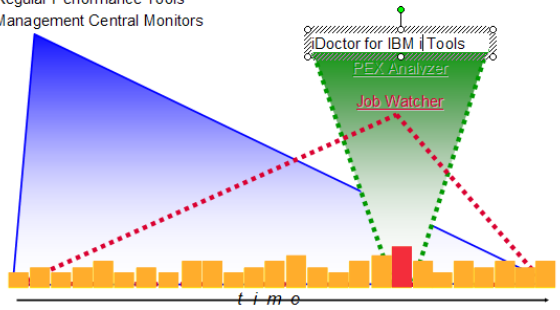


iDoctor for IBM i
the ability to focus on details

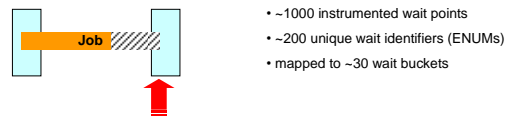
PM eServer iSeries
Regular Performance Tools
Management Central Monitors



What is Job Watcher

- a snapshot approach
- a non-intrusive collector (does not interfere with a job's code path)
- collects one or all jobs/threads/tasks running on the system
- harvests job details such as waits, call stacks, SQL statements
- start analysis after two snapshots

Job Watcher
the last current wait at snapshot time

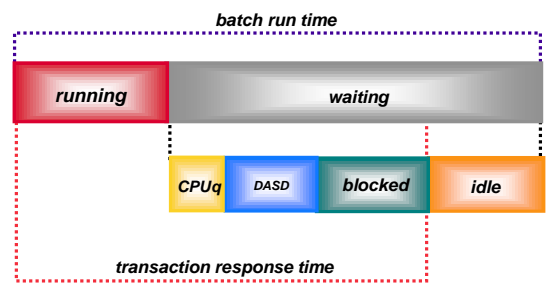


- ~1000 instrumented wait points
- ~200 unique wait identifiers (ENUMs)
- mapped to ~30 wait buckets
- the unique wait identifier (ENUM)
- the wait time (so far)
- the object waited on
- the holder of the object (when available)

Long "bad waits" can be spotted right here (blocks, contention)

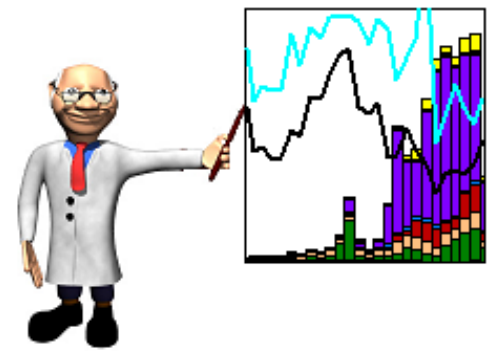
IBM iDoctor for IBM i
Tools developed and used by service in Run/Wait Analysis

Job/Thread/Task Run/Wait Components



IBM iDoctor for IBM i

Software and Services for
Run/Wait Analysis



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

IBM®

© Copyright IBM Corporation 2017
All Rights Reserved

References in this publication to IBM products or services do not imply that IBM intends to make them available in every country in which IBM operates.

IBM, the IBM logo, System i, IBM i and IBM iDoctor for IBM i are trademarks or registered trademarks of International Business Machines Corporation.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Other company, product, and service names may be trademarks or service marks of others.



about IBM iDoctor for IBM i

The IBM iDoctor for IBM i suite of performance tools continues to develop and grow. It is driven by demand from performance experts in the IBM i Global Support Center and IBM STG Lab Services, along with feedback from customers and consultants, who regularly use iDoctor to collect, investigate and analyze performance data. The goal of iDoctor is to make analysts more productive and help solve complex performance issues quickly. The dynamics of “real world” performance situations encountered by iDoctor users continues to shape the enhancements and new function being considered and implemented in iDoctor components and features. Under the premise that “What’s good for the Support Center will be good for our clients” the iDoctor suite of tools and services remains a vital product.

What are just some of the differences between iDoctor and Performance Data Investigator that is included with Performance Tools LPP?

- The Performance Data Investigator is web based while the iDoctor is client-server based, but both utilize the same collection engines, commands, definitions and data base files.
- The Performance Data Investigator works with Collection Services, Job Watcher, Disk Watcher, and PEX data.
- iDoctor works with all the same data referenced above in addition to Plan Cache Snapshots, External Storage, VIOS, AIX, and Linux.
- iDoctor is typically updated with new function quarterly vs updates to PDI occurring at release boundaries.

What are some special iDoctor GUI features?

- Situational Analysis – Identify problem areas and provides drill downs into them.
- Monitors: 24x7 collection of JW, PEX, DW.
- Collection scheduling
- Automatic PTF checking
- Summarization of data and improved analysis functions as a result.
- Collection Search
- Send data to IBM support
- Record Quick View: select, view, compare all row columns vertically
- Window resizing, multiple views and alternate views
- Dynamic Legend Support: add, remove selected metrics as Y1 and Y2 data series, X axis labels and flyovers from a list of available metrics
- Scrolling large files and/or using summarized Time Interval Graphs which can be toggled to use one of 9 interval sizes
- Comparison functions to make analysis easier (graph compare mode, SQL table comparison wizard and more).
- Optional synchronized table and graph view

iDoctor Job Watcher Includes:

- **Job Watcher:** Provides in depth wait state and call stack analysis over Job Watcher data collected by the operating system. This allows you to find the reason why a job is waiting, for example, database record lock contention, seize contention, etc.
- **Collection Services Investigator:** Allows analysis of Collection Services data collected on the system. This includes everything from high level job wait states to memory, IO, and physical

disk performance. Analysis of DS8k data collected through Collection Services and SVC/Storwize data imported using QMGTOOLS is also included.

- **Disk Watcher:** Statistical summary or detailed trace data down to the disk unit and object level.
- **Plan Cache Analyzer:** Allows filtering and graphing of SQL statements and access plans by CPU, number of runs, I/O, full opens, etc.

iDoctor PEX-Analyzer

- Analyzes the most detailed trace data available on IBM i over dozens of different event types including Task Switching, CPU, Stats Hierarchical, Physical Disk I/O, Temp Storage, DB Open, and more.

iDoctor Power Connections

- Connect and import data from non-IBM i operating systems related to Power including HMC, VIOS, AIX, and Linux.
- Analyze data related to system wide, cross partition performance, NMON, Fiber Channel Utilization, and Shared Ethernet Utilization

Education

In-depth, hands on, customizable education on the use of both the PEX Analyzer and Job Watcher software. Save time by diagnosing issues on your own before they become costly problems.

Where to find out more

To get more information, obtain a free 45-day trial, or request a no obligation price quote, visit us at: <https://www.ibm.com/it-infrastructure/services/lab-services/idoctor>