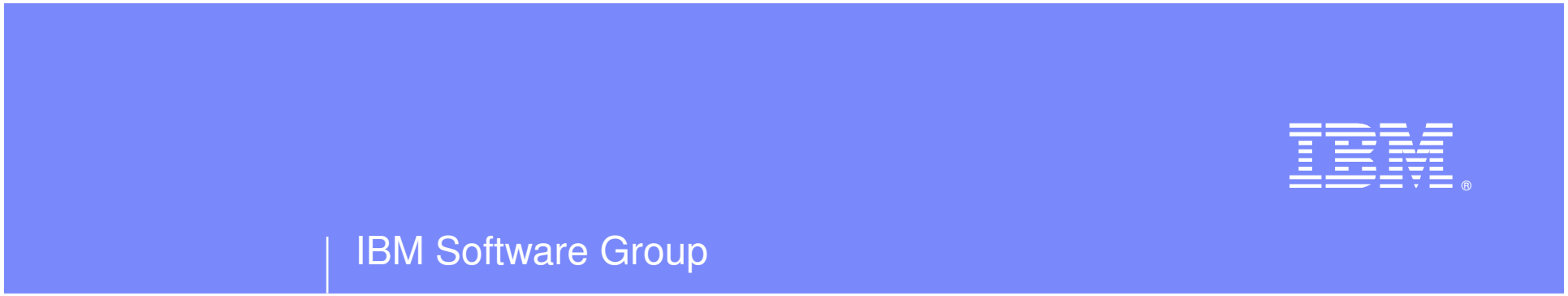


Automating problem identification using IBM Autonomic Computing technology

Denilson Nastacio

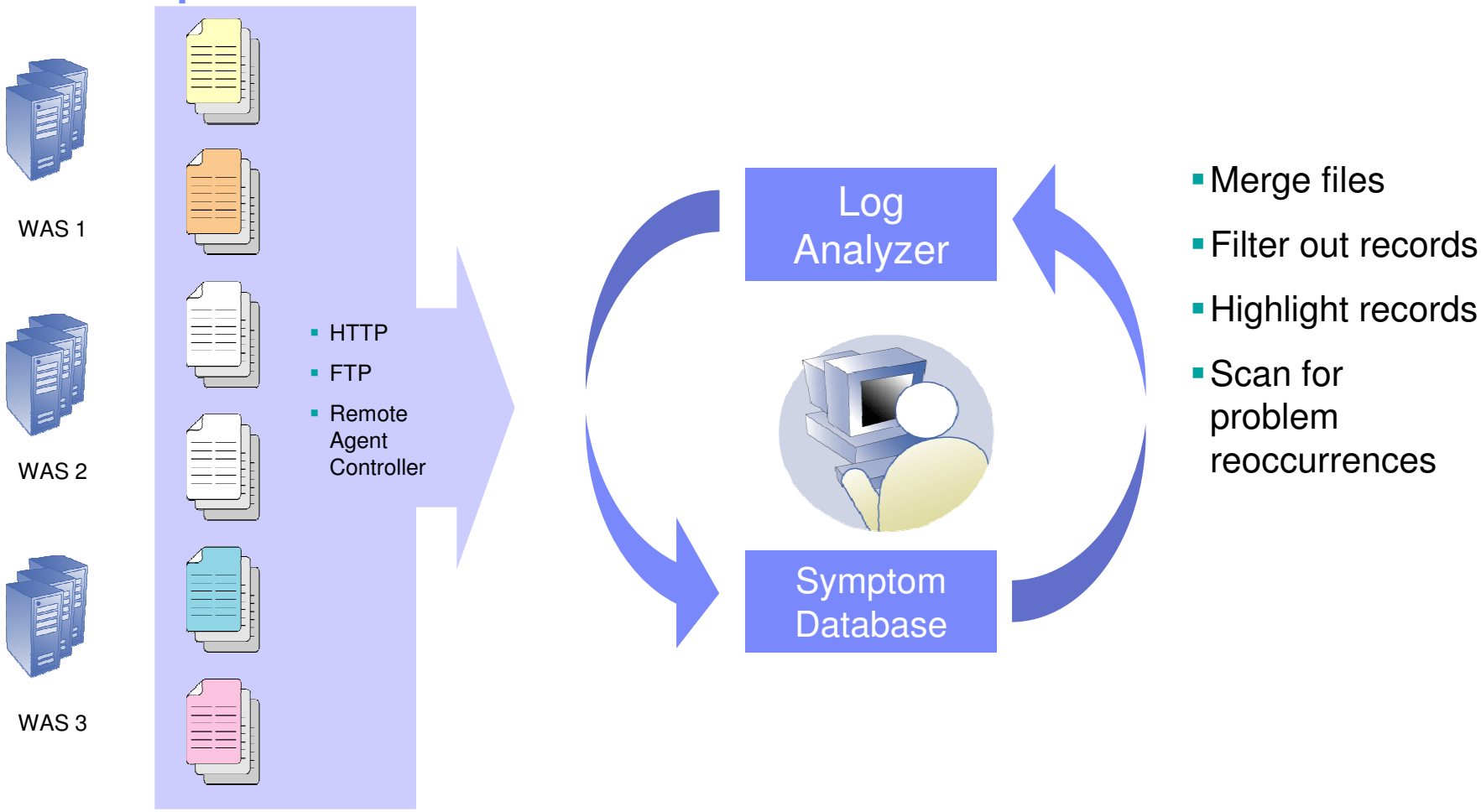
Agenda

- The business cases for Log Analysis
- Tool overview
  - IBM Support Assistant
  - Log Analyzer
  - Symptom Editor
- Case study
  - A recurring security error in a WAS installation

When customers call…

- Recreate the problem
- Run a diagnosis tool
- Google…Google again
- Ask a coworker…wait for him to Google…again
- When all else fails, read the logs entries, all thousands…Google them

