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# IDDE 1.0 Features and Futures

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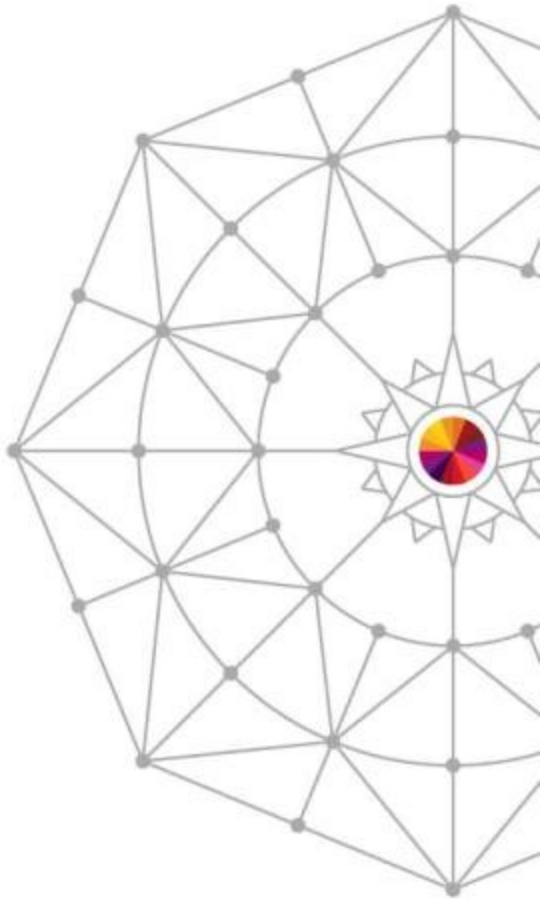
March 13 2014
Session 14955



SHARE in Anaheim

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# Agenda

- IDDE Introduction
  - IDDE origins
- IDDE 1.0
- IDDE 1.1
- IDDE 1.1 Demo


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# IDDE - Interactive Diagnostic Data Explorer

- IDDE Tech Preview available January 29, 2013
- IDDE 1.0 GA'd March 28, 2013
  - Supports system cores, IBM javacores and PHD files.
  - Full content assist for available commands
  - Syntax highlighting
  - Investigation log which mixes free text with live session data
  - Multiple JVM support
  - Encryption of analysis files for secure storage
  - Caching for high performance
  - Support for IBM Dump Analyzer commands, providing a single access point for analysis

- IBM Extensions for Memory Analyzer (IEMA) Plugins
- IDDE now has limited support for WebSphere Application Server IEMA plugins directly within IDDE and is available by installing the IBM Monitoring and Diagnostic Tools for Java - Interactive Diagnostic Data Explorer Bridge for Memory Analyzer [Tech Preview] feature.
- The limitations are summarized as :-
  - No support for dominator tree or similar analysis,
  - No interactive/graphical user interface elements.


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# IDDE - Interactive Diagnostic Data Explorer

- IDDE 1.1 GA'd December 2, 2013
  - New features in 1.1 allow you to:

  - Connect to dump files on a remote IDDE server.
  - Use IBM Monitoring and Diagnostic Tools for Java - Dump Analyzer commands.
  - View information about multiple Java tenants.


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# IDDE overview

- IBM JVMs only
- A visual representation of your set of dump files
- An investigation log editor in which you run commands.
  - Command assistance
  - Auto-completion of text
  - The ability to save commands and output, which you can then send to other people
  - Highlighted text and flagging of issues
  - The ability to add your own comments
- Support for using commands from the following tools
  - IBM Monitoring and Diagnostic Tools for Java - Dump Analyzer
  - IBM Monitoring and Diagnostic Tools for Java - Memory Analyzer (technical preview)
- An outline view to help you navigate the commands and output in the log editor

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# IDDE Installation

- Available from http://www-01.ibm.com/software/support/isa/
  - IBM Support Assistant 4
  - IBM Support Assistant 5

- Pre-requisite Feature
  - Diagnostic Tool Framework for Java

- IDDE Features
  - *IBM Monitoring and Diagnostic Tools for Java - Interactive Diagnostic Data Explorer*
  - *IBM Monitoring and Diagnostic Tools for Java - Interactive Diagnostic Data Explorer Bridge for Memory Analyzer [Tech Preview]*


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# Supported artifacts

- Java core
  - Text file produced by JVM.
  - Mix of OS and Java data
- Portable Heap Dump (PHD)
  - Binary file produced by JVM
  - High level view of objects (no fields)
  - Classloaders
- System core file
  - Binary image produced by OS.
  - jextract required for native library collection for early Java6 levels


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# Why Core files?

