there are 'System' and 'Daily Processes' sections. The 'System' section shows a table with 'Category' and 'Count' columns, listing items like 'Users to Clear', 'Pending Emails', 'Failed Emails', 'Awaiting Copyright Processing', and 'Invalid Links'. The 'Daily Processes' section shows a table with 'Process' and 'Run Time' columns, listing items like 'CCC Updater', 'Course and User Load', 'Item Activation', 'Item Cleanup', and 'Orphan File Cleanup'. The bottom of the interface shows the 'atlas' logo and a page number '6005'.

Note too that there's a "Search Courses" Section as well.

It works the exact same way. It just searches COURSES rather than ITEMS.

Ares Reporting Overview

- Custom Query
 - Within the Ares Client

Standard Item Search Options

The screenshot displays the Ares Client interface. At the top, there are tabs for 'Home', 'Process', and 'System'. Below these, there are search fields for 'Item ID', 'Item Information', and 'Course Information', along with a 'Search' button. A red box highlights these search fields, and a red arrow points from the text 'Standard Item Search Options' to this box. To the right, there are search fields for 'Course ID', 'Course Information', and 'Instructor Information', also with a 'Search' button. Below the search fields, there is a 'New' button and a 'Search Items' button. The main area of the interface shows a list of 'Requests (6005 items)'. The list includes various request types and their counts. On the right side, there are two summary tables: 'System' and 'Daily Processes'.

Category	Count
Users to Clear	0
Pending Emails	0
Failed Emails	0
Awaiting Copyright Processing	0
Invalid Links	0

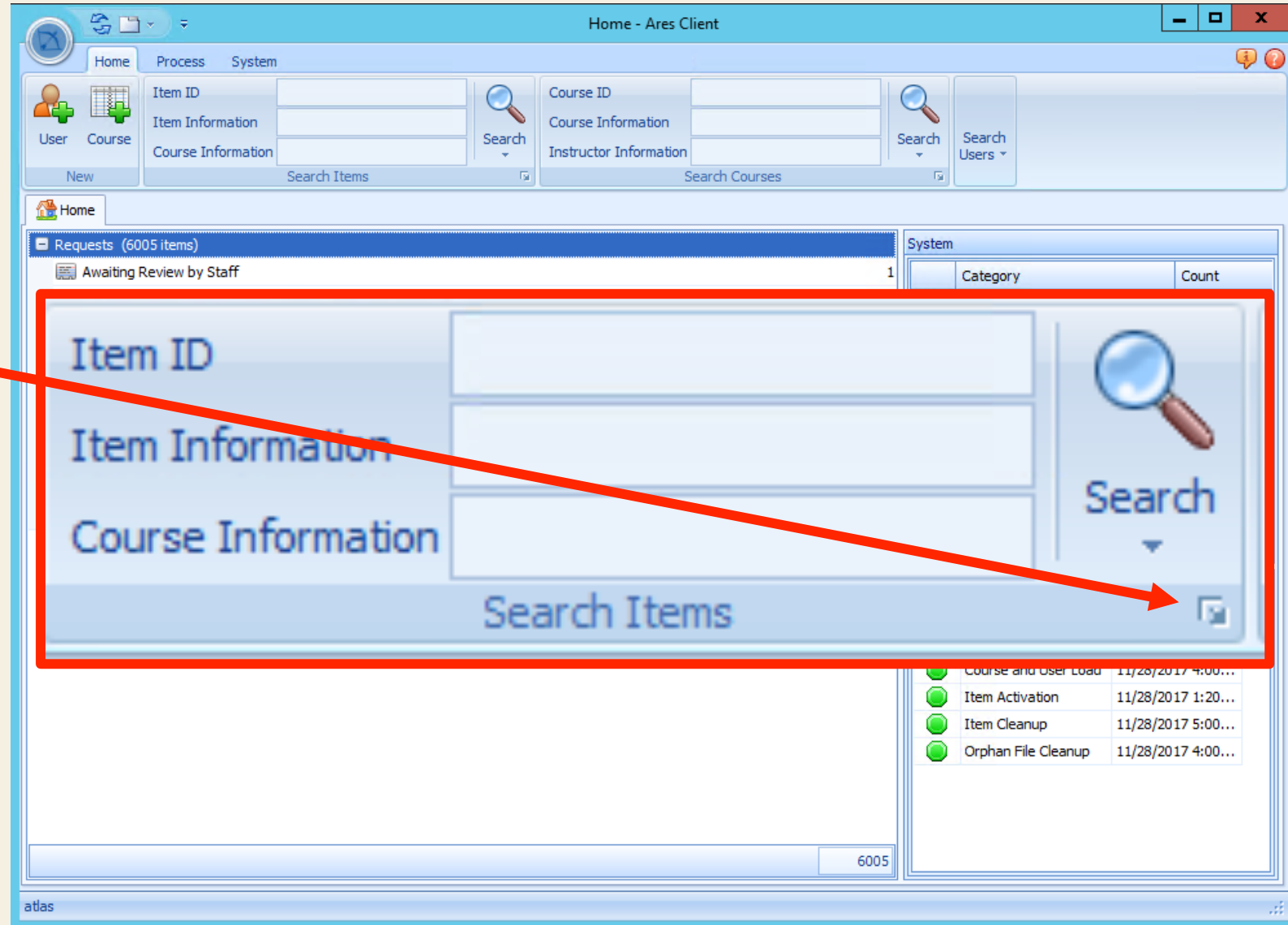
Process	Run Time
CCC Updater	11/28/2017 3:57...
Course and User Load	11/28/2017 4:00...
Item Activation	11/28/2017 1:20...
Item Cleanup	11/28/2017 5:00...
Orphan File Cleanup	11/28/2017 4:00...