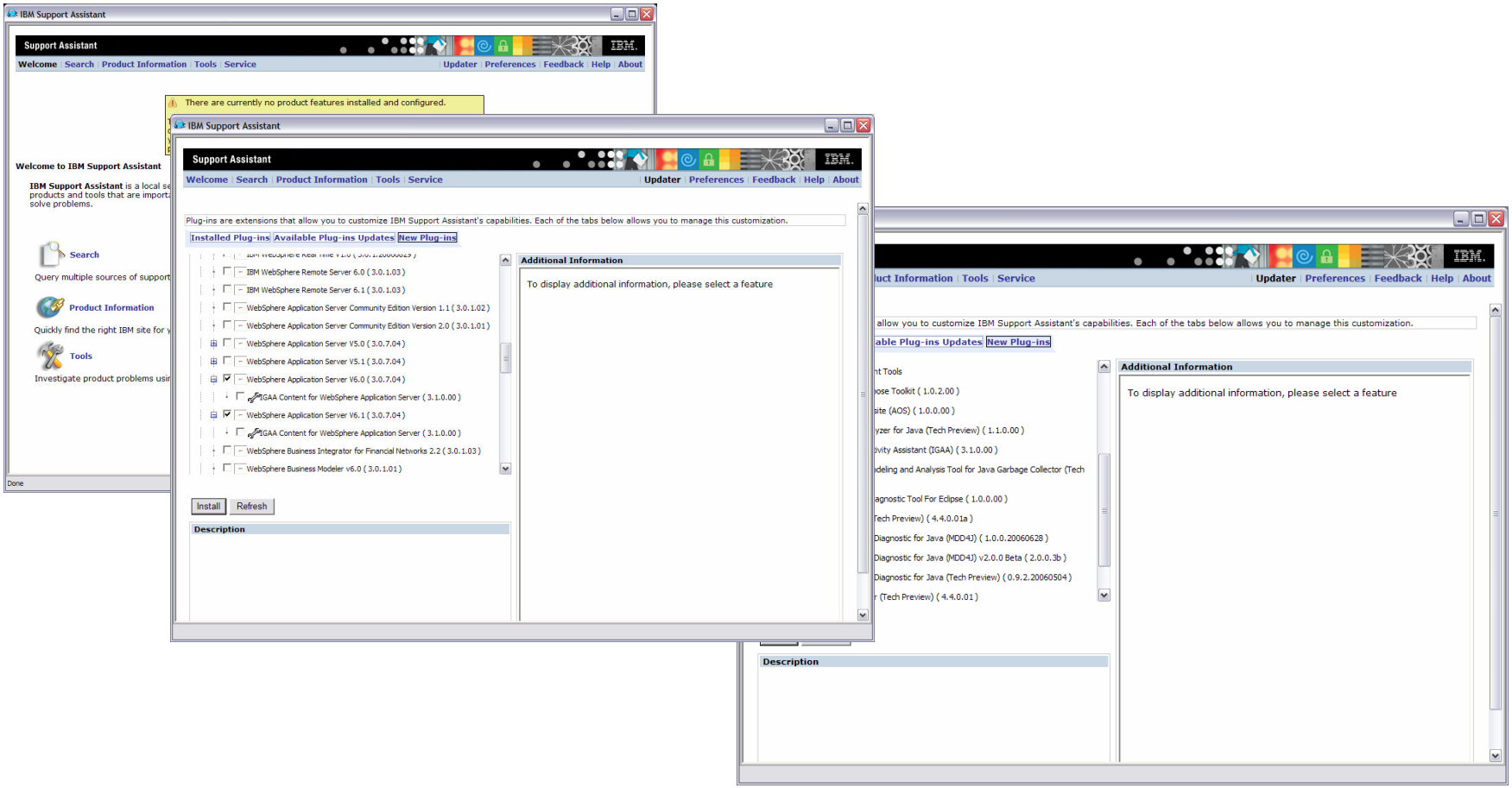
When problem hits



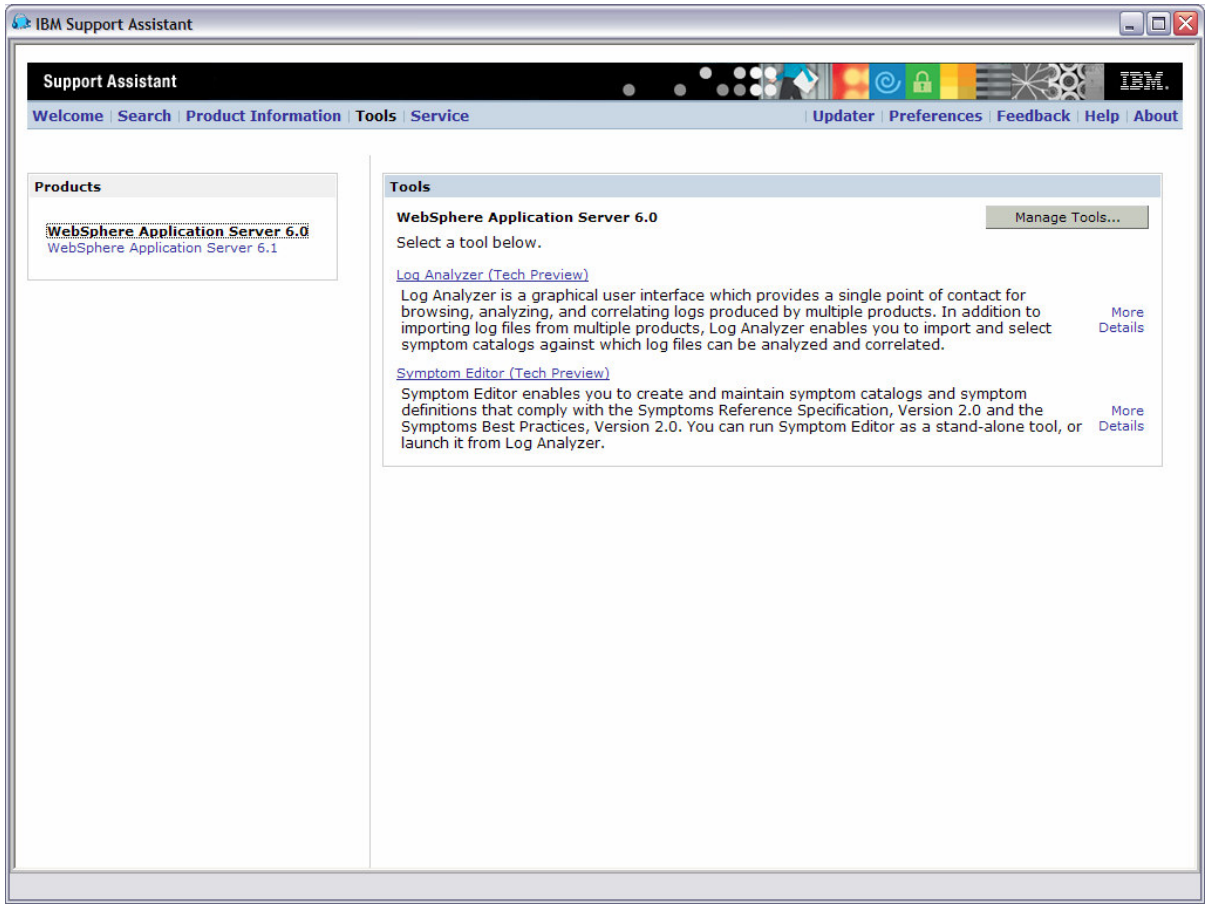
IBM Support Assistant

- Download
- Install product plug ins
  - WebSphere Application Server
  - Other IBM products
- Install tool plug ins
  - Log Analyzer
  - Symptom Editor
- http://www.ibm.com/software/support/isa/

Product specific and common plug ins

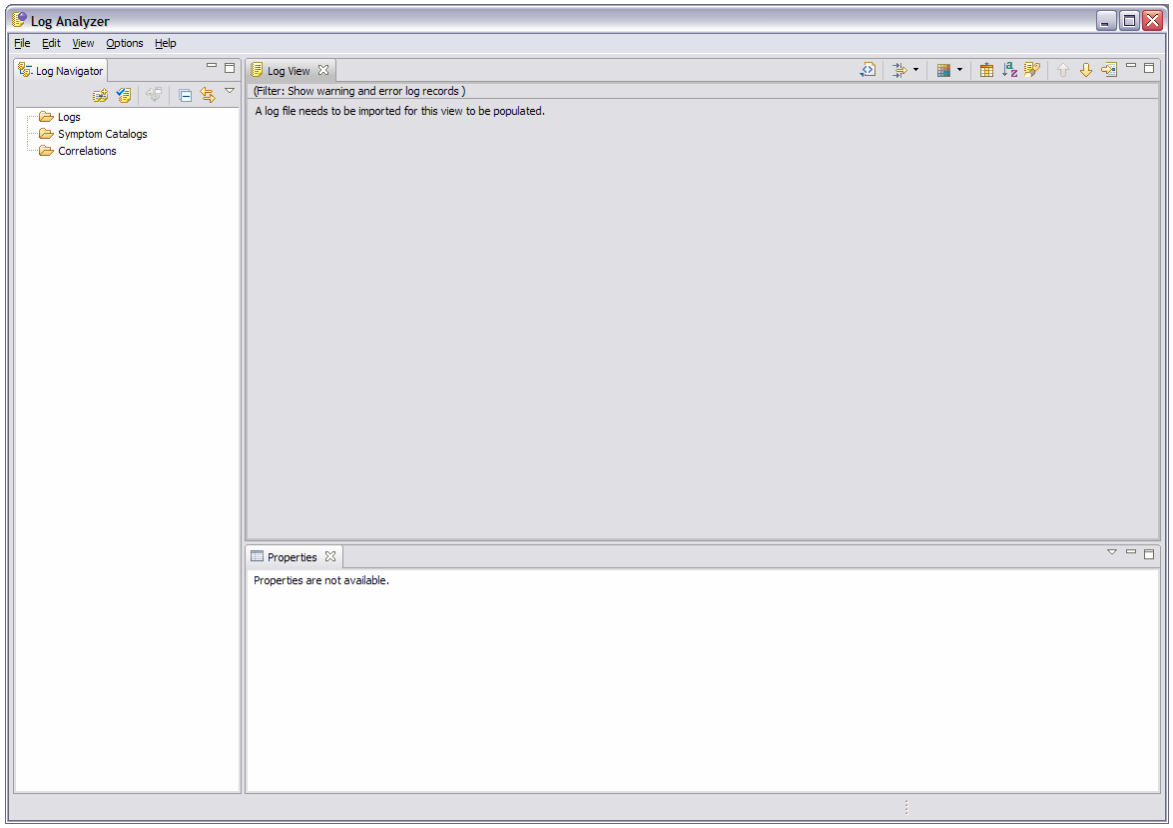


Select a product…and…launch a tool



Log Analyzer Main Screen

- Import log files
- Merge log files
- Apply filters
- Apply highlighters
- Choose and reorder columns
- Import symptom databases
- Scan for symptom matches



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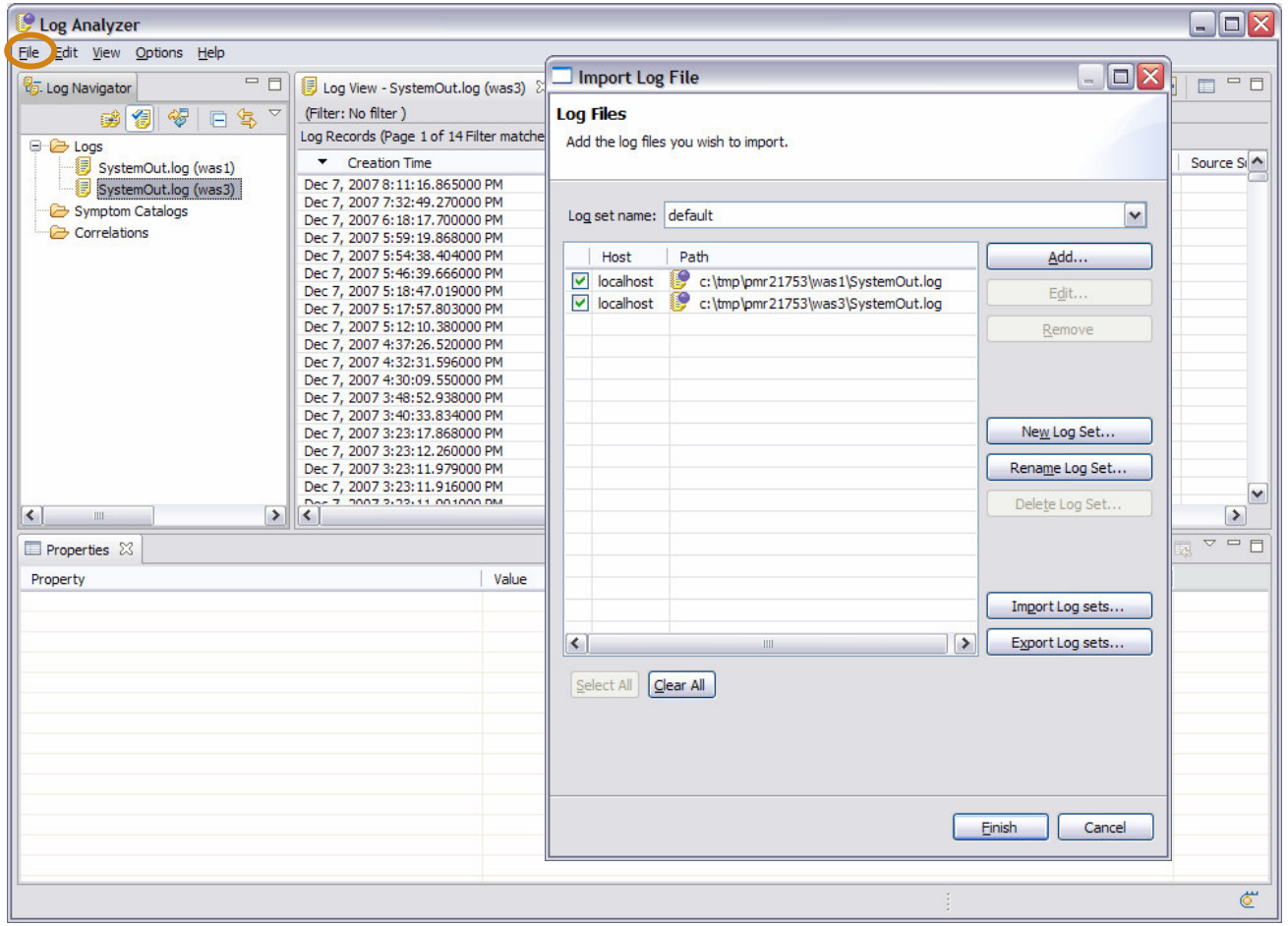