- Trace is WYSIWYG
- Avoid round tripping
- Access to Java Internals
  - Class definitions
  - Object implementations
  - JVM internals
- Good for event based issues
- Can be used for cumulative effect issues
  - Will take time to generate
- Compress well, provide portability


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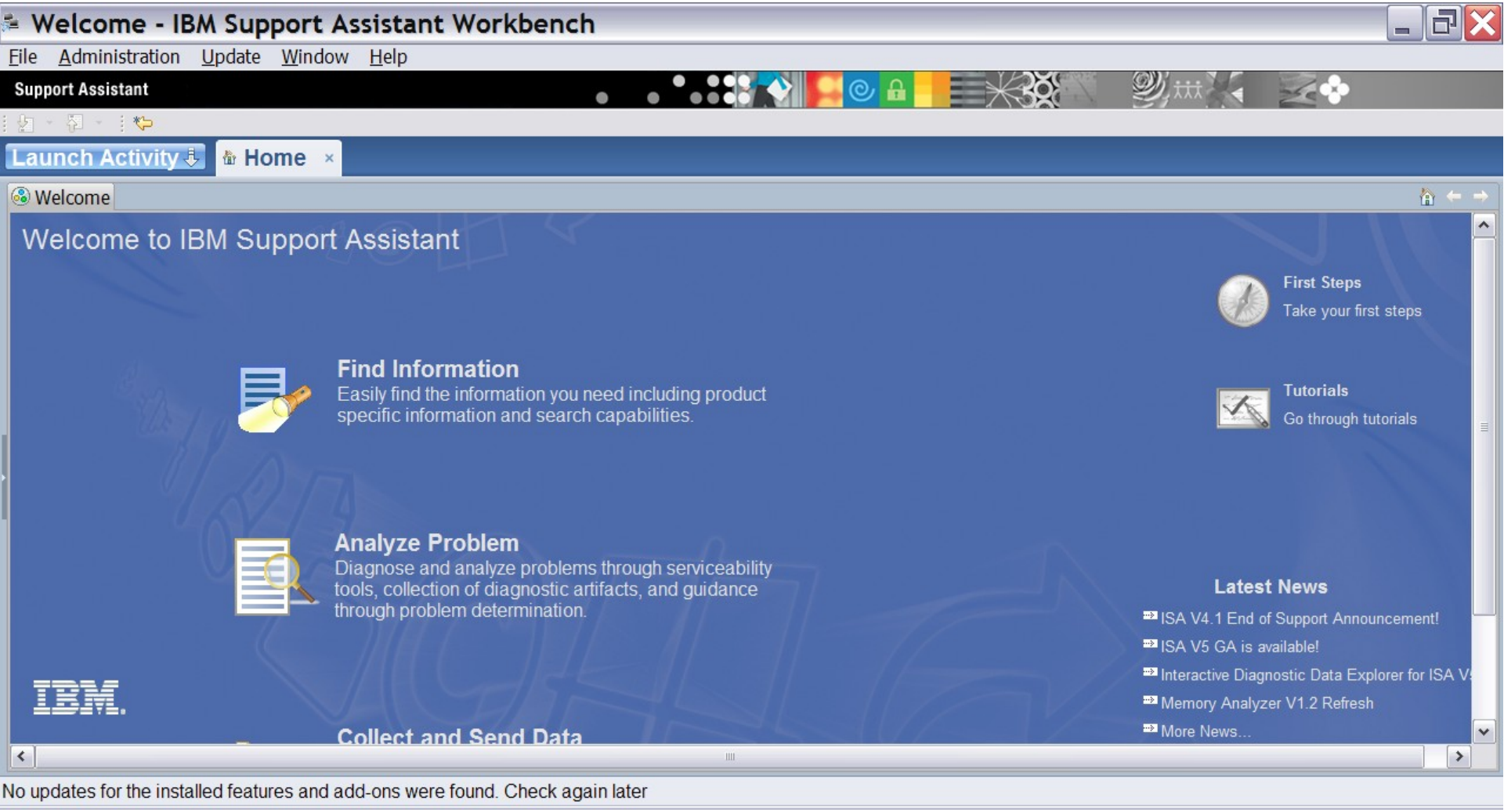
# IDDE Demo