atlas

Ares Reporting Overview

- Custom Query
 - Within the Ares Client

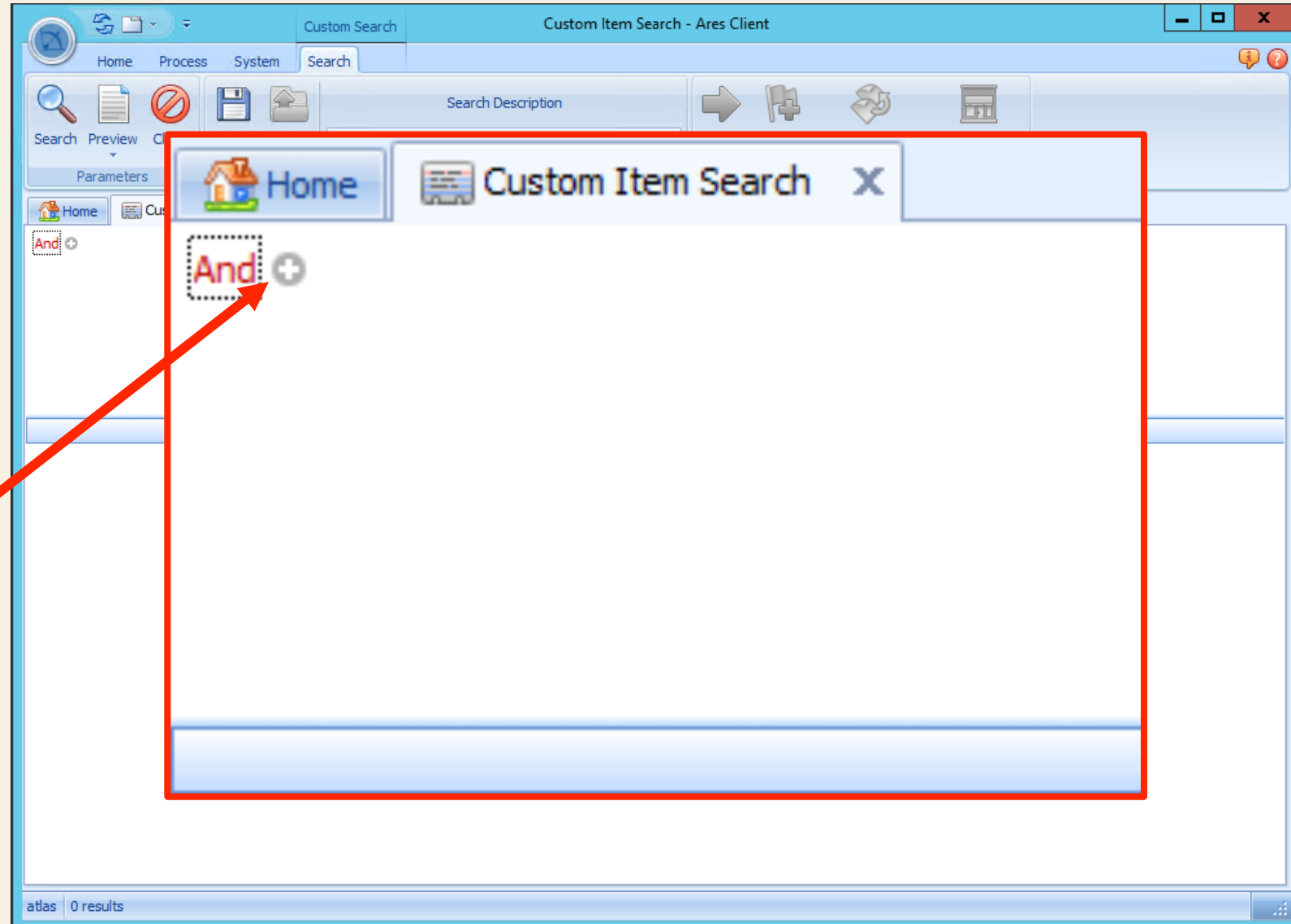
Custom Search Button



Ares Reporting Overview

- Custom Query
 - Within the Ares Client

To select specific criteria for the search, click the plus symbol next to the "And".



