Baseline Repository & Asset Validation Operation v1.0

User Guide

Security Classification
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Document Abstract
The *Baseline Repository & Asset Validation Operation (BRAVO) User Guide* describes how to use the BRAVO tool.

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Contact Information
Contact information is available at: http://techcenter.austin.ibm.com/

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Contents

About this book

This chapter contains the following topics:

Who should read this guide

The audience for this guide includes Asset Management Analysts who maintain the data in BRAVO, Account teams who use the reports generated by BRAVO, and System Administrator and Mainframe Technical Analysts who provide scans and validate installed software against hardware baseline data.

Before you begin

If you have not already done so, familiarize yourself with the links on the Asset Management Tools Home page at http://tap.raleigh.ibm.com/.

Definitions of terms used in this guide

The following terms are used in this guide.

Asset Tracking & Planning tool (ATP): The repository containing hardware asset data used by BRAVO.

ATP serial number: A physical serial number from the machine reported when the ATP hardware list is updated and listed in the Account Asset report.

BIOS serial number: A logical serial number reported during a software scan of the LPAR on which the software resides and listed in the Account Asset report.

Customer Number Database (CNDB): Account information and customer number management tool.

Discrepancy status: Status assigned to each installed software product that identifies where it is in the validation process.

- **None**: No issue with asset record exists.
- **Missing**: A discrepancy was submitted and the hardware record does not exist in the hardware baseline for this asset.
- **Valid**: The software has been validated on the LPAR.
- **Invalid**: The software was installed but not validated.

False Software Hit: A scan identifies a software product that is installed on a machine, but the software is not actually on the machine.

IBM Tivoli Configuration Manager (TCM): A product that is used to control, manage, and monitor software and hardware. For more information, go to http://www-306.ibm.com/software/tivoli/products/config-mgr/.

Invalid software: The software was installed but not validated.

LPAR: The name of the machine, otherwise known as hostname, machine name, or node name.

Scan: The process of examining and documenting installed software on a system.

Standalone Script: A TCM-based script that captures detailed information about a system's hardware, software and operating system. The output of these scans have a filename suffix of .tar.Z.

Software Discrepancy Upload Template: An Excel spreadsheet used to submit manually obtained information about installed software on a mainframe LPAR, server, or workstation.

TCM: IBM Tivoli Configuration Manager, which is a product used to control, manage, and monitor software and hardware.

TRAILS: The Reconciliation And Inventory of Licensed Software tool.

Contents overview

This guide contains the following chapters:

- "About this book" (this section) describes the purpose of the guide, audience considerations, and document conventions; gives an overview of the contents of the guide; and tells where to go for additional information.
- Chapter 1. "Understanding BRAVO" introduces the application's purpose and describes the general concepts used throughout the application.
- Chapter 2. "Using BRAVO" describes the functionality of BRAVO and provides procedures for completing tasks and analyzing reports.

What you type

Information that you must type exactly as shown in the instructions appears in `monospace`. For example:

> To run asset reports, type `i_report.kbc` in the **Procedure** field.

Values that you must provide are displayed in *italics*. For example:

> In the **Run** field, type *x*:`\system\`*filename*.
>
> where *x* is the directory where your program files are stored, and *filename* is the name of the application.

Field names and other interface elements, such as buttons and links, are displayed in **bold** text. For example:

> In the left navigation panel, click **Applications**, and then click **New**.

Hyperlinks and cross-references are displayed as blue, underlined text.

Customer support

For additional help, refer to the Global Asset Management Problem database at: Notes:///8525736A006FE231/.

Additional resources

For additional resources, see the Asset Management Tools Home page at http://tap.raleigh.ibm.com/

Chapter 1. Understanding BRAVO

This chapter discusses the following topics:

What is BRAVO?

Baseline Repository & Asset Validation Operation (BRAVO) is an IBM intranet-based asset management tool that supports the software tracking asset management service and acts as the staging point for software reconciliation. BRAVO provides a central repository for software scan data from multiple scanning tools and integrates hardware data to tie asset information together in a central location.

BRAVO supports asset management services by providing reports that compare scan data with the hardware baseline information in the Asset Tracking & Planning (ATP) tool. BRAVO automates the load of this data into the TRAILS tool for software reconciliation and provides reports about the software scans and hardware baseline information that allow each account to resolve issues between these baselines before loading the data into TRAILS.

