



IBM Software Group

WebSphere Application Server V6.1 Problem determination guide

Using the IBM Support Assistant



@business on demand.

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Converted to video May 18, 2015

This unit covers the IBM Support Assist tool platform.

Unit objectives

After completing this unit, you should be able to:

- Describe the different support activities such as Find Information, Analyze Problem, and Manage Service Request
- Recognize when to use the IBM Support Assistant
- Update IBM Support Assistant with new software add-ons
- Install new support tools
- Use Collect Data and Automated PD features
- Use the IBM Support Assistant for problem determination
- Create a portable collector



Upon completing this unit, you should be able to describe the different capabilities of the IBM Support Assistant including how to find information, analyze problems, and manage service requests with IBM Support. Also, you should be able to determine when to use the IBM Support Assistant and how to install new products and tools into the IBM Support Assistant.

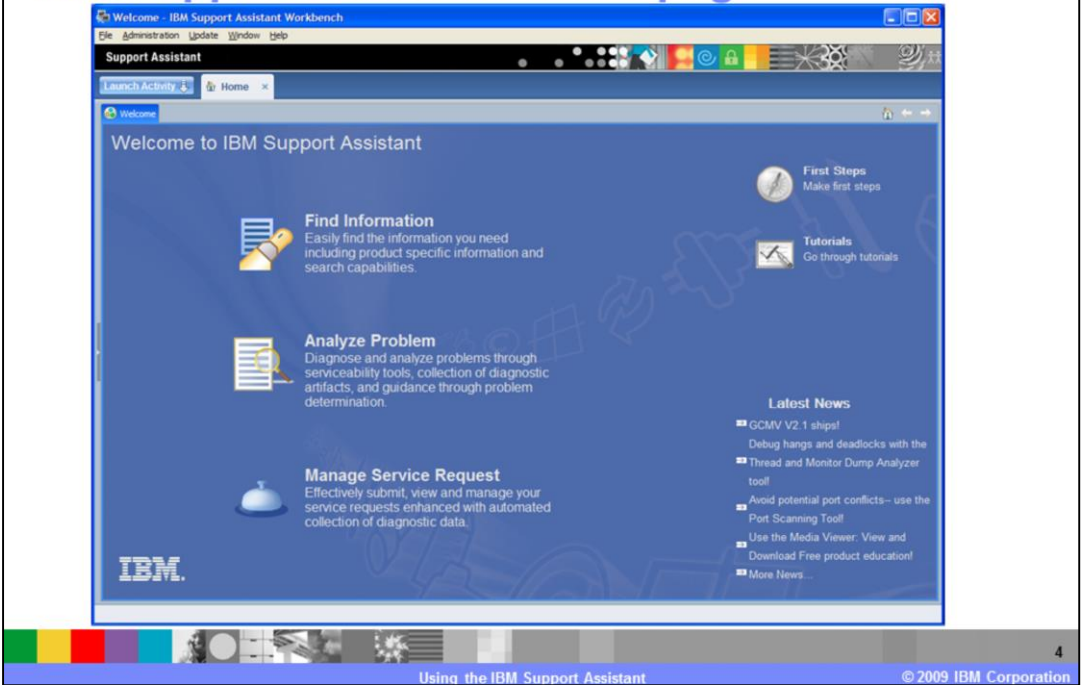
What is the IBM Support Assistant?

- The IBM Support Assistant is a *free, stand-alone application* that you can install on any workstation
- It can be enhanced by installing add-on modules for the IBM products you use
- Saves time searching product, support, and educational resources
- If a Service Request needs to be opened, IBM Support Assistant helps with
 - ▶ Gathering support information based on problem type
 - ▶ Creating and updating the service request
 - ▶ Tracking your electronic service request
- Includes a support tool framework allowing for easy location and installation of useful product support tools
- IBM Support Assistant can be downloaded from
<http://www.ibm.com/software/support/isa/>



The IBM Support Assistant improves your ability to locate IBM support, development and educational information through a federated search interface. It also provides quick access to the IBM Education Assistant and key product education roadmaps. It simplifies access to IBM product home pages, product support pages, product forums or newsgroups, skills enhancements, and problem determination links. The IBM Support Assistant saves you time submitting problems to IBM Support by collecting key information, then electronically creating a Service Request. It also includes a support tool framework allowing for the easy installation of support tools associated with different IBM products. The IBM Support Assistant provides a framework for IBM software products to deliver customized self-help information into the different tools within it.

