

Cognos Analytics 11

Diagnostic Logging and User Session Logging



New Logging Framework

Why?

- Existing logging required updates for new services
- Outdated
- New options for log gathering
- Cloud requirements with no access to the file system/infrastructure
- New logging has no impact on AUDIT logging

Logging - Agenda

- Log files – what they are for
 - New logs and existing logs
 - When should I use what log?
- Session Logging
 - User session for reproducible problems
- Diagnostic Logging browser-based administration
 - Use for intermittent or service-specific problems
- Interactive Performance Assistant Logging
 - IPA customers self diagnose performance or tuning related issues before logging a PMR
 - Report Performance Challenges in a Distributed Environment

Log files – what they are for

- cbs_*.log – no change
 - Bootstrap files, tells you about startup, running and shutdown state of the application
- cogaudit.log - new
 - used to be cogserver.log, contains all the audit information
- p2pd_messages.log – no change
 - information about the dispatcher JVM regarding startup, run and shut down state
- dq_messages.log -
 - information about Dynamic Query JVM regarding startup, run and shut down state
- cognosserver.log - new
 - trace information about running state of dispatcher JVM
 - Also contains Diagnostics logging if enabled
- cognosserver-session_id.log
 - Created when doing user session log and contains information specific to that session at debug level
- dataset-service-session_id.log
 - Created when doing user session log and contains information specific to that session at debug level when accessing a report or dashboard

Session Logging

When to use it

- Use this feature when a user can reproduce the problem
- No restart of Cognos Analytics is required
- Logs user activity at highest level of detail in every CA component and service that services the users request
- No knowledge of components, services, or logging configuration details
- Unique server log file for each user that enables it
- Session logging expire options:
 - 1 hour after being enabled, when the user closes the browser, or the user turns it off in the browser session
- User-specific diagnostic logging has no performance impact for other users

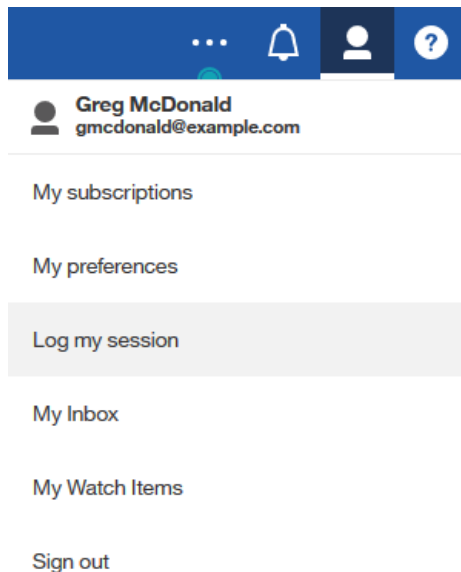
Session Logging

What to gather

- Admin must collect log files for the user session.
- User session log files will be named the same on every server as
 <component>-session-<sessionID>.log
 - e.g. cognosserver-session-912b8b09-73dc-4d9f-826b-b0773ec17770.log
 - e.g. dataset-service-session-912b8b09-73dc-4d9f-826b-b0773ec17770.log
- Admin can set maximum size for log files
- Session log files will roll over automatically based on size

Session Logging

How to Enable



User session logging

Session logging



On

Log identifier 1440dd6e-7892-4a4c-96ee-ad0bb46be4be

Session logging is used to enable detailed, diagnostic logging for your current Cognos Analytics session. Session logging can run for one hour maximum, but can be turned off at any time.

A unique identifier is generated to allow the administrator to identify the session logging data. Record the log identifier before you turn off the logging or close your browser.

In the logs directory you will find the users logs

-  dataset-service-session-1440dd6e-7892-4a4c-96ee-ad0bb46be4be.log
-  cognosserver-session-1440dd6e-7892-4a4c-96ee-ad0bb46be4be.log

Diagnostic Logging

When to use it

- Use Manage -> Configuration -> 'Diagnostic Logging' tab to set logging for specific components
- No restart of Cognos Analytics Required
- Use this in an environment for intermittent problems
- Same logging configuration automatically set on all servers and impacts all users of the system.
- NO IMPACT on session logging or AUDIT logging
- Look for these new log files:
 - cognosserver.log
 - dataset-service.log (may not show up initially)
- Admin can set maximum size for log files
- New log files will roll over automatically based on size, and Admin can set the maximum number of files to keep

Diagnostic Logging

What to gather

- Logging topics are a collection of logging settings, based on IPF client sample files
- Built-in topics' JSON spec can be downloaded as basis for creating a Custom topic
- Custom topics can be modified, Built-in cannot.
- ipfclientconfig.xml will only work for native code components, not Java components
 - (e.g. Report Servers, Framework Manager, Classic Query Mode).
- **WARNING:** ipfclientconfig.xml can impact AUDIT logging, so use with caution

Interactive Performance Assistant(IPA)