Ares Reporting Overview

- Custom Query
 - Within the Ares Client

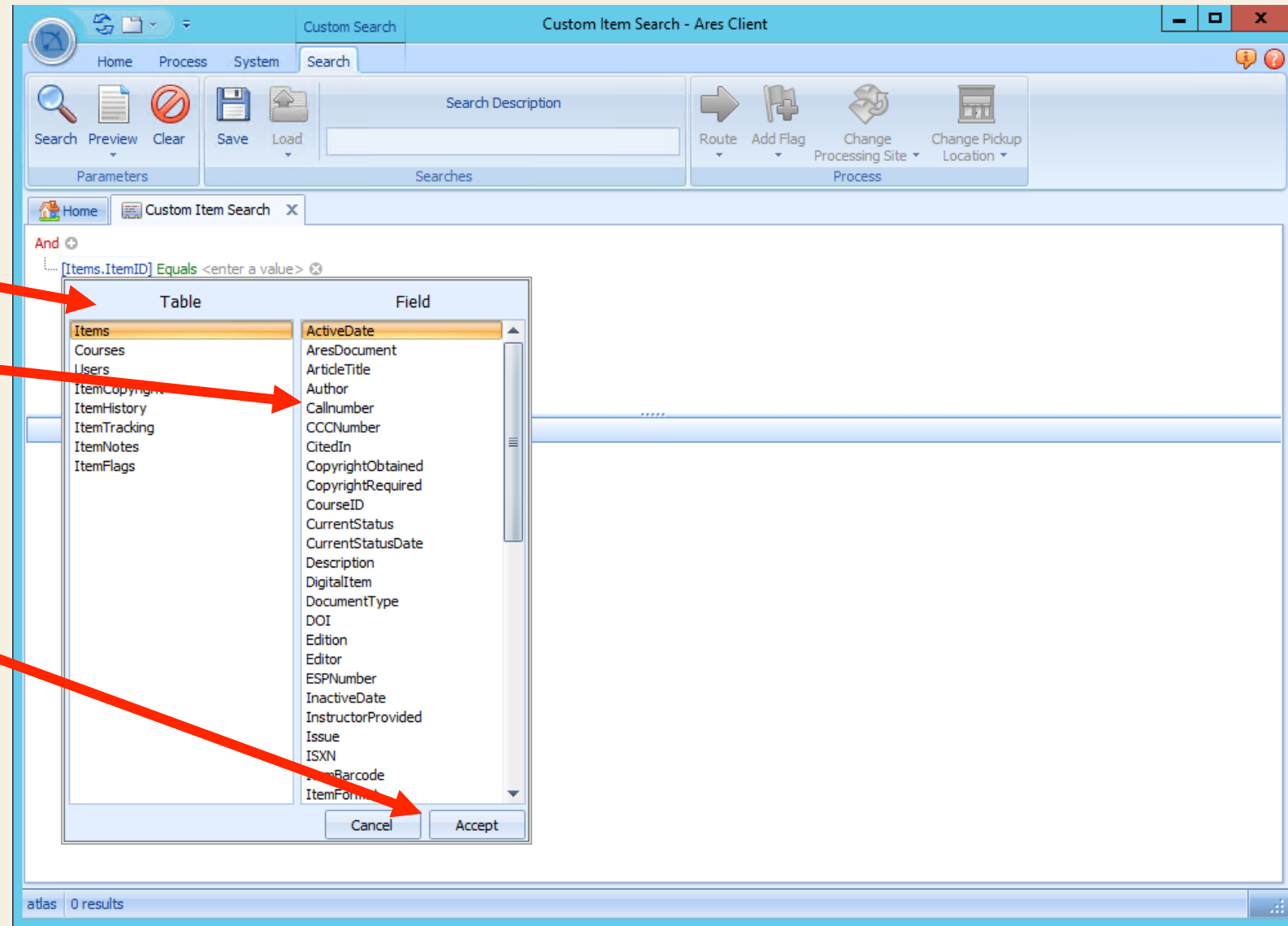
Select the Table

and Field

you're interested in.

Then Click the
"Accept" button.

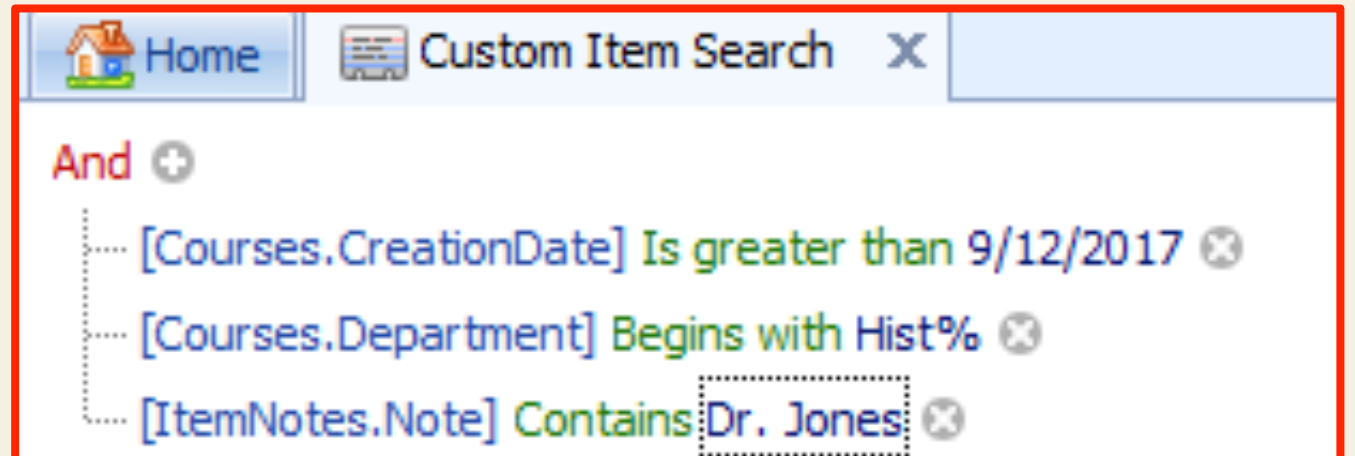
Rinse and Repeat as
needed



Ares Reporting Overview

- Custom Query
 - Within the Ares Client

Build your search based on whatever specific criteria you need.



The screenshot shows the Ares Client interface with a search bar. The search criteria are:

- And (+)
- [Courses.CreationDate] Is greater than 9/12/2017
- [Courses.Department] Begins with Hist%
- [ItemNotes.Note] Contains Dr. Jones

When you're happy with the search, click the "Search" button to see your results.

Results will display in the bottom results pane as they would with any other client search.