IBM Support Assistant home page



This shows a screen capture of the main screen of the IBM Support Assistant, version 4.

IBM Support Assistant: Updater component

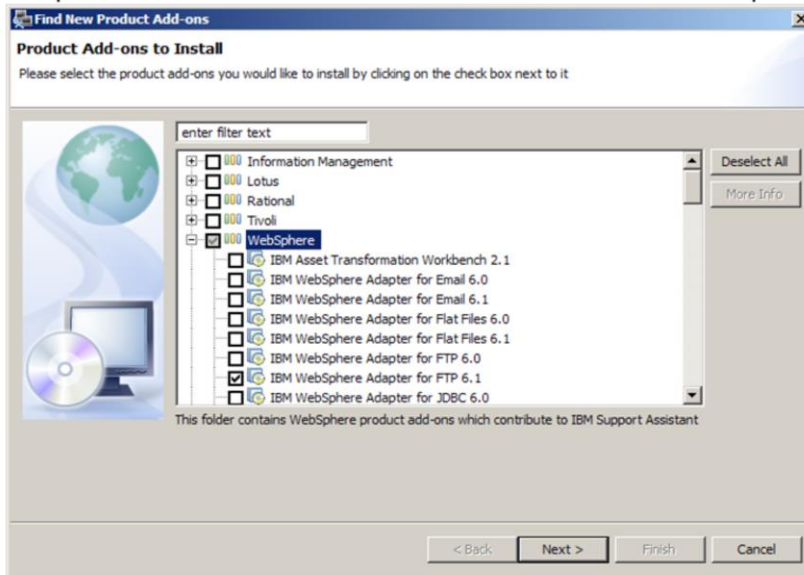
- Updater component
 - ▶ Lets you add IBM product add-ons to IBM Support Assistant
 - ▶ Adding a product add-on provides more information to IBM Support Assistant
 - ▶ Here are examples of information that can be provided when you add a product add-on:
 - **Find Information activity:** The product name can be used as a *search* option. The product's on-line *Information Center* can also be used as a search target.
 - **Find Information activity:** Product *newsgroups and forums, skills enhancements, problem determination, and news links* become available
 - **Analyze Problem activity:** *Data collection* for the product is enabled
 - **Analyze Problem activity:** A portable data collector can be exported for use on any machine
 - **Analyze Problem activity :** *Support tools* may be associated with the product.
 - **Manage Service Request activity:** *Service Requests* for the product is enabled



The Updater component can be used to locate more up-to-date versions of the product information and tools that you currently have installed. If you want to see more products, you can add them by using the updater to find, download, and install the required product information from the IBM Web site. IBM Support Assistant product and tool information is packaged as product or tool add-ons. You can add a product by installing a new product or tool add-on. Generally, installing new products or tools requires a restart of the IBM Support Assistant work bench.

