IBM iDoctor for i Overview

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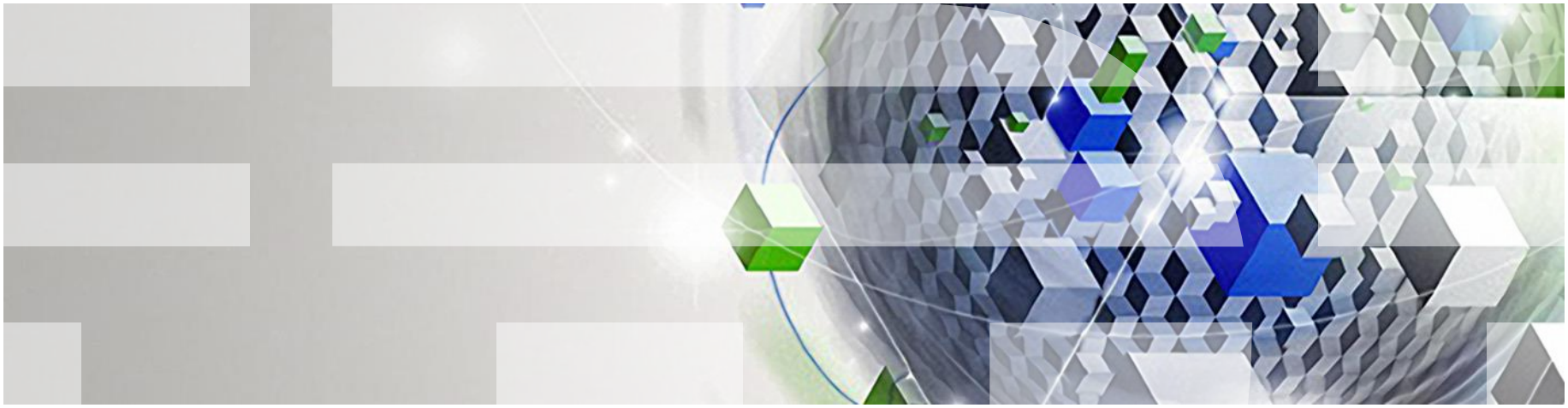


IBM iDoctor for i

Tools developed and used by service for performance investigation

Job Watcher **Disk Watcher** **PEX Analyzer**
Collection Services **Investigator** **Power Connections**

iDoctor for i - Introduction

Overview

- iDoctor is suite of dynamic tools developed by the IBM i Global Support Center for performance analysis on i.
  - Frequently used by IBM, along with customers and consultants to help solve complex performance issues quickly.
  - The tools are used to monitor overall system health at a high level but also feature more advanced drill-down capabilities.
  - Some tools are free, and others require a license key.
  - **Note:** iDoctor is NOT an IBM product (LPP) and is sold only via IBM Lab Services Statements of Work (SOWs).

https://www-03.ibm.com/systems/campaignmail/services/labservices/iDoctor/requestform.html

iDoctor for i - Introduction

Goals

- **Broaden the user base for Performance Investigation**
  - enable Operators, Programmers, IS Management
  - as well as Performance Specialists, Consultants
- **Simplify and automate processes**
- **Provide quick, immediate access to collected data**
- **Reduce the dependency on PEX traces**

iDoctor for i - Introduction

Licensing

- Customers can buy a Job Watcher and/or PEX Analyzer license through IBM Lab Services SOWs
  - Terms are usually 1-3 years.
  - Discounts apply to multiple systems, years and when renewing.
  - 45-day trials (or longer if needed)

- iDoctor Website and E-mail:

  https://www.ibm.com/it-infrastructure/services/lab-services/idoctor

  idoctor@us.ibm.com for questions

- License, Trial and/or education requests:

  https://www-03.ibm.com/systems/campaignmail/services/labservices/iDoctor/requestform.html

iDoctor for i - Introduction

Licensed Functions

Functions	Component	License
High-level system, job, memory pools, disk monitoring	**Collection Services Investigator**	**JW**
Medium-level system, job monitoring	**Job Watcher (JW)**	**JW**
Low-level system, job tracing, stats, profiling	**PEX Analyzer (PA)**	**PA**
Disk stats and tracing	**Disk Watcher** **Collection Services Investigator** **PEX Analyzer**	**JW or** **PA**
Plan cache	**Plan Cache Analyzer**	**JW**

iDoctor for i - Introduction

Free Functions

Function	Component
VIOS monitoring (nmon/npiv) HMC information	**Power Connections**
IFS browsing Library and object browsing File transfers DB2 for i reports (table statistics, index advisor, etc) ASP, Disk Units views	**iDoctor FTP GUI**
WRKACTJOB interface (with graphs) WRKOBJ, WRKOBJLCK, WRKLNK, WRKUSRPRF SQL editor Table search	**iDoctor GUI**

iDoctor for i - Introduction

iDoctor vs. Performance Tools LPP (Performance Data Investigator)

iDoctor	Performance Tools
Windows Client	Web Browser
Fee/Free	Fee/Free
Frequent updates	Less frequent updates
More analysis options	Fewer analysis options