Current Status	Current St...	Item Type	Digital Item	Location	Ares Docu...	Instructor ...	Copyright ...	Copyright ...	Visible To S...	Active Date	Inac
Item Available at Reserve Desk	10/13/2017...	MON	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/4/2017	
Item Available at Reserve Desk	9/26/2017 ...	MON	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/4/2017	4
Item Available at Reserve Desk	10/13/2017...	MON	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/4/2017	4
Item Available on Electronic Reserves	9/19/2017 ...	SER	<input checked="" type="checkbox"/>	10001102.pdf	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/4/2017	1
Item Available on Electronic Reserves	10/10/2017...	SER	<input checked="" type="checkbox"/>	10001128.pdf	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/4/2017	1
Item Available on Electronic Reserves	9/20/2017 ...	SER	<input checked="" type="checkbox"/>	10001103.pdf	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/4/2017	1
Item Available on Electronic Reserves	9/11/2017 ...	SER	<input checked="" type="checkbox"/>	100010F0.pdf	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/4/2017	1
Item Removed From Reserves	9/13/2017 ...	SER	<input checked="" type="checkbox"/>	100010F1.pdf	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/1/2016	4
Item Removed From Reserves	9/13/2017 ...	SER	<input checked="" type="checkbox"/>	https://uwi...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/1/2016	4
Item Removed From Reserves	9/13/2017 ...	SER	<input checked="" type="checkbox"/>	100010F2...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/1/2016	4
Item Removed From Reserves	9/13/2017 ...	SER	<input checked="" type="checkbox"/>	https://uwi...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/1/2016	4
Item Removed From Reserves	9/13/2017 ...	SER	<input checked="" type="checkbox"/>	100010F3...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/1/2016	4
Item Removed From Reserves	9/13/2017 ...	SER	<input checked="" type="checkbox"/>	100010F4...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/1/2016	4
Item Removed From Reserves	9/13/2017 ...	SER	<input checked="" type="checkbox"/>	100010F5...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/1/2016	4
Item Removed From Reserves	9/13/2017 ...	SER	<input checked="" type="checkbox"/>	100010F6...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/1/2016	4
Item Removed From Reserves	9/13/2017 ...	SER	<input checked="" type="checkbox"/>	100010F9...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9/1/2016	4

Ares Reporting Overview

- ODBC Link-Based Methods (Open Database Connectivity)
 - Used by:
 - Power BI (can also use a direct SQL connection)
 - Tableau (can also use a direct SQL connection)
 - Excel
 - MS Access
 - Essentially anything semi-useful that can connect that way.
 - Each of these tools works differently, but they all pull data from the database, filter and sort it by specific criteria, and allow you to display the data.
 - Power BI and Tableau, and to a lesser extent newer versions of Excel, are very graphics-oriented.