Installing IBM product add-ons

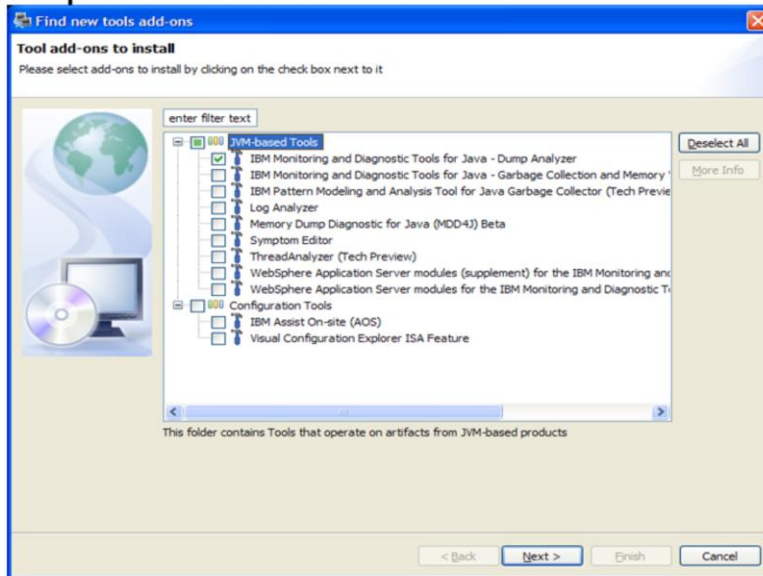
- The Updater can be used to install available add-ons for IBM products



This slide shows the dialog box used by the Update component used to select new products to be installed into the IBM Support Assistant.

Using the Updater component to install tools

- Select **Update->Find New->Tool Add-ons**



This slide shows the dialog box used by the Update component to select new tools to be installed into the IBM Support Assistant.

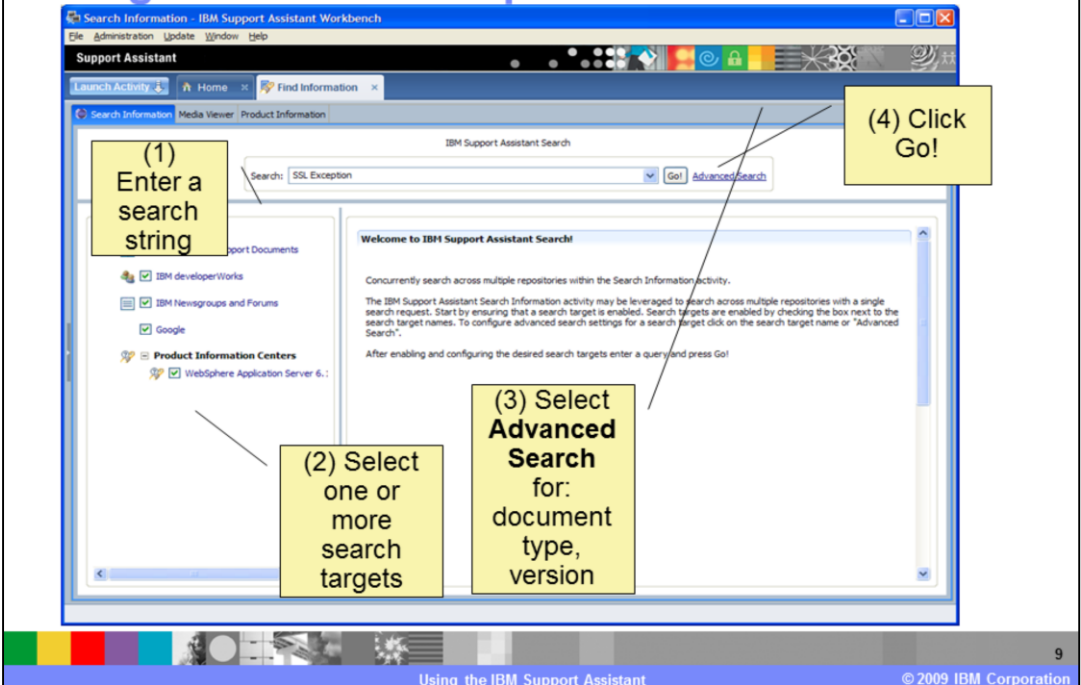
The Find Information activity

- Search component
 - ▶ Enables searching multiple information locations concurrently including
 - Technical notes from the *IBM software support Web site*
 - Articles from *IBM developerWorks®*
 - Postings from *IBM newsgroups and forums*
 - Google Web search
 - On-line *Information Centers*
 - ▶ You can also narrow your search by selecting
 - Specific software products (example: WebSphere® Application Server)
 - Specific versions (example: V5.1, V6.0, V6.1)



The Search component provides a unified method to search multiple information repositories for information on your chosen products. Search options are provided to help you narrow the scope of your search. The search location you choose determines what search options are available. For example, if you select Google Web Search, search options do not apply. The IBM developerWorks and IBM Newsgroups and Forums search locations let you narrow your search to specific product areas.