- Different approaches applied to summarization and analysis techniques
- **Note:** PDI (PT1) Job Watcher is not a prerequisite in order to use iDoctor Job Watcher.

iDoctor for i – The iDoctor GUI

Overview

- Windows client offers flexibility and functionality not in web version
- All components offer a similar user experience
- Supported on IBM i 7.1+
- Key requirement:
  - IBM i Access Client Solutions AND Windows Application Package.

iDoctor for i – The iDoctor GUI

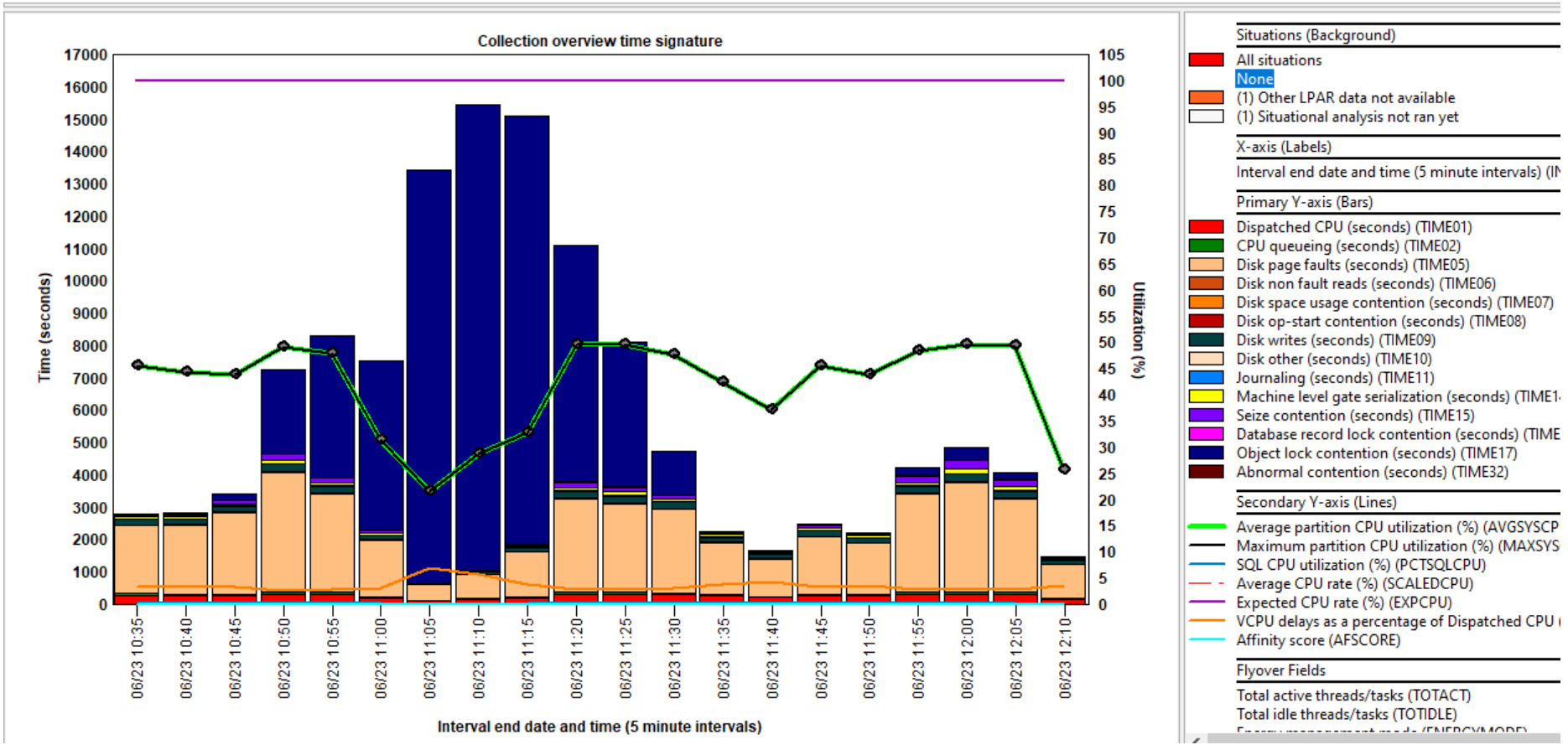
Key Features

- Wait bucket analysis
- Monitors
- Graph compare mode
- WRKACTJOB graphs
- Filters
- SQL Editor
- Time range toggling
- Dynamic graph legend
- Situational Analysis

iDoctor for i – The iDoctor GUI

Wait bucket analysis

- Performance analysis using wait information to answer “why isn’t my job running?”