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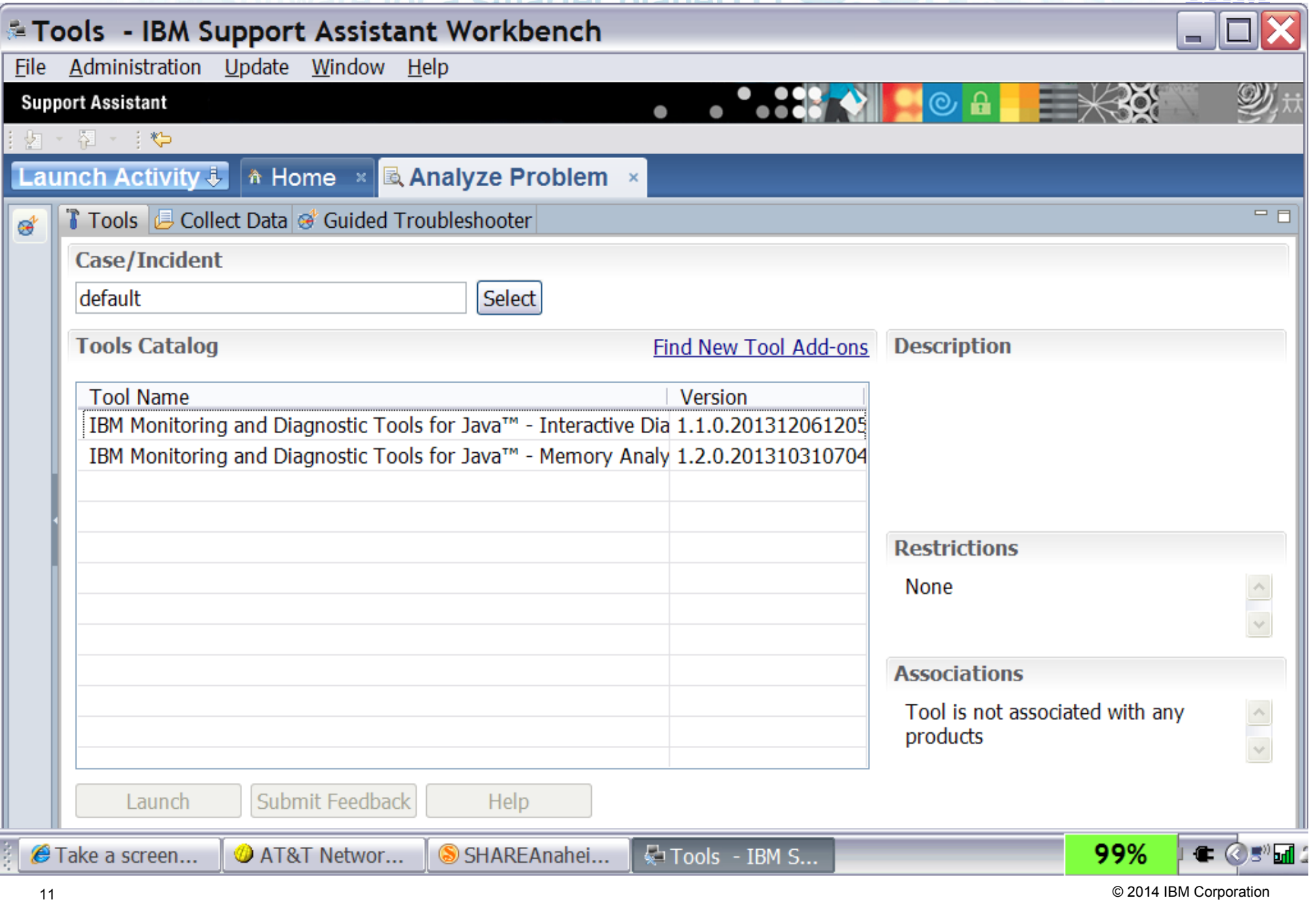