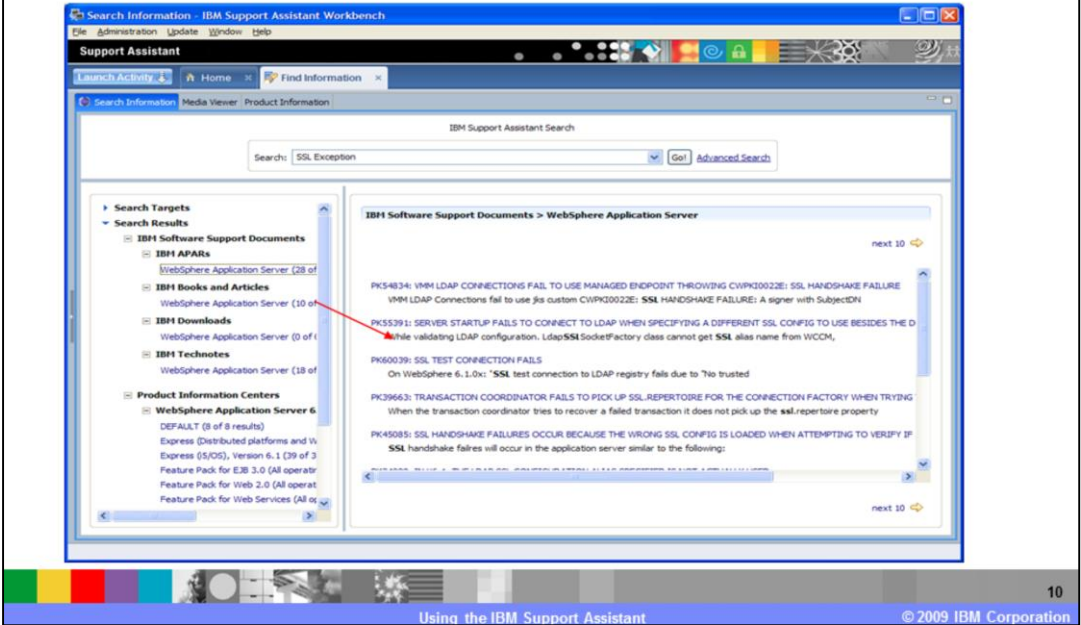
Using the Search component



This slide shows an example screen capture of the Search component of the IBM Support Assistant. To perform a search, enter a search term in the search textbox, select one or more repositories to search, select any advanced search options like document type or version, and click the Go button. The results are asynchronously built and listed for you on the left panel.

Viewing results of a search

- After the search completes, click any of the links in the search results tree to view the list-- Click any item in the list to read the details



This slide depicts a completed search interaction. Note that the search results are grouped according to the repository from which the data came.