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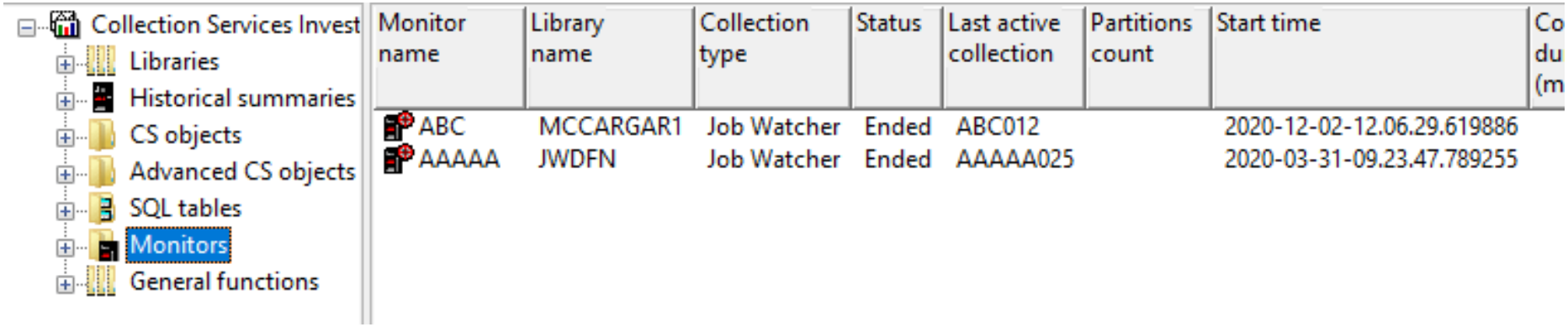
Monitors

- Allows 24x7 collection of Job Watcher, PEX Analyzer or Disk Watcher data.
- Retain only the desired amount of historical data.
- When a problem occurs you will have the data you need to start your analysis.



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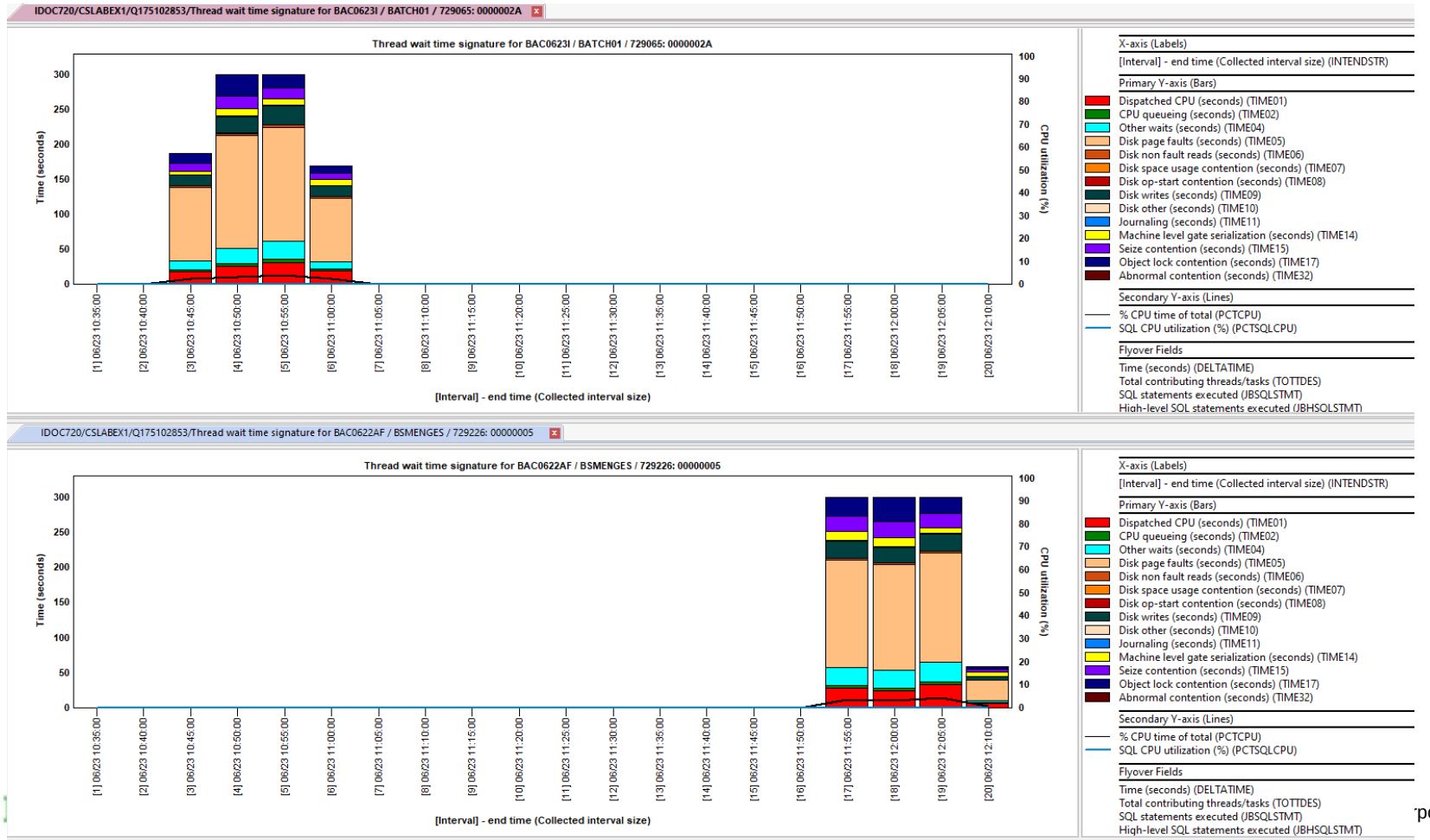
Graph compare mode