When to use it

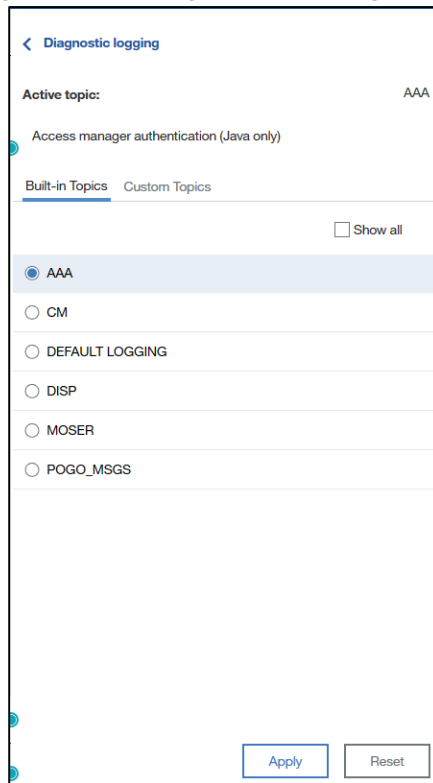
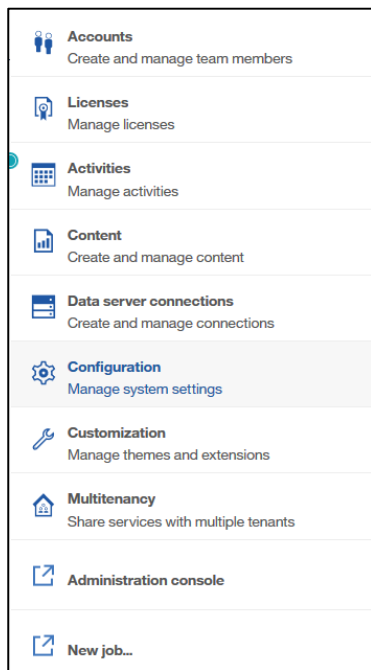
- A report is running too “slow”
- The report is too complex to simplify
- When a report becomes “slow” but only happens randomly
- Impossible to reproduce in house by IBM support
- Taking days if not weeks to resolve the issue with various performance traces

- Helps find potential bottlenecks in a report
- Query reuse or optimization

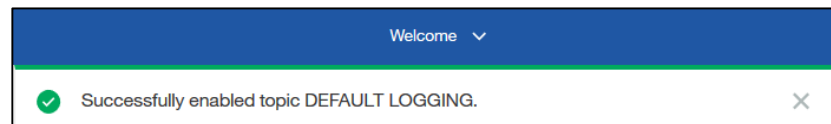
Diagnostic Logging

How to Enable

As an Administrator go to Manage -> Configuration -> Diagnostic logging



Message indicating that Diagnostic Logging is enabled



All debug information is in cognosserver.log

Interactive Performance Assistant

- Supported in Reporting
- To enable it it's done through properties of the report
- In the report output each part of the report will have:
 - Total execution time
 - Query execution time
 - Rendering time

- At the bottom of the report you get:

IPA Logging

How to Enable

2011 Sales Summary_DQ
8/9/2017 10:00 AM

Edit report

- Run HTML
- Run PDF
- Run Excel
- Run Excel data
- Run CSV

Show run options

Run options

Paper size: (Default)

Paper orientation: (Default)

Data mode: All data

Language: (Default), Afrikaans, Afrikaans (South Africa), Albanian, Albanian (Albania), Amharic

Rows per page:

Prompt

Include accessibility features

Enable bidirectional support

Include performance details

OK Cancel

Reporting 2011 Sales Summary
Quarterly and Yearly Breakdown for 2011

Top 10 Sales Staff (% Over Target)

Staff name	Revenue	Sales target	Percent of Target
Ires Wouters	\$6,135	\$5,000	122.70%
Jake Carlel	\$655,269	\$560,000	117.01%
Carole Claudel	\$2,805,193	\$2,402,800	116.75%
Sergio Ferrari	\$4,470,633	\$3,841,400	116.39%
Susan Blackwell	\$3,009,125	\$2,586,600	116.34%
Kolna Nilsson	\$1,043,754	\$897,800	116.26%
Katharina Hoerike	\$5,005,613	\$4,307,500	116.21%
Alphonse Sauvage	\$3,577,962	\$3,087,800	115.87%
Jutta Shultz	\$5,224,050	\$4,512,900	115.76%

Execution Time: 1124 ms

Revenue by Product type

Top 10 Sales Staff by Quantity Sold

Staff name	Sales region	Quantity
Fausta Bruno	Central Europe	361,192
Nathalie Benoit	Central Europe	350,951
Frank Fuhrhoh	Americas	335,695
Rudolf Albfara	Central Europe	335,189
Charles Lauril	Americas	321,650
Fiorina Giordano	Central Europe	321,124
Warren Thomas	Central Europe	317,532
Jarico Thomas	Americas	311,447
Chang-ho Kim	Asia Pacific	310,620
Fe Meng	Asia Pacific	296,279

Execution Time: 798 ms

Aug 14, 2017

Total Execution Time: Rrequest Id: d89acdcM9va7ia489ia78naM84Cv9Gic7G481-10481.ms

Execution Time: 1222 ms

Render: Combination Chart111111, 424 ms

Query: Order Method Pie Chart, 798 ms