Product Information component

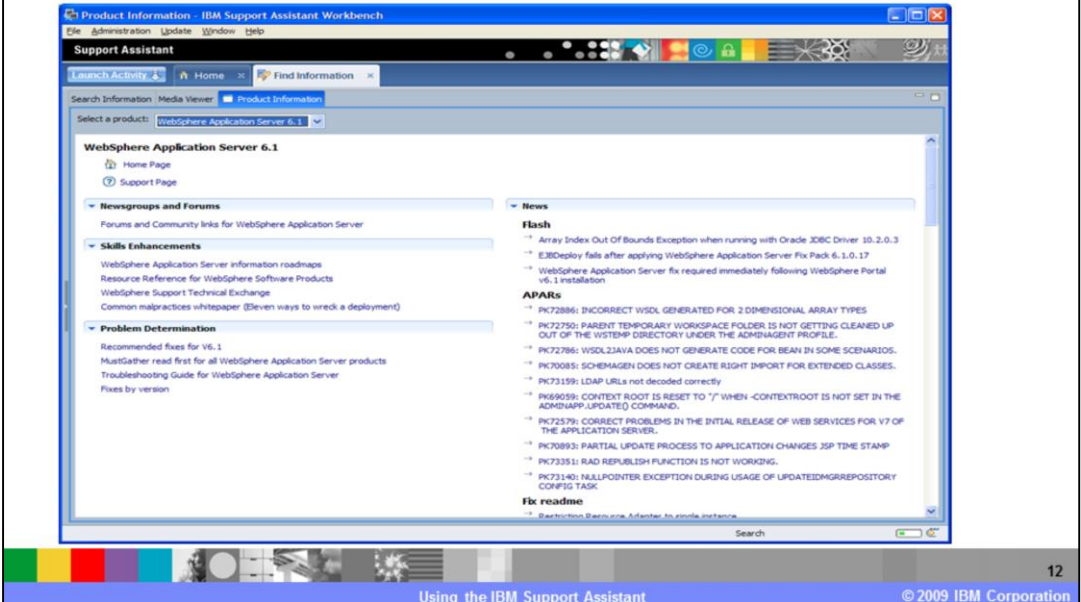
- Product information component
 - ▶ Helps you quickly find helpful IBM Web sites.
- For each IBM product added to IBM Support Assistant, the Product Information component displays:
 - ▶ **Home Page:** Product overview and links to other types of product information
 - ▶ **Support Page:** Product support documents and other types of support information
 - ▶ **Newsgroups and Forums:** Product discussions in newsgroup/forum format
 - ▶ **Skills Enhancements:** Useful links to documents and resources to enable you to improve your skills with the selected product.
 - ▶ **Problem Determination:** Links to documents specifically for troubleshooting purposes. Includes items such as MustGather documents, Troubleshooting Guide, and fixes by product version.



With product information links you can access a variety of support, troubleshooting, and educational options including traditional classes, Web-based training, and CD-ROM training.

Using the Product Information component

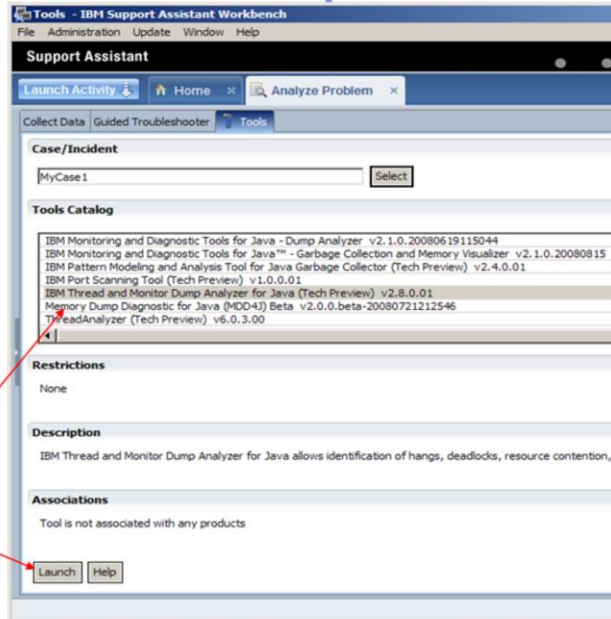
- Select a product to see support and forum resources in addition to skills enhancements (educational) and problem determination resources



This slide shows a screen capture displaying product information links targeted for WebSphere Application Server version 6.1.