- Compare ASPs, disk units, jobs and more



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WRKACTJOB graphs

- Graph CPU, IOs, temp storage and more with auto refresh capability.

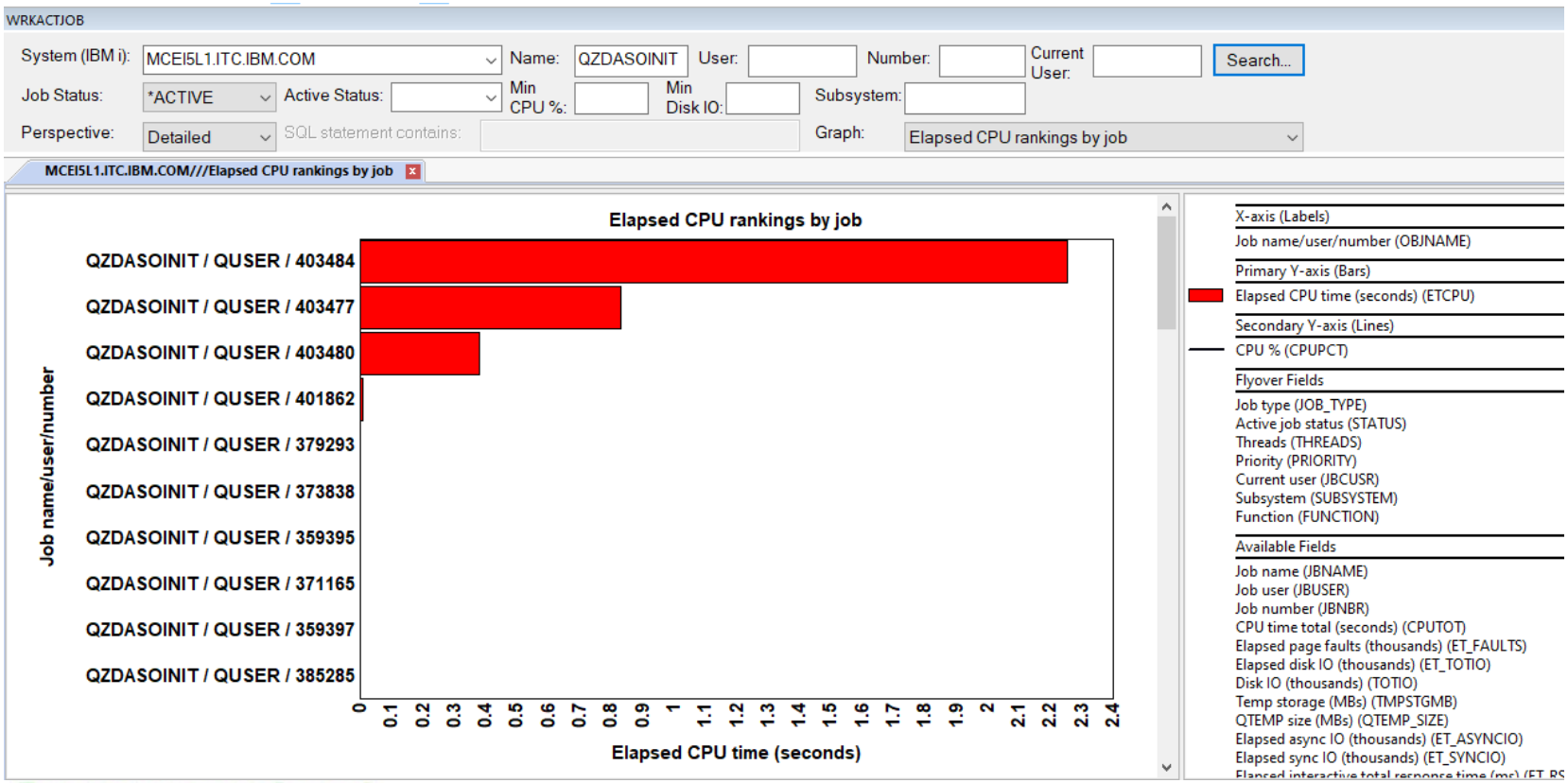

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Table Filters

- Add filters easily to tables and avoid writing SQL

Idoc720/CSLABEX1/Q175102853 - #1

Program library (PGMLIB)	Program name (PGMNAM) * Field starts with 'Q'	Program description (PGMDSC)
QSYS	QACCLOSE	ICFAPPC Close
QSYS	QACDEVSL	APPC device selection function
QSYS	QACEFEVH	ICFAPPC Expedited Flow Event Handler