Ares

- Direct Querying
- SQL Management Studio

```
DECLARE @BeginDate DateTime, @EndDate DateTime, @SITECode nvarchar(10) ;

-- EDIT THESE VALUES BEFORE RUNNING SCRIPT --

SET @BeginDate = '2017-01-01 00:00:00';
SET @EndDate = '2017-07-01 00:00:00';

SELECT

MONTH(InitialDate.CreationDate) AS Month, DAY(InitialDate.CreationDate) AS Day, YEAR(InitialDate.CreationDate) AS Year --, count(*) as Number

FROM Items

JOIN (
    SELECT ItemID, Min(DateTime) as CreationDate
    FROM ItemHistory
    GROUP BY ItemID
) as InitialDate

ON Items.ItemID = InitialDate.ItemID

WHERE InitialDate.CreationDate BETWEEN @BeginDate AND @EndDate

GROUP BY YEAR(InitialDate.CreationDate), MONTH(InitialDate.CreationDate), DAY(InitialDate.CreationDate)
ORDER BY YEAR(InitialDate.CreationDate), MONTH(InitialDate.CreationDate), DAY(InitialDate.CreationDate)

SELECT

MONTH(PatronUseDate.UseDate) AS M, DAY(PatronUseDate.UseDate) AS D, YEAR(PatronUseDate.UseDate) AS Y, count(*) as Number

FROM Items

JOIN (
    SELECT ItemID, Min(DateTime) as UseDate
    FROM ItemHistory
    Where Entry in ('WebAccess')
    GROUP BY ItemID
) as PatronUseDate

ON Items.ItemID = PatronUseDate.ItemID

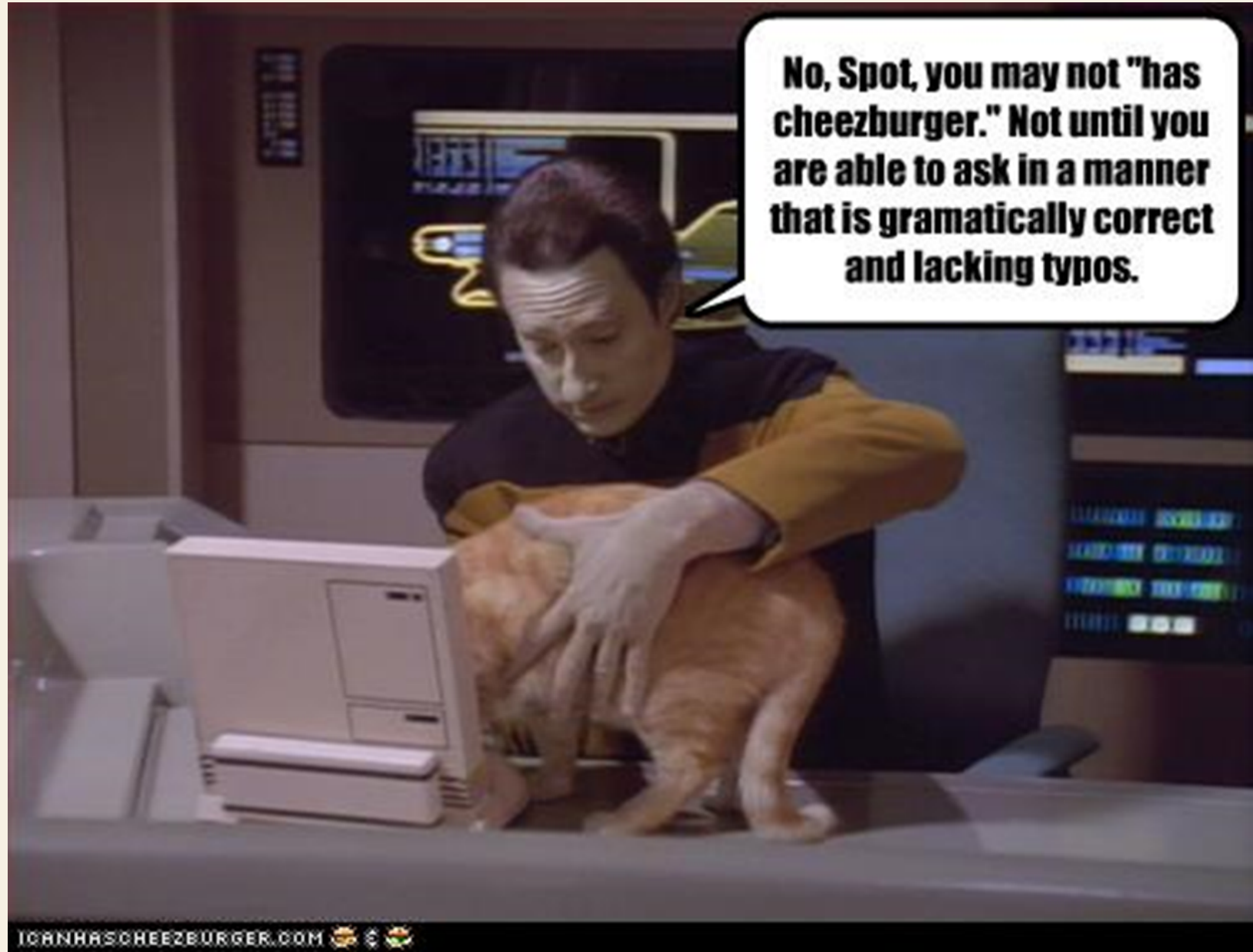
WHERE PatronUseDate.UseDate BETWEEN @BeginDate AND @EndDate

GROUP BY YEAR(PatronUseDate.UseDate), MONTH(PatronUseDate.UseDate), DAY(PatronUseDate.UseDate)
ORDER BY YEAR(PatronUseDate.UseDate), MONTH(PatronUseDate.UseDate), DAY(PatronUseDate.UseDate)
```



Ares Reporting Overview

- Direct SQL Querying
 - SQL Server Management Studio



Ares Reporting Overview



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Ares Reporting Overview