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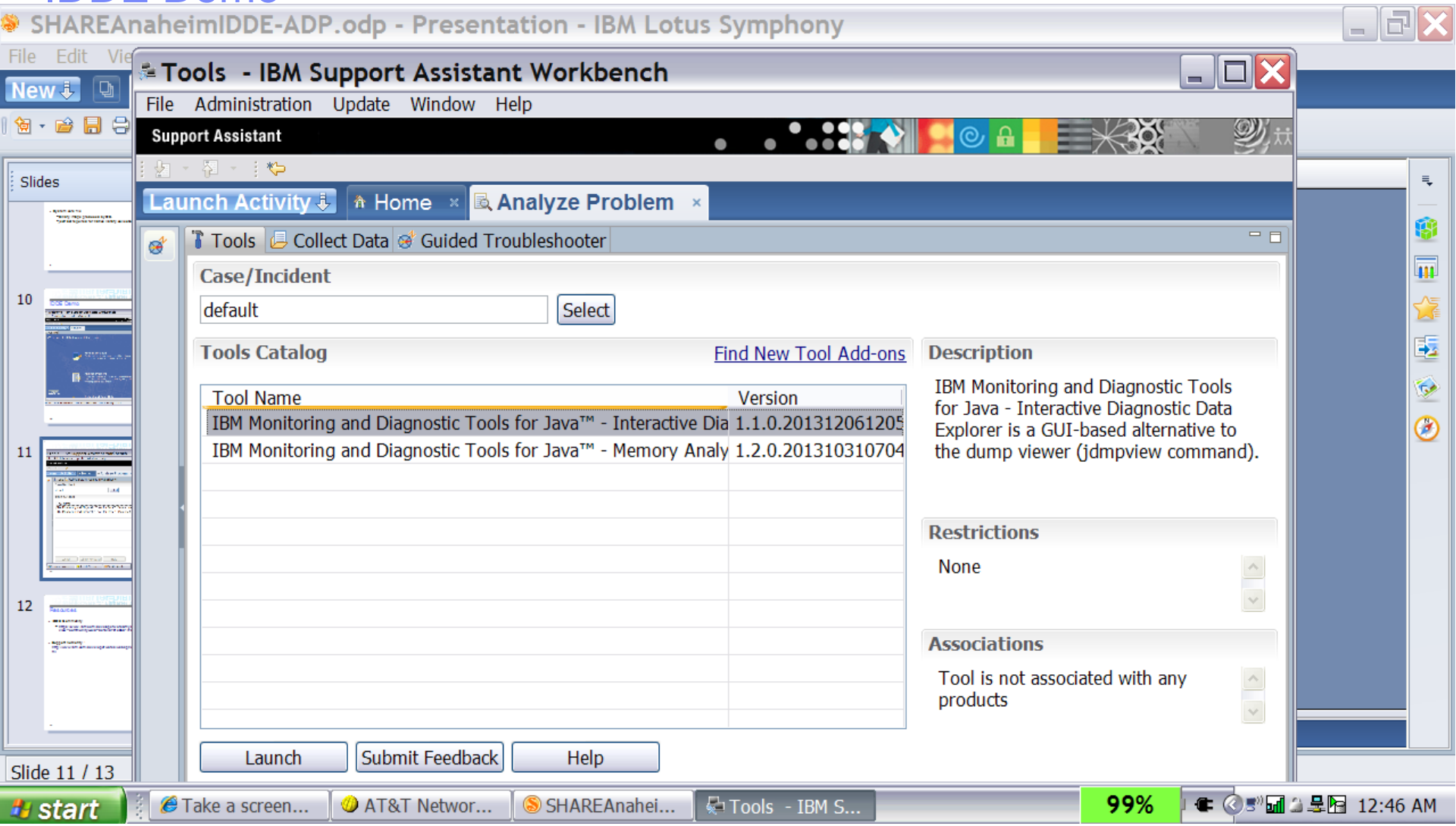