QSYS	QACERP1	ICFAPPC AP Error Handler
QSYS	QACERP2	ICFAPPC FM Error Handler
QSYS	QACFMH7	ICFAPPC FMH7 handler
QSYS	QACGET	ICFAPPC Get
QSYS	QACINASP	ICFAPPC Initialize PUT associated space
QSYS	QACIOCMP	ICFAPPC REQIO completion handler
QSYS	QACNFEVH	ICFAPPC Normal Flow Event Handler
QSYS	QACOPEN	ICFAPPC Open File
QSYS	QACPSR	ICFAPPC Program Start Request mainline
QSYS	QACPSRIO	ICFAPPC PSR REQIO completion handler
QSYS	QACPUT	ICFAPPC Put
QSYS	QACRSP	ICFAPPC Send Response

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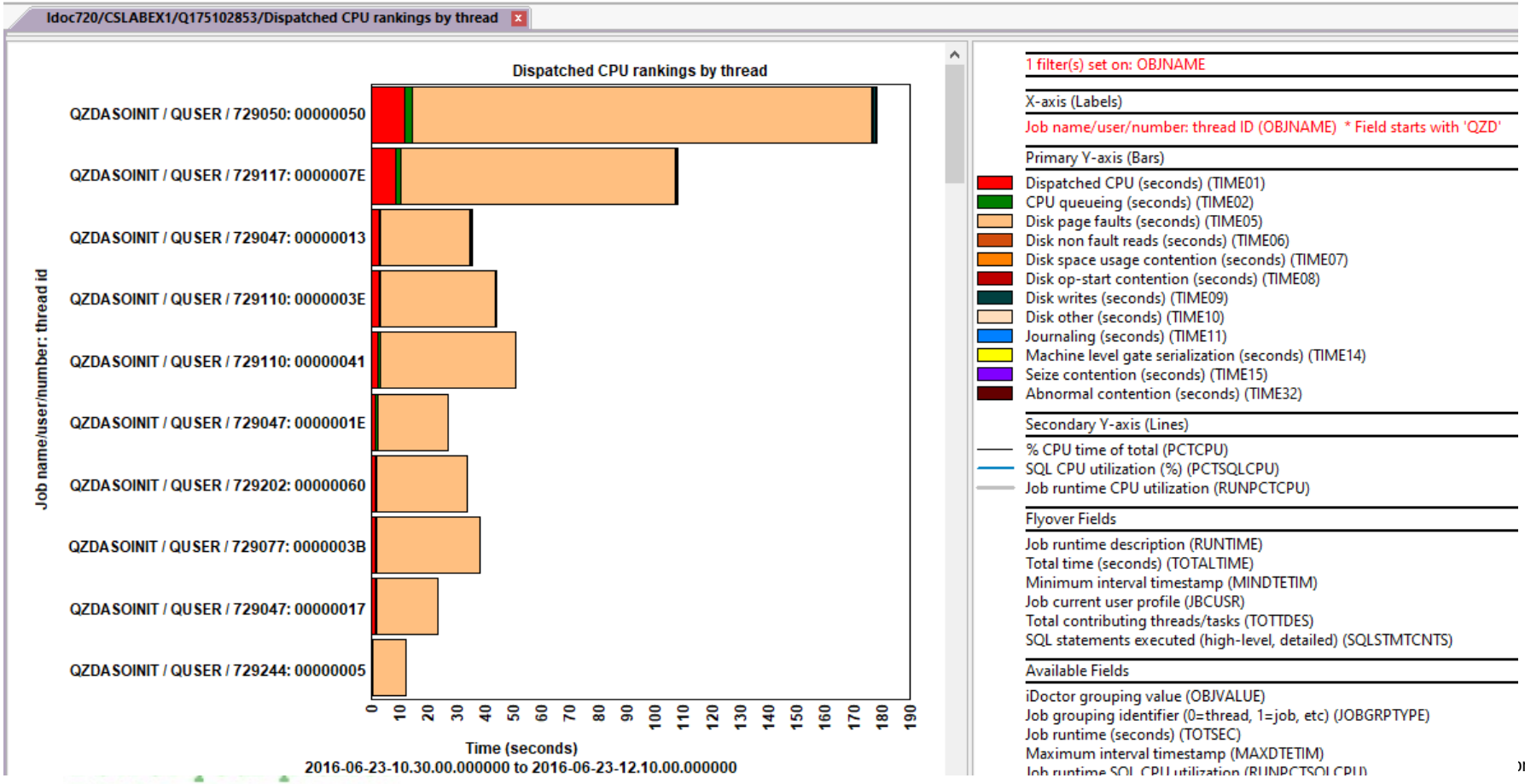
Graph Filters