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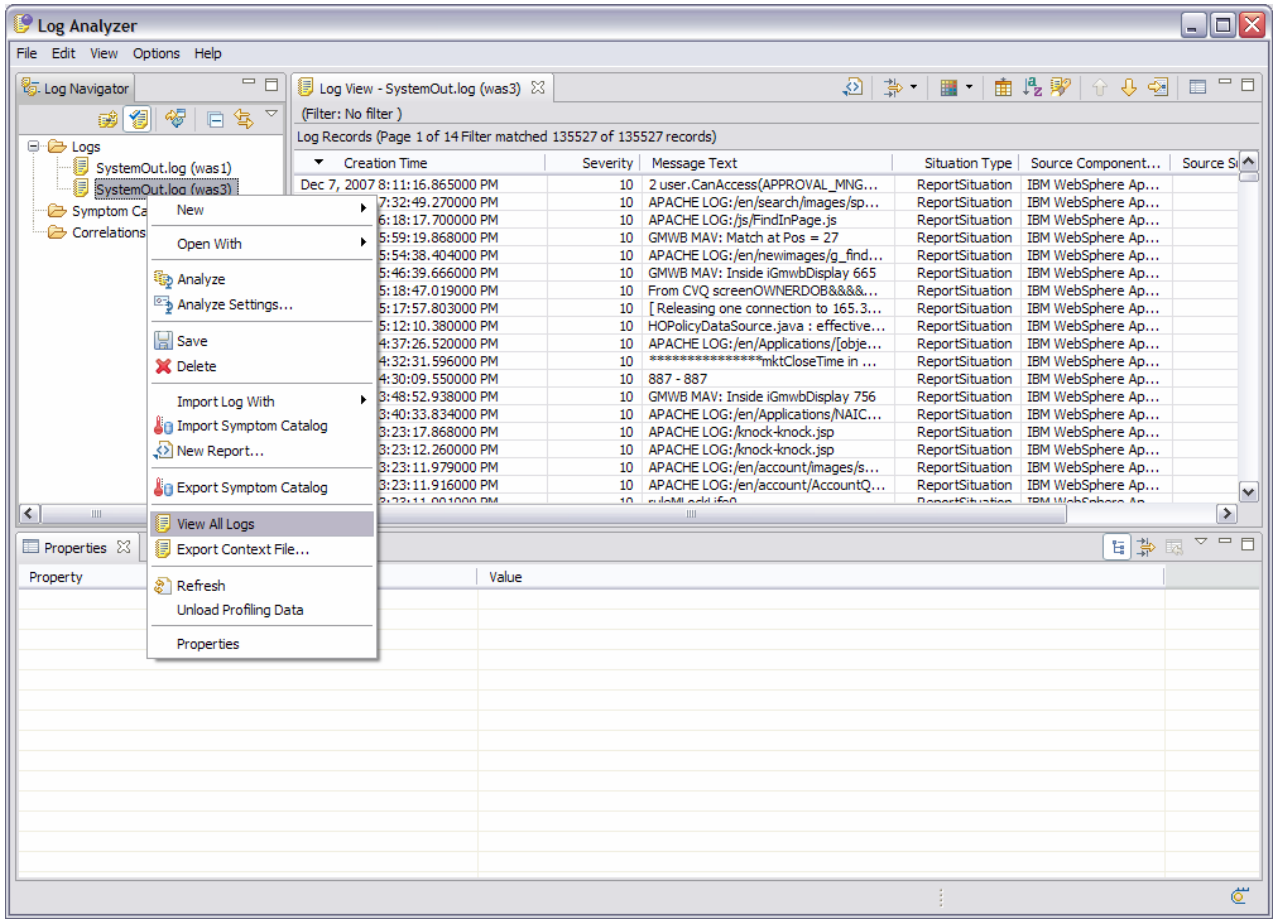

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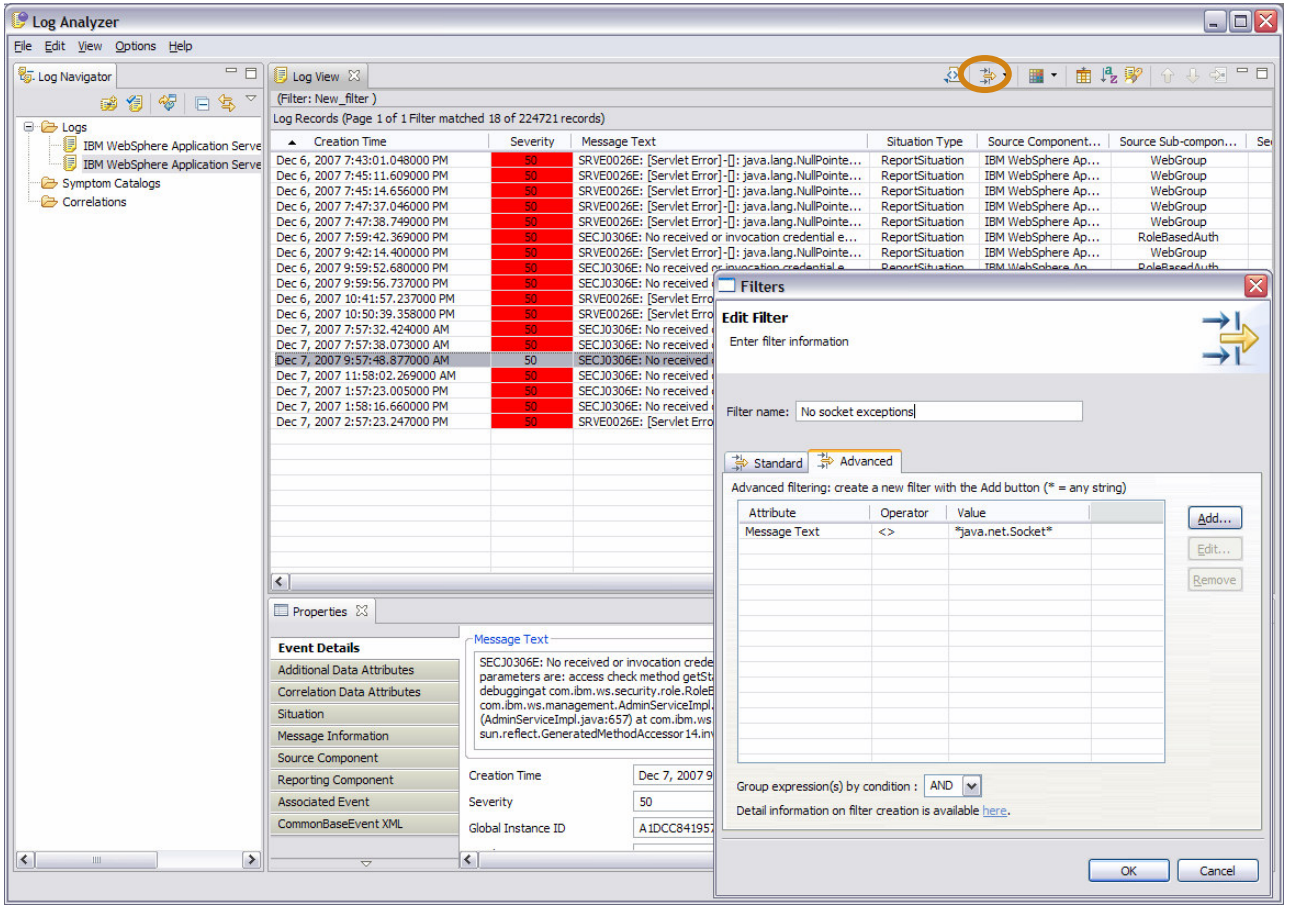