IBM Support Assistant: Tools component

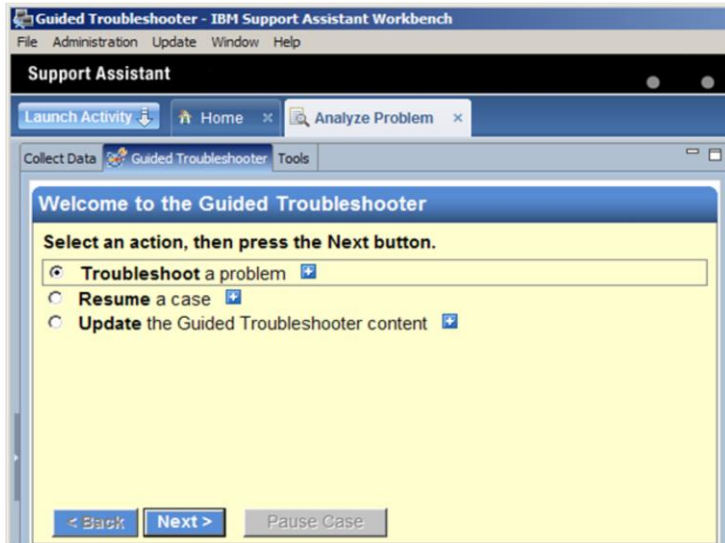
- Tools component
 - provides support tools to identify and prevent problems
- Use the Update feature to download the latest tools
 - Select **Update-> Find New-> Tools Add-ons**
- Note that each product will have its own set of tools
 - Some tools are common to multiple products
- Tool can be selected and launched in their own windows



The Tools component is a way to provide support tools to you. These tools can be used diagnostically to identify problems you are having. Some tools can also be used preventively to stop a problem before it occurs. IBM Support Assistant provides a way to use support related tools to identify problems or provide health checking tools to prevent problems. Tools are installed using the Updater component of IBM Support Assistant. Tools may be launched in a new window by clicking their name or they may be launched in another tab within the IBM Support Assistant workbench.

Analyze Problem: Guided Troubleshooter

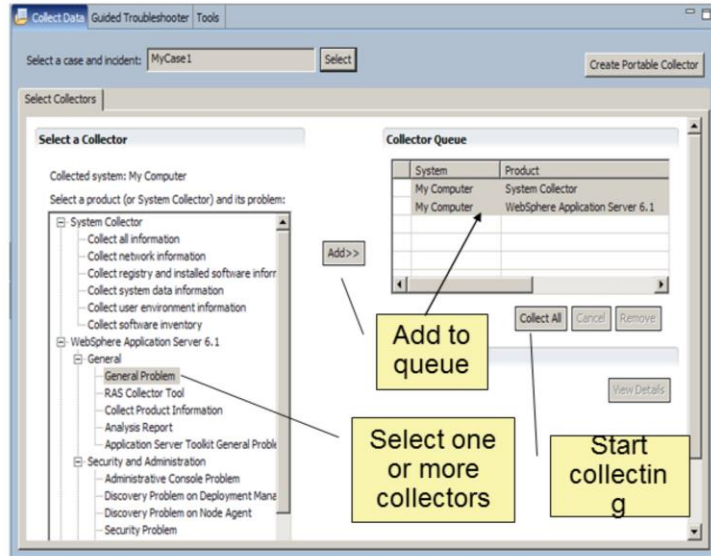
- This tool provides a step-by-step guide for
 - Configuration tasks
 - Troubleshooting
- Helps gather
 - problem information
 - diagnostics
- Helps analyze the gathered data to solve the problem



The Guided Troubleshooter provides access to walkthroughs and allows you to personalize the viewing experience to your own preferences. If no product add-ons are installed the Guided Troubleshooter offers a generic guide to troubleshooting your problem.

Analyze Problem: Collect Data

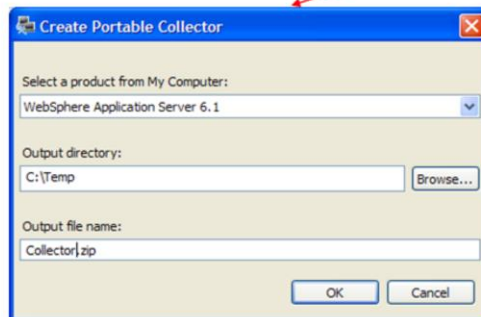
- Collect data on
 - ▶ system information
- Collect data on application server problem types
 - ▶ Hang
 - ▶ DB connection pool
 - ▶ Crash
 - ▶ Many others
- Create Portable Collector
 - ▶ Create collector .zip file and copy/run on remote machine



The IBM Support Assistant provides the ability to assist you in collecting information required to resolve the problems you are having with IBM products. The data collection features allow for a concise and targeted collection of data necessary to troubleshoot a specific problem in addition to general problems. IBM Support Assistant also allows you to create portable versions of the data collectors that can be copied to any server and then run to collect diagnostic artifacts.