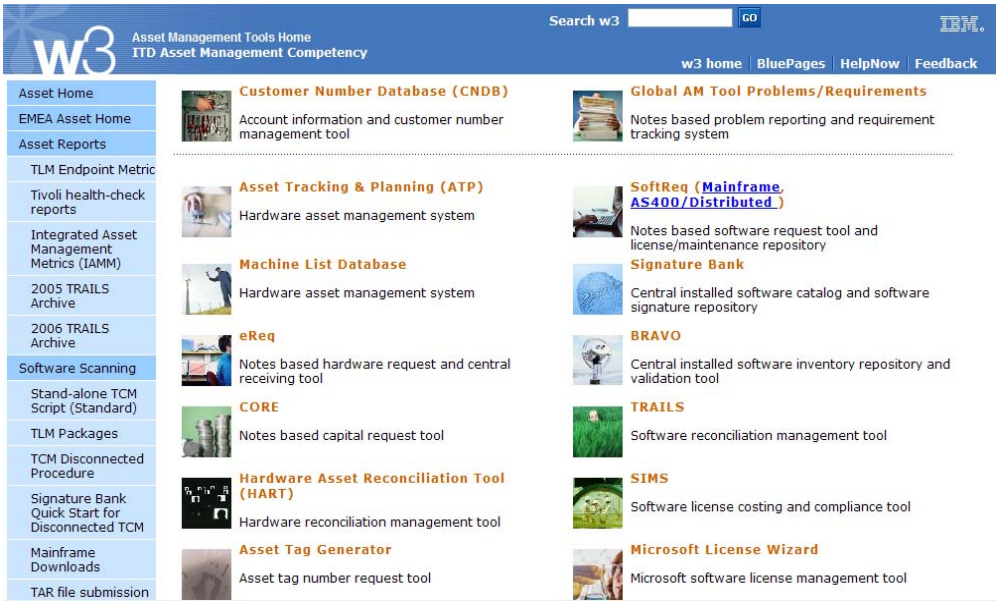
Logging into BRAVO

A link to BRAVO is available on the Asset Management Tools Home Page.

- **To log into BRAVO**

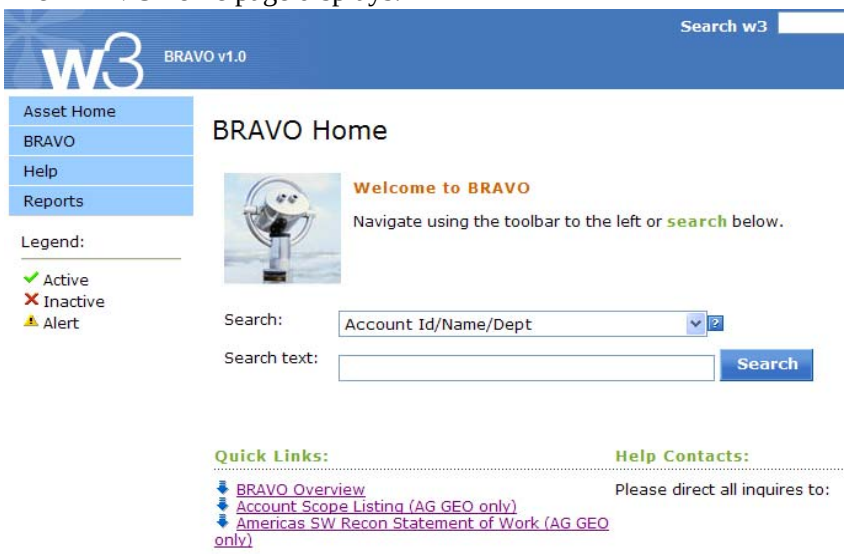
1. Open a browser, and go to http://tap.raleigh.ibm.com/.

The Asset Management Tools Home Page is displays.