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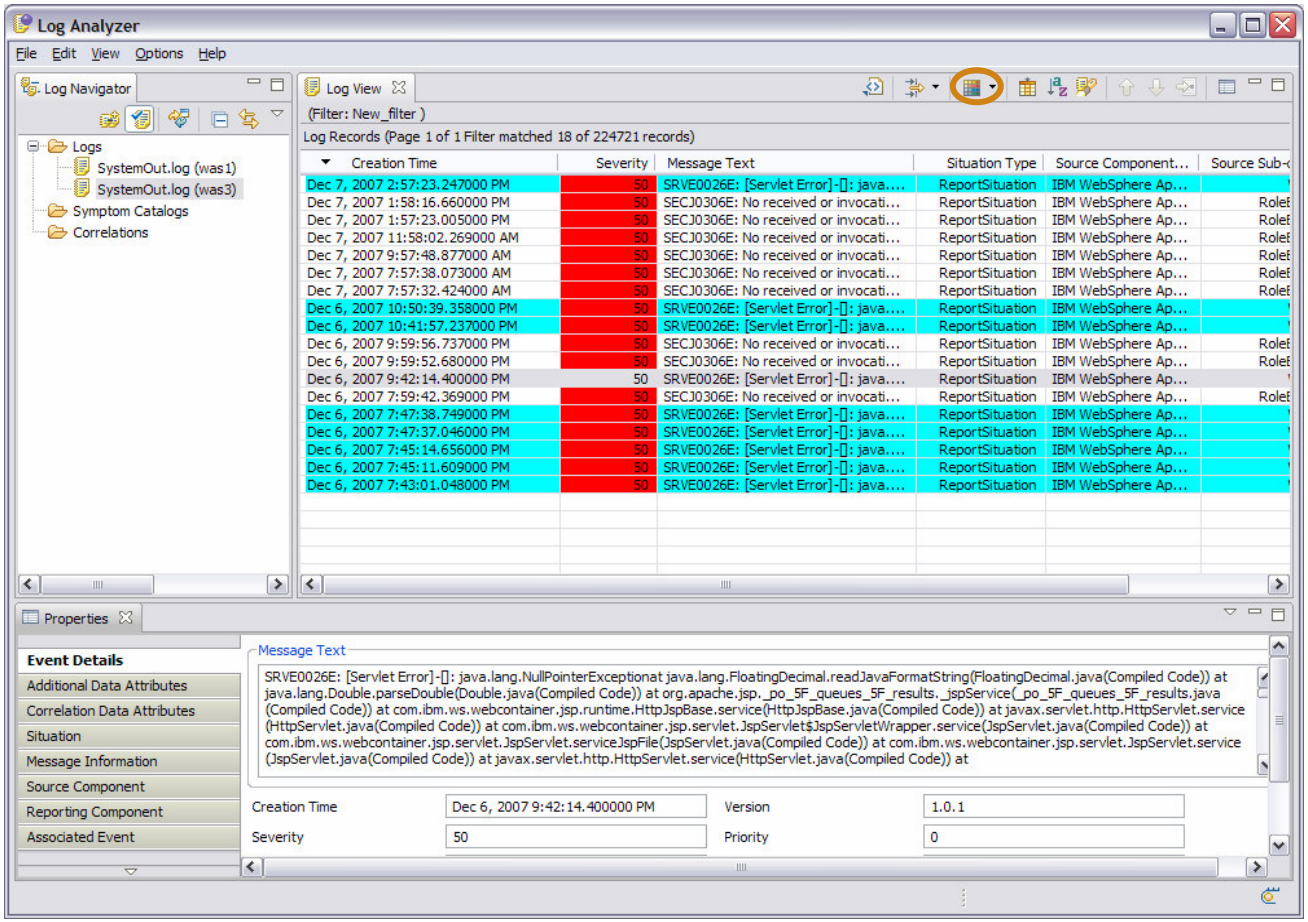

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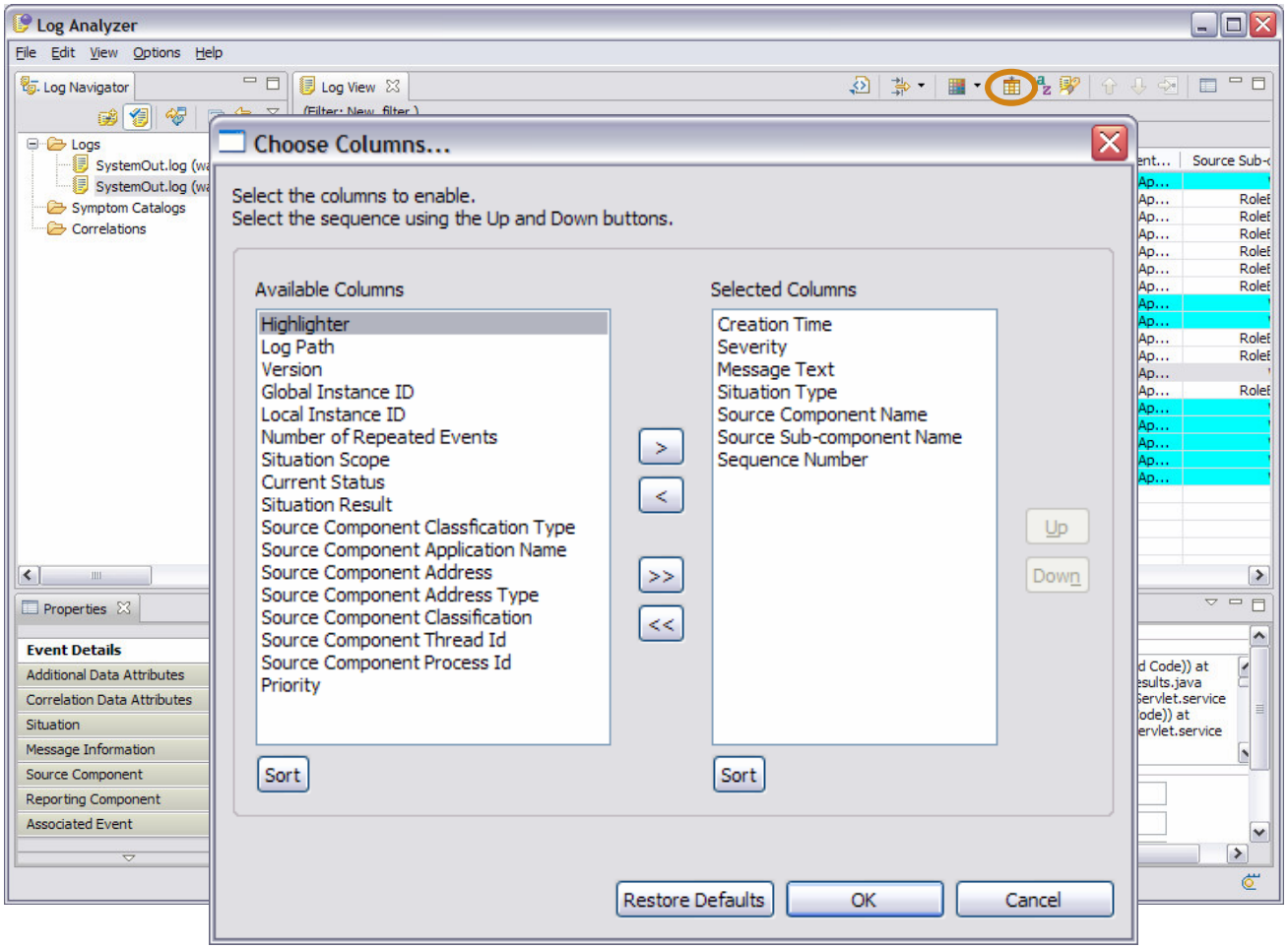

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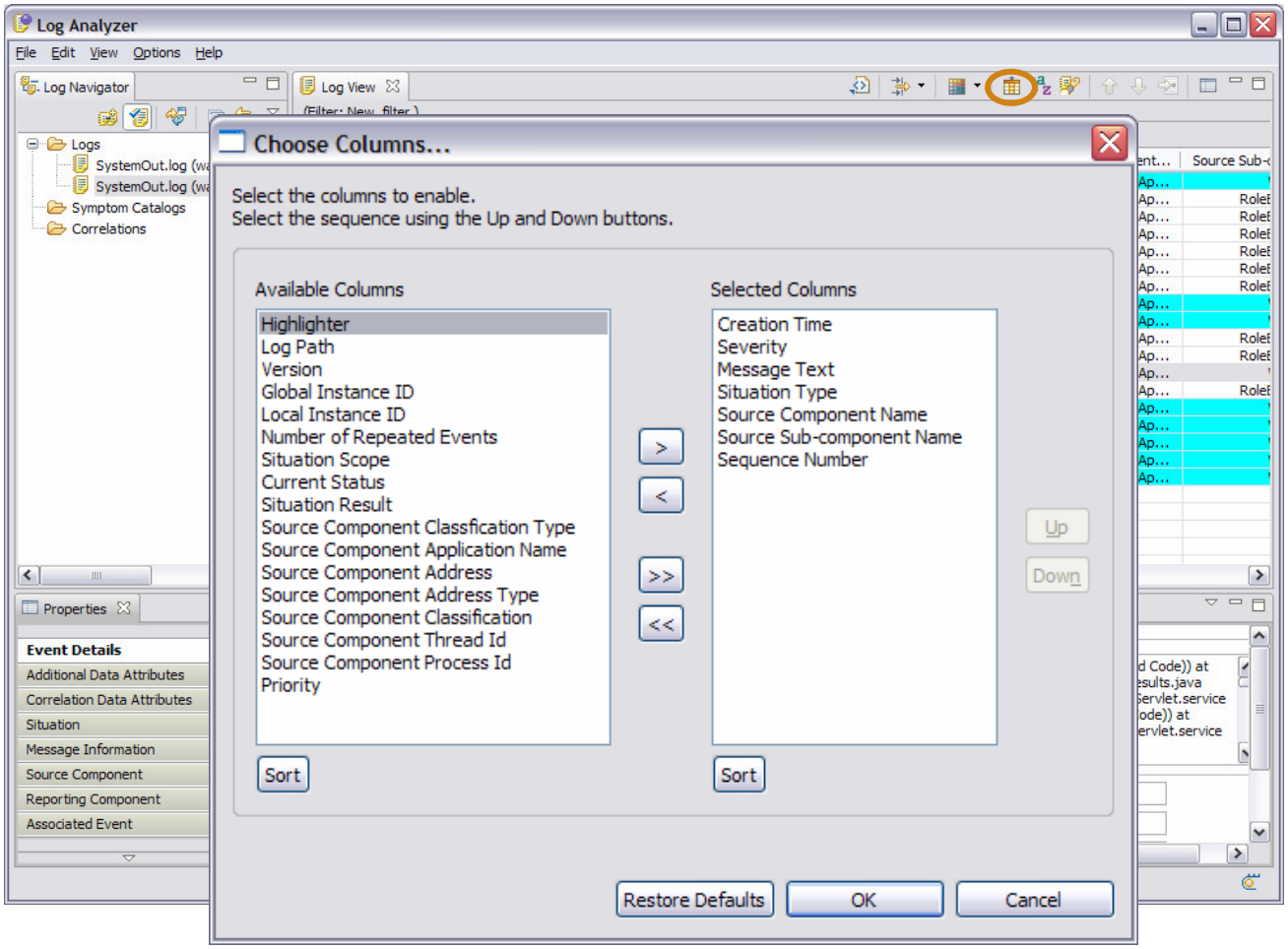