Create portable collector

- Select **Create Portable Collector**
 - ▶ Select product
 - ▶ Select output directory
 - ▶ Name collector
- FTP .zip file to remote machine
- Extract and run collector on remote machine
 - ▶ The collector runs interactively within a command console



The portable Collector is a clone of the IBM Support Assistant Collector. It is packaged so that you can transport it to another computer and run it there. The portable Collector creates an output file on the other computer which you can transport back to the computer where IBM Support Assistant is installed. You can attach the portable Collector output file to a case in the same manner as an IBM Support Assistant Workbench collector output file is added to a case. The portable collector is the typical method of data collection in an enterprise environment. The portable Collector requires the target computer to have a Java™ Runtime Environment, version 1.4.2 or higher. The Microsoft® Java Virtual Machine is not supported.

Collect data and automated PD features

- The type of system and log data collected depends on the problem type you select
- Collected data is archived in a time stamped .zip file
 - ▶ Some applications provide a facility so you can specify the location and name of the archive, using the Problem Management Report expression
 - For example: /tmp/55555.333.333.general.0951_0768.zip
- Analysis reports are generated in an HTML file
 - ▶ For example: autopd_analysis_report.html
- Some problem types make use of Automated PD
 - ▶ Enable tracing of relevant components on a specific server
 - ▶ Automatic stop/restart of server
 - ▶ Option to reproduce problem and have trace output collected



The IBM Support Assistant data collectors create a time stamped archive file containing all the files needed to troubleshoot the problem at hand. The data collectors are customized for each supported platform.

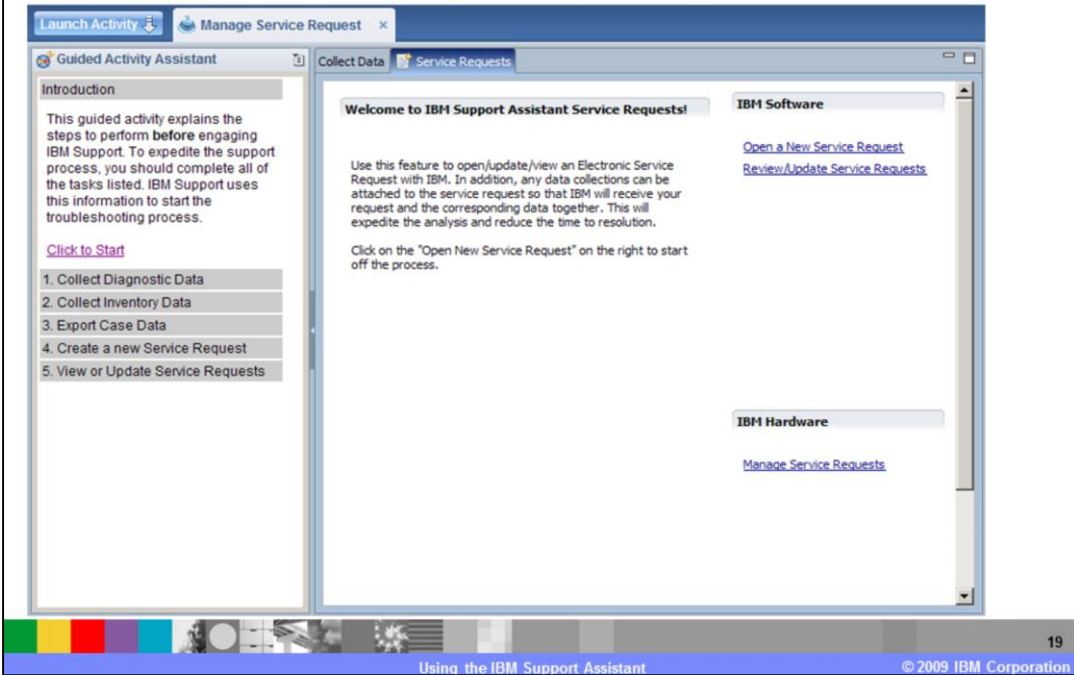
Manage Service Request (1 of 2)