- Add filters easily to graphs and avoid writing SQL



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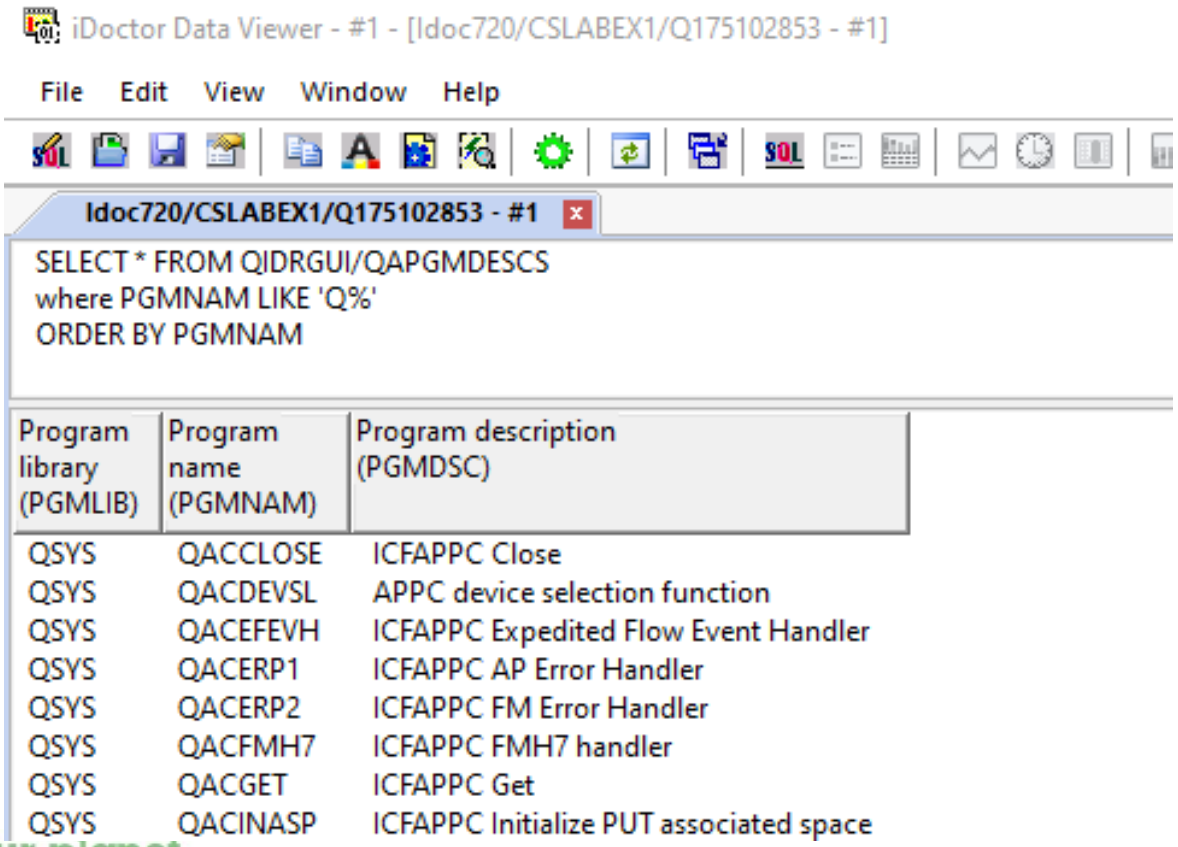
SQL Editor