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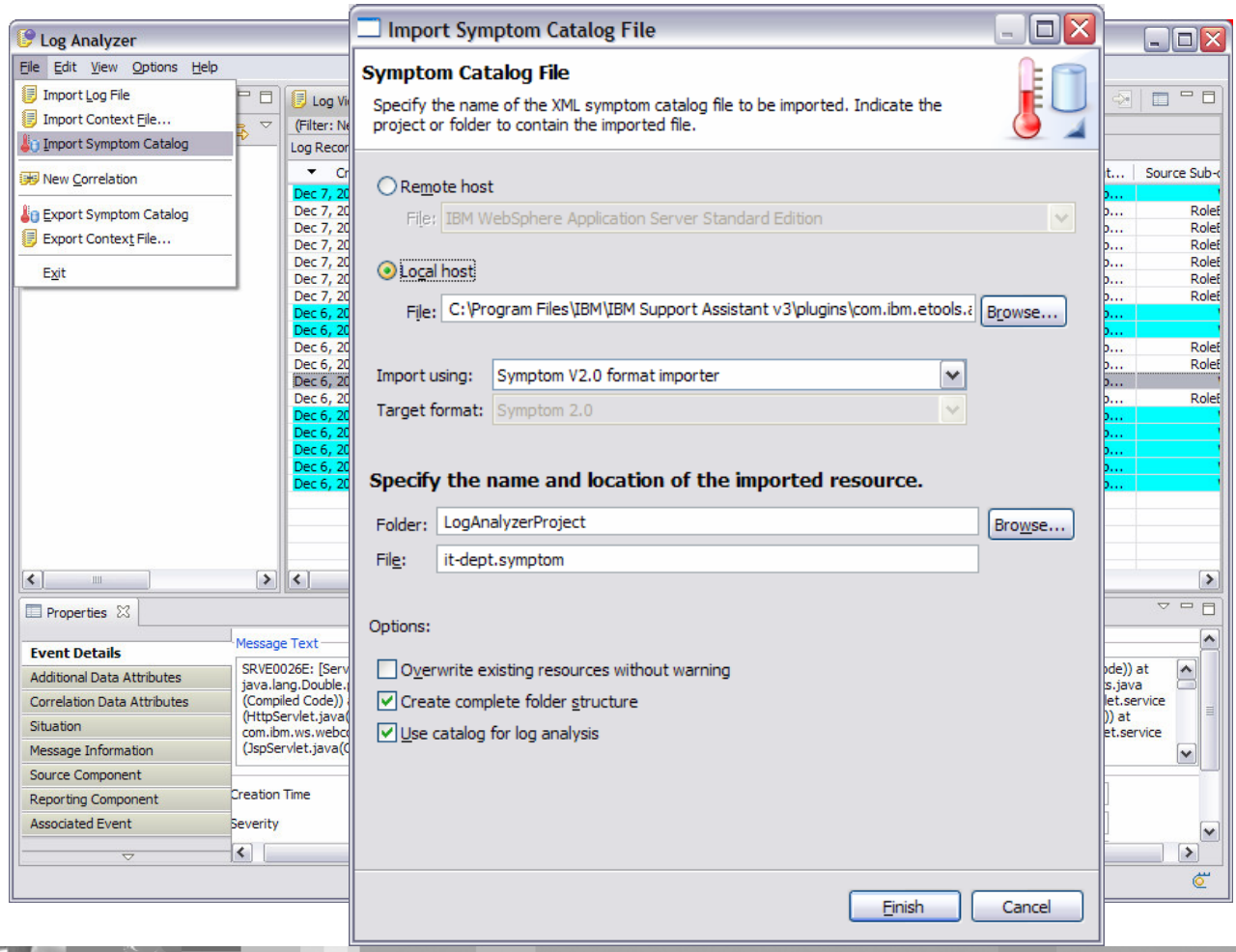

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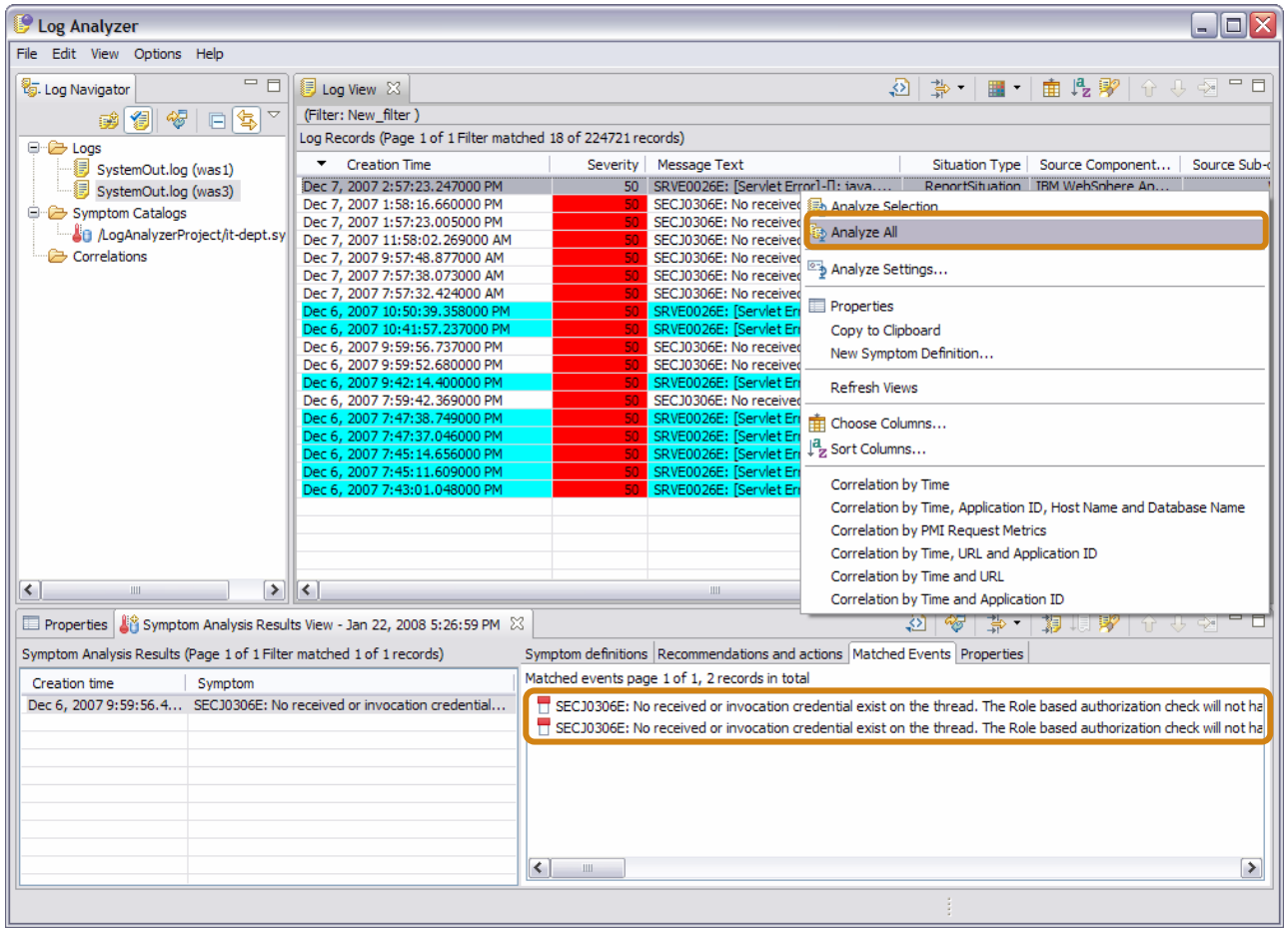
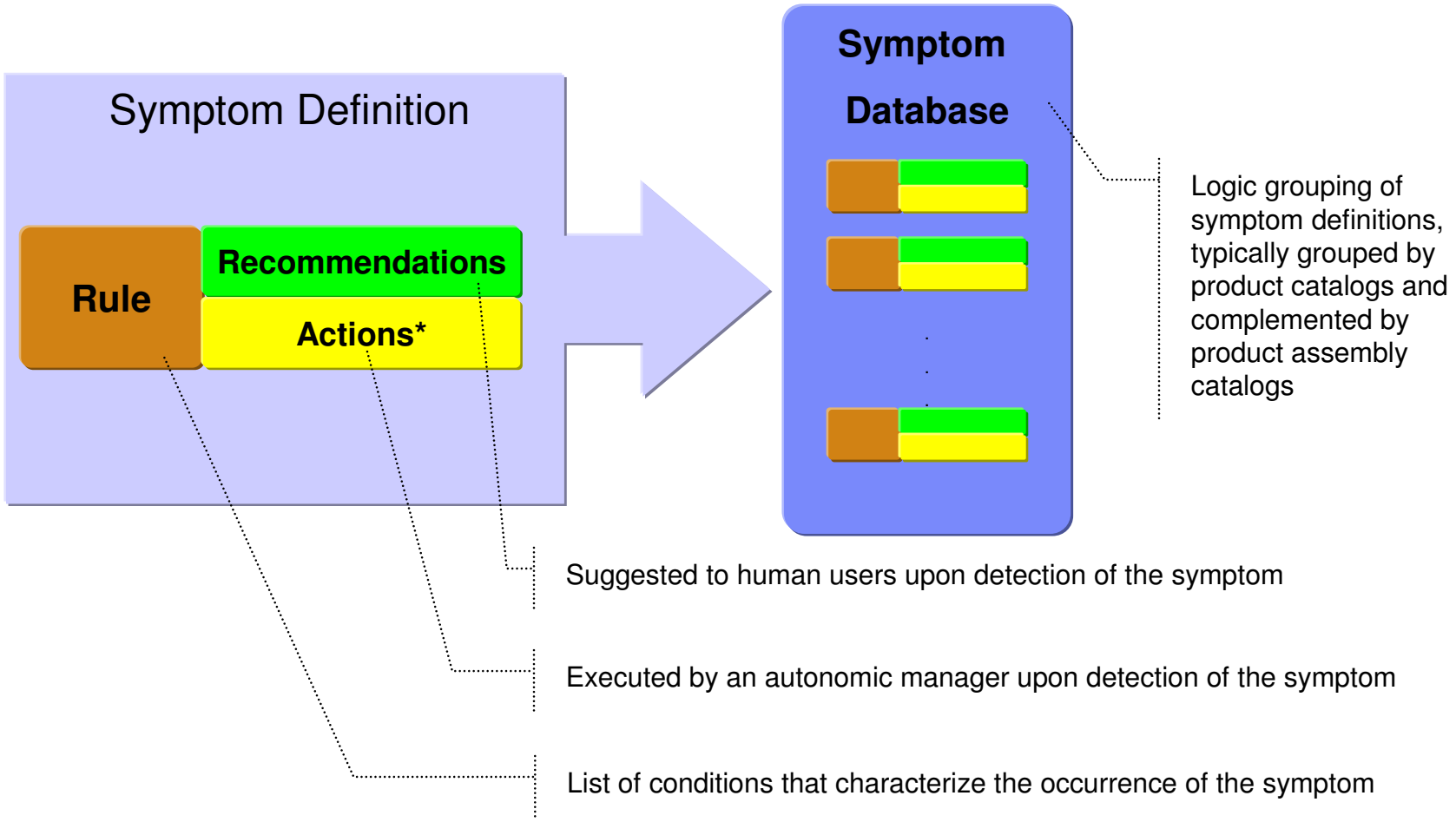