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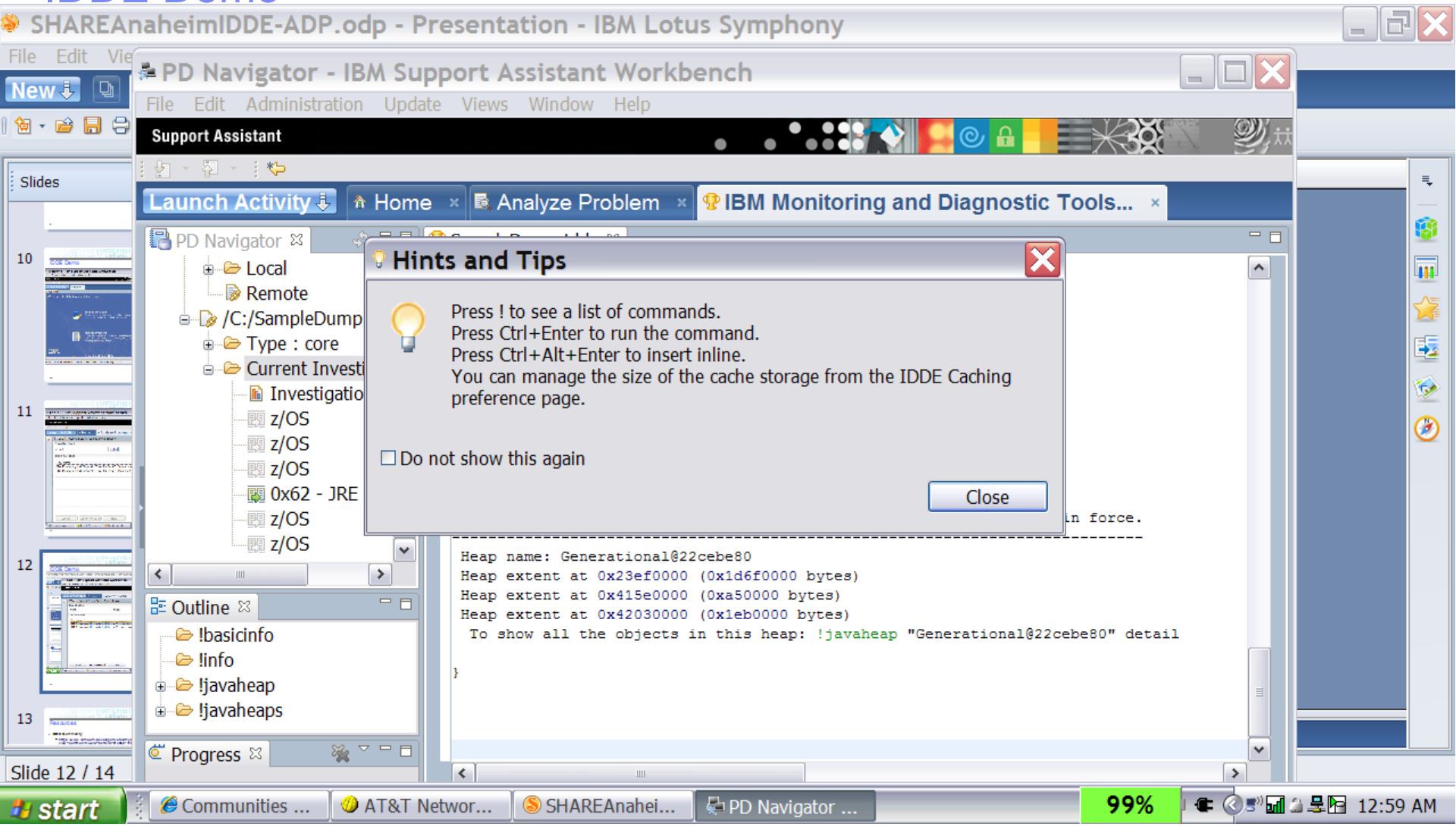




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# Resources

- IDDE Community
  - https://www.ibm.com/developerworks/mydeveloperworks/groups/service/html/communityview?communityUuid=5efb4378-ebba-47da-8c0f-8841d669d0cc
  - https://www.ibm.com/developerworks/mydeveloperworks/groups/service/html/communityview?communityUuid=5efb4378-ebba-47da-8c0f-8841d669d0cc&lang=en
- Support Authority : http://www.ibm.com/developerworks/websphere/techjournal/1210_supauth/1210_supauth.html


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# Questions ?



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