- Manage Service Request activity
 - ▶ Submit a problem report to IBM in the form of a Service Request (SR)
 - ▶ Provides an enhanced form of report submission because the collected data is sent with service request
 - ▶ The Service component brings you these tasks to help you submit an enhanced problem report:
 - Collect Data
 - Manage Problem Reports
 - ▶ The Collect System Data task expedites problem resolution
 - it gives IBM Support engineers immediate access to diagnostic data from your system.
 - ▶ The Manage Problem Report task lets you
 - Submit a new problem report
 - View and update existing problem reports
 - Attach files to problem reports



In order to manage service requests, you need to log in. Once you are logged in, you can open a New Service Request for IBM software products, review / update Service Requests for IBM software products, and manage Service Requests for IBM hardware products. IBM Support Assistant integrates the data collection operations with the Manage Service Request functionality. Data that has been collected can be submitted directly to IBM Support and associated with your service request without leaving the IBM Support Assistant workbench.

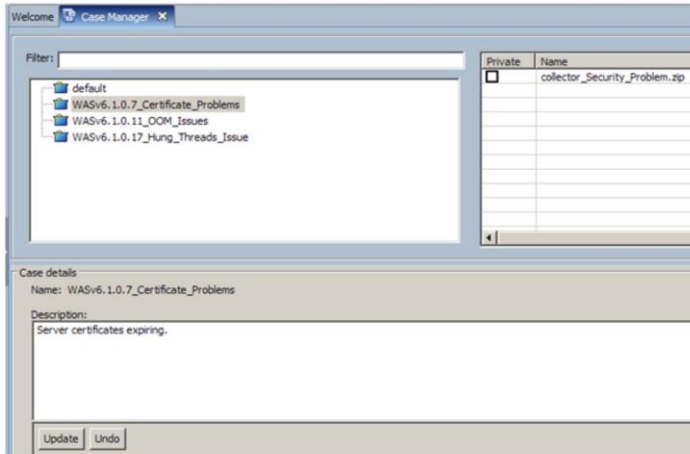
Manage Service Request (2 of 2)



This slide demonstrates a sample screen from the Manage Service Request component. Note that the IBM Support Assistant does not provide an interface for service request manipulation but, rather, it opens a browser window to the IBM Support site for electronic service requests.

Case Manager

- Cases act as containers to store artifacts related to a problem investigation
 - ▶ Organize data with folders, group related files
 - ▶ Send data to IBM support
 - ▶ Add incidents to a case to track data for a specific problem occurrence
 - ▶ Import and export cases



The Case Manager component of the IBM Support Assistant can be used to track specific instances of problems in your environments. By creating a case, you can describe the problems seen and note the servers that are affected with the problem. Additionally, you can attach diagnostic data like collector archives to the case and export the entire case so that it can be given to IBM Support. The Case Manager screen can be accessed from the Analyze Problems section of the workbench.

Unit summary

Now that you have completed this unit, you should be able to:

- Describe the different support activities such as Find Information, Analyze Problem, and Manage Service Request
- Recognize when to use the IBM Support Assistant
- Update IBM Support Assistant with new software add-ons
- Install new support tools
- Use Collect Data and Automated PD features
- Use the IBM Support Assistant for problem determination
- Create a portable collector



This unit covered the different support activities possible through the IBM Support Assistant workbench such as managing service requests, finding product information, and collecting data for solving a problem.

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