Symptom matches, you say?

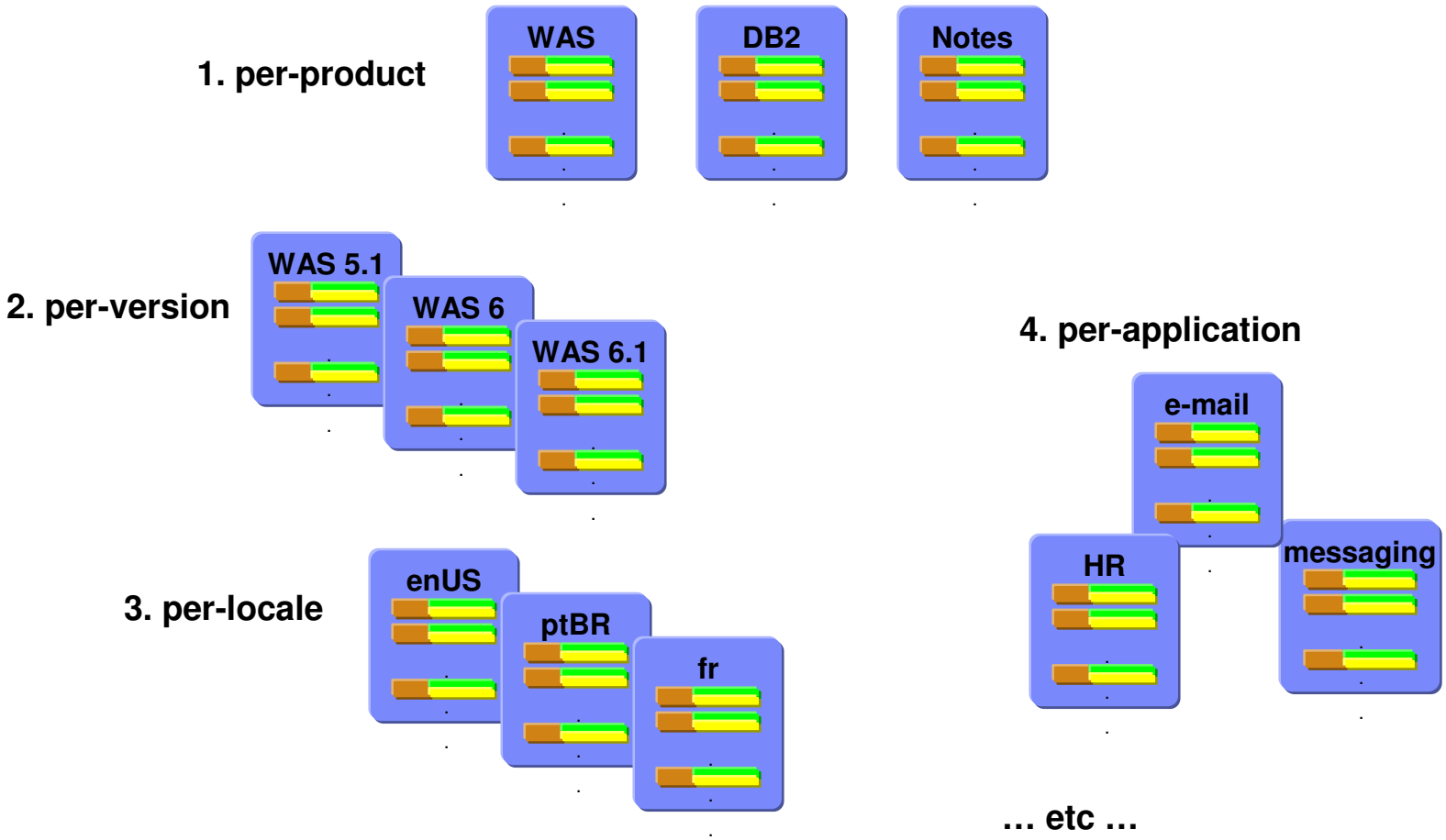
Symptom Definitions and Symptom Databases