- Customize iDoctor reports or write your own using SQL.



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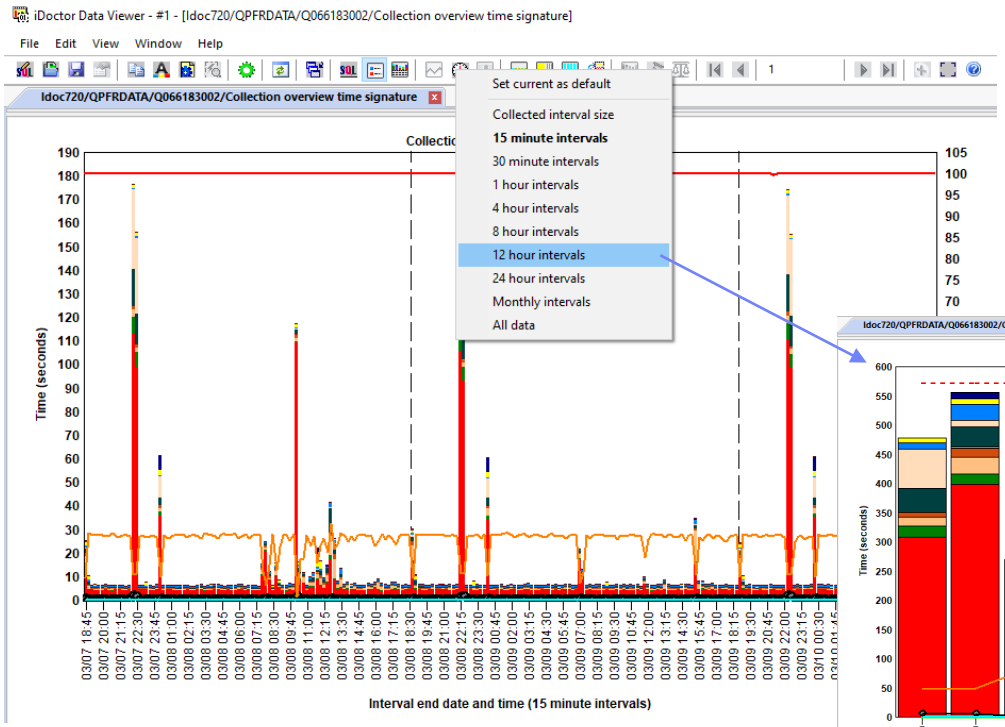
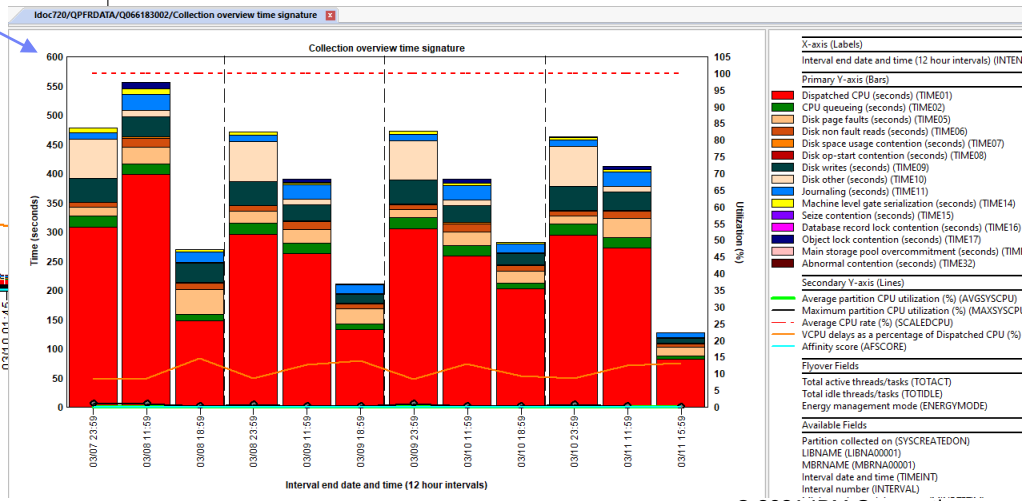
Time range toggling