Symptom examples

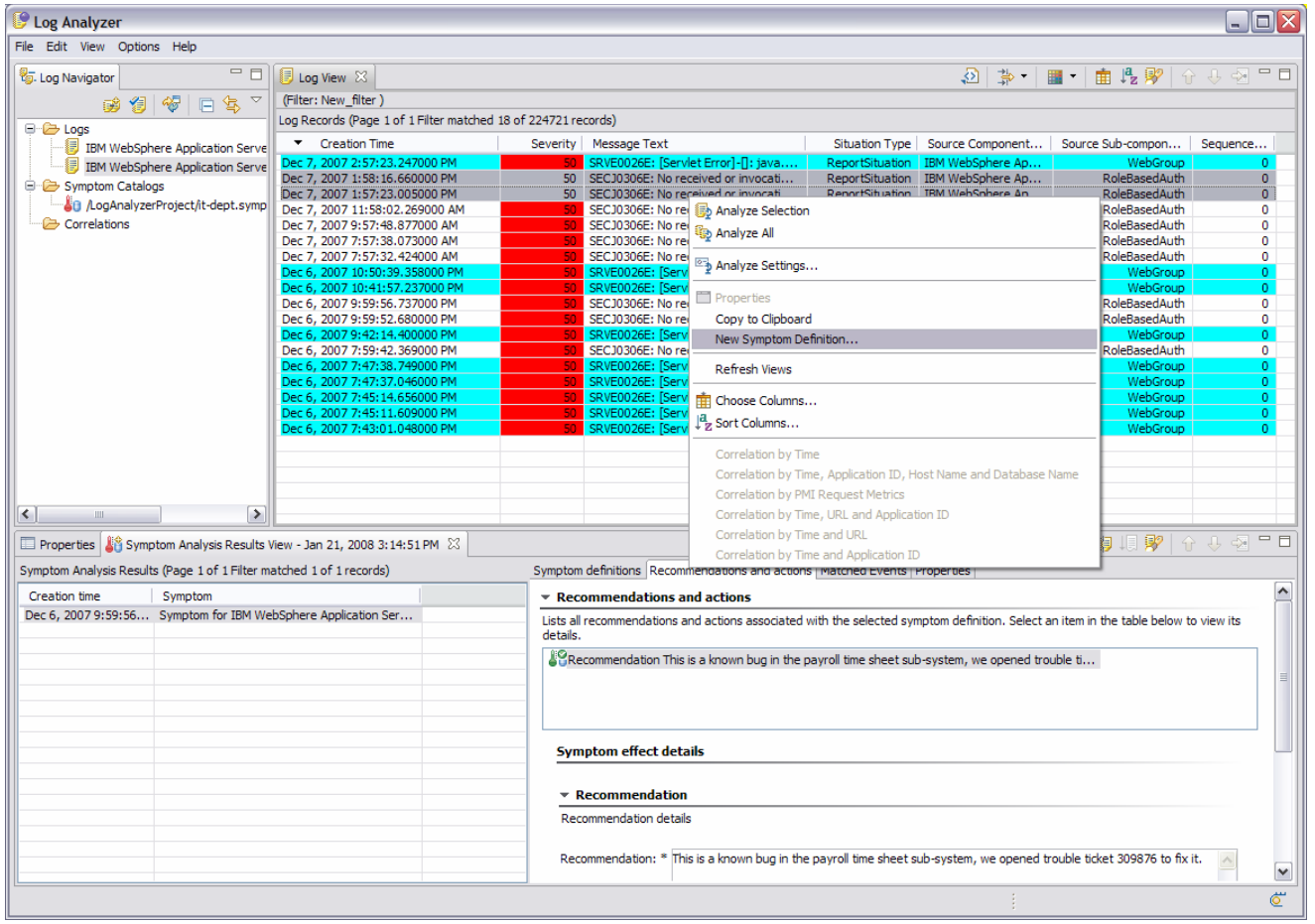
event .msgid=CEI0011E and situation.category=connect	"...verify that the JMS message provider used by the Common Event Infrastructure is up and running, you can find the provider hostname by…"
	No Actions
event .msgid=CEI0011E and situation.category=connect AND previously.observed.event.msgid=JMS0089I	"The JMS server used by the Common Event Infrastructure is stopped"
	wsadmin –hostname {0} –f startjms.jacl

Symptom Databases (suggestions)

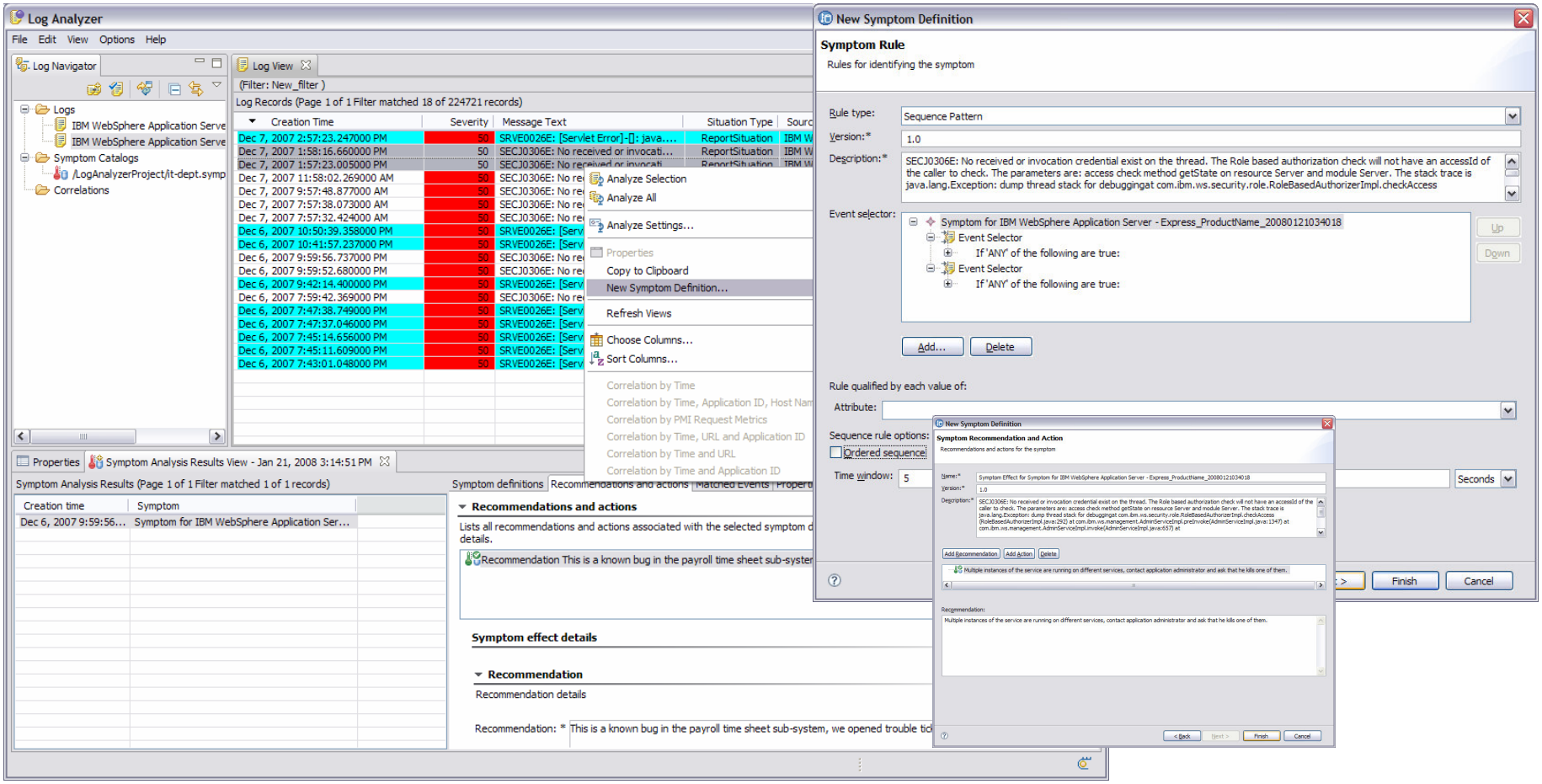


Creating new symptom definitions

1. Select events
2. Select pattern
3. Add recommendation
4. Share the symptom definitions

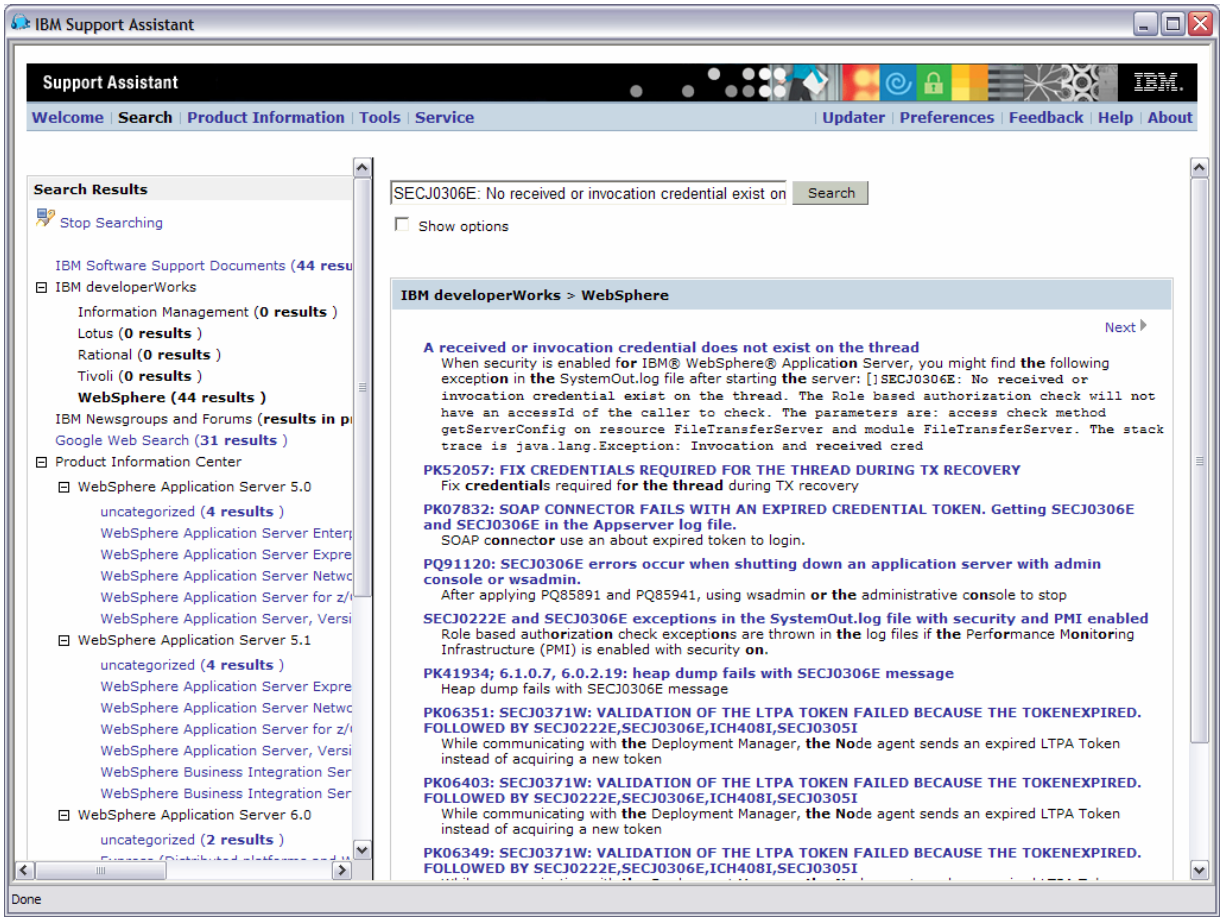


Creating new symptom definitions



Where do you get your recommendations?

- Colleagues
- “Oh, you knew about it…”
- ISA Federated Search

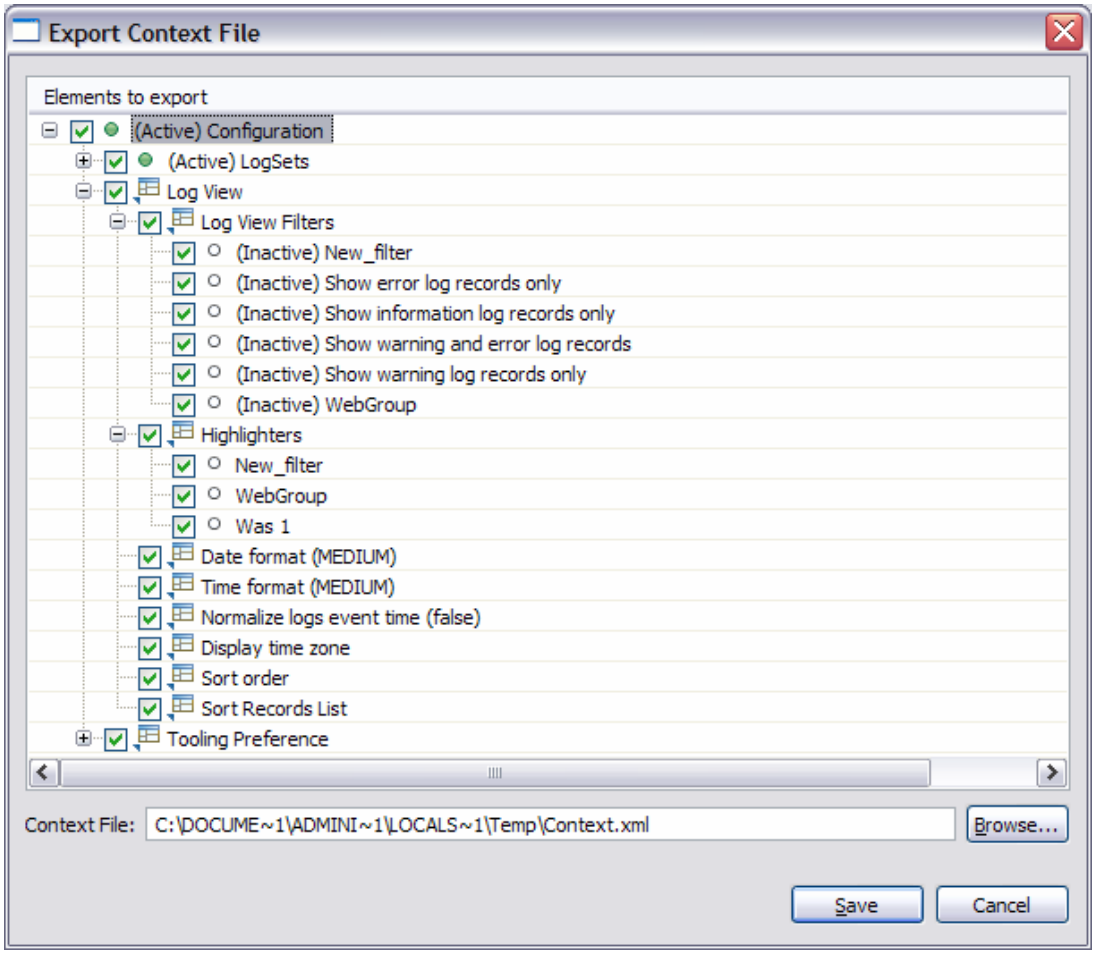


Sharing your settings and findings

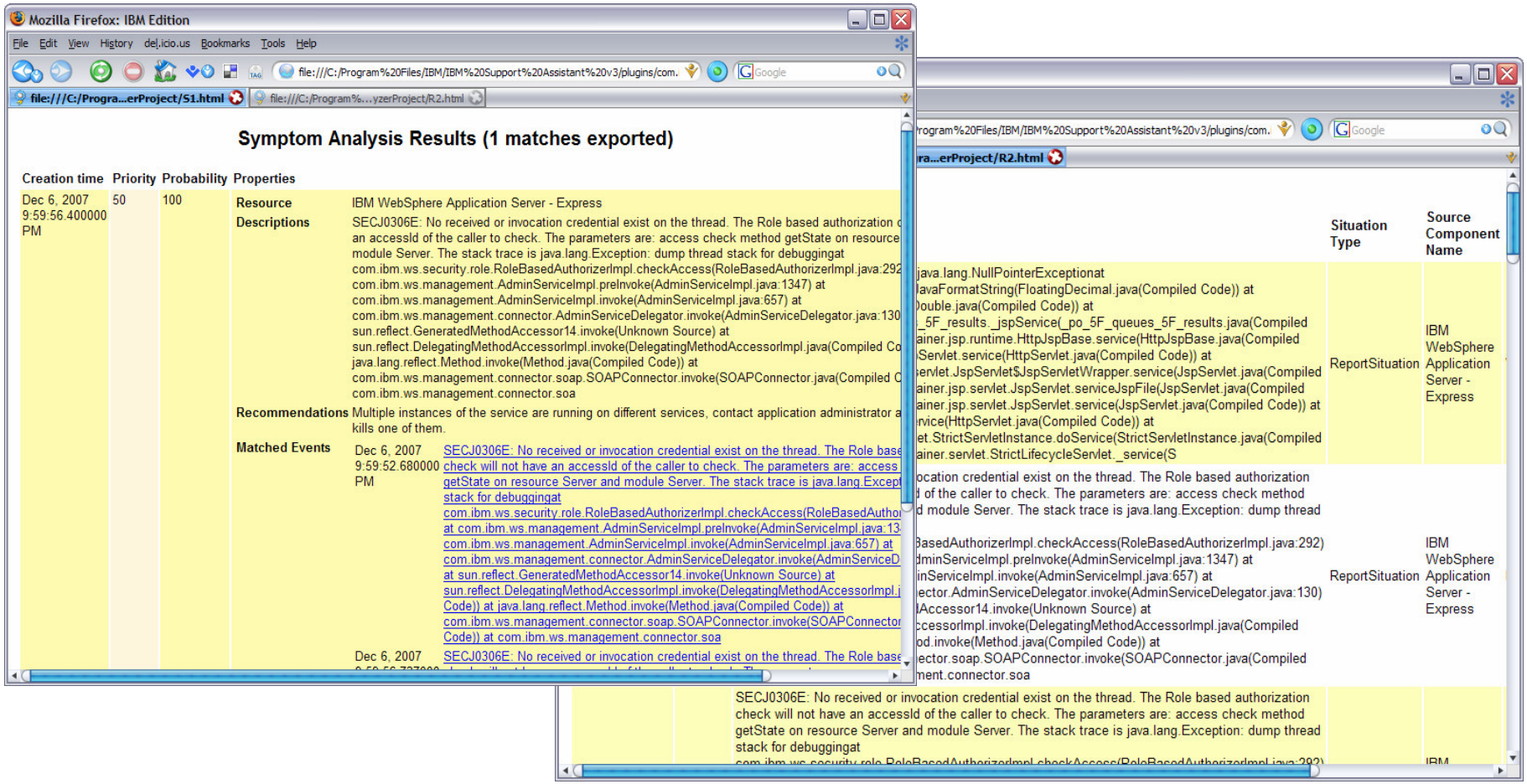
Collaboration with other specialists

- Export and import configuration

- Filters
- Highlighters
- Sorting
- Column choices
- Data formats



Share the results…



Summary

- Log Analyzer as a triage tool
- Filter what you do not want to see
- Highlight what it is important
- Record new found knowledge in a symptom definition
- Save your time…and others' too

Resources

- IBM Support Assistant
  - http://www.ibm.com/software/support/isa/
- Apache Derby (for large log support)
  - http://db.apache.org/derby/
- DB2® Express (for large log support)
  - http://www.ibm.com/software/data/db2/udb/support/downloadv8.html

Resources (symptoms databases)

- Symptoms deep-dive series
  - http://www.ibm.com/developerworks/autonomic/library/ac-symptom1/
- Eclipse Test & Performance Tools Platform
  - http://www.eclipse.org/tptp/
- Symptoms best-practice
  - http://download.boulder.ibm.com/ibmdl/pub/software/dw/opensource/btm/SymptomBestPractices_v2.0.pdf
- Symptom Catalog 2.0 specification
  - http://download.boulder.ibm.com/ibmdl/pub/software/dw/opensource/btm/SymptomSpec_v2.0.pdf

Additional WebSphere Product Resources

- Discover the latest trends in WebSphere Technology and implementation, participate in technically-focused briefings, webcasts and podcasts at: http://www.ibm.com/developerworks/websphere/community/
- Learn about other upcoming webcasts, conferences and events: http://www.ibm.com/software/websphere/events_1.html
- Join the Global WebSphere User Group Community: http://www.websphere.org
- Access key product show-me demos and tutorials by visiting IBM Education Assistant: http://www.ibm.com/software/info/education/assistant
- View a Flash replay with step-by-step instructions for using the Electronic Service Request (ESR) tool for submitting problems electronically: http://www.ibm.com/software/websphere/support/d2w.html
- Sign up to receive weekly technical My support emails: http://www.ibm.com/software/support/einfo.html

Questions and Answers