- Get the big picture by rerunning a report using larger time intervals





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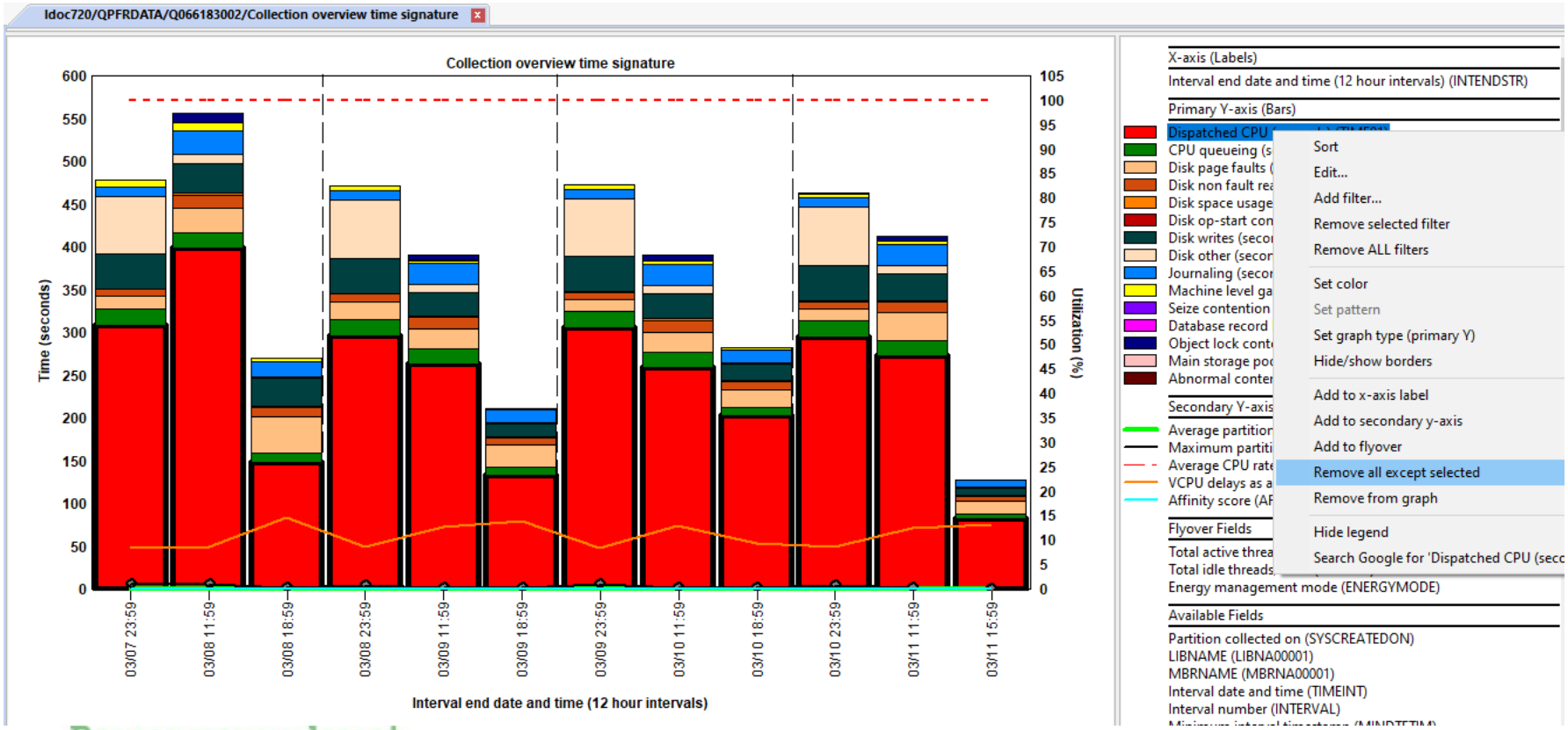
Dynamic graph legend

- Quickly change a graph to best suit your needs using menu options or even drag and drop.



iDoctor for i – The iDoctor GUI

Situational Analysis

- Identifies any potential problem jobs found in the collection.
- Built on the vast knowledge of IBM performance experts and past experiences.
- Included with Collection Services Investigator, Job Watcher and Disk Watcher
- Different background colors/flyovers on the overview graphs indicate potential problems.

iDoctor for i – The iDoctor GUI

Situational Analysis Example