2. Click the graphic next to **BRAVO**.
3. Type your IBM intranet User ID and password, and click **OK**.

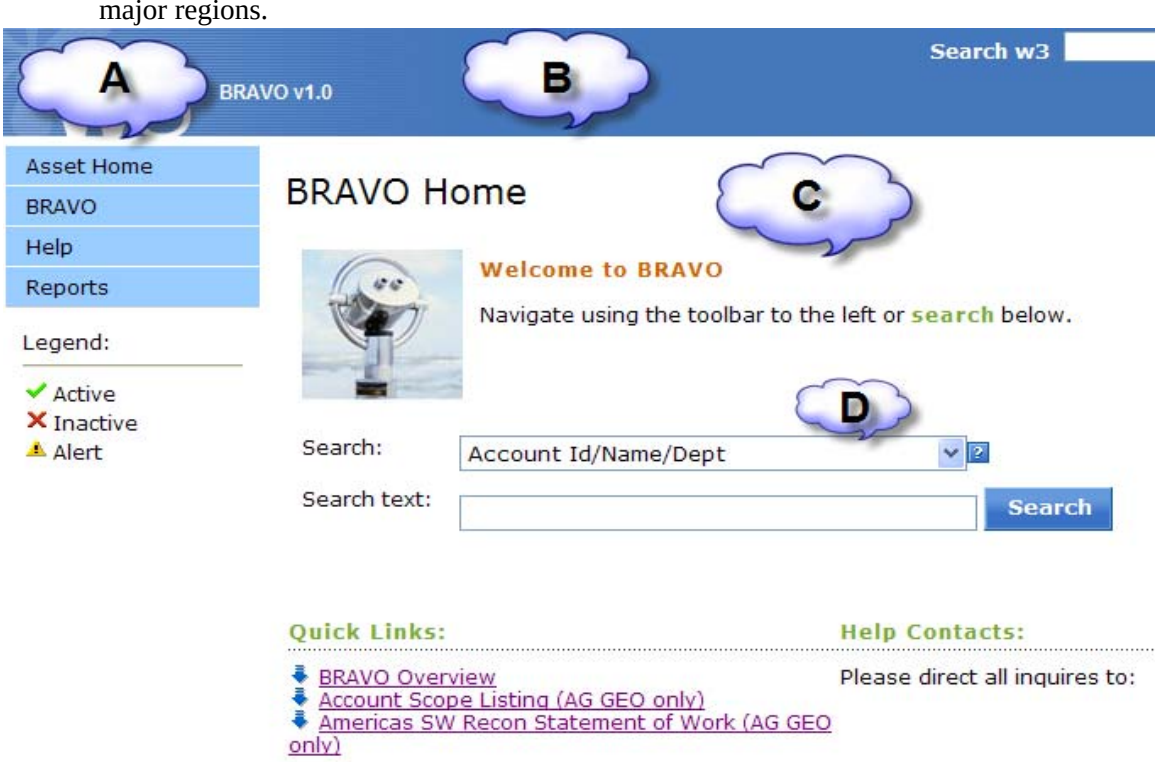
   The BRAVO home page displays.



4. Navigate within BRAVO by using the links in the left navigation bar, the Search function, the Quick Links at the bottom of the page, or the Help Contacts.

Understanding the BRAVO home page

This section helps you navigate around the BRAVO home page. Following is a screen capture of the BRAVO home page with lettered callouts added to divide the page into four major regions.



Region A is referred to as the “left navigation bar.” This is the main tool you use to access the various functions and screens within BRAVO. In this guide, procedures are described the largely the same order that they display in the left navigation bar. Following are the major functions that you can access from the bar:

- **Asset Home:** Click this link to go to the Asset Management Tools home page.
- **BRAVO:** Click this link to go to the BRAVO home page.
- **Help:** Click this link to access BRAVO’s help tools .
- **Reports:** Click this link to access reporting functions within BRAVO.

Note: On many of the screens, there are numerous ways to navigate to other areas of the application. This guide provides a single way to perform each procedure.

Region B is the masthead for all pages in this application. It shows that you are in the BRAVO application, allows you to search w3 as needed, as well as click the links on the right hand side of the masthead. The links allow you to access the w3 home, BluePages, the HelpNow! application and to give feedback, respectively

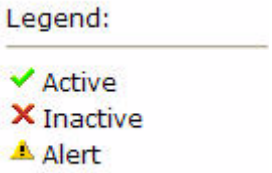
Region C contains the title for the current BRAVO page and a brief description of the function you are viewing or performing in the Region D.

Region D usually contains a table that has information you need to view, links you need to follow, fields you must fill in to perform a search or some other type of function, or the results of a search or function you have already performed.

Searching in BRAVO

On the BRAVO Home Page, a **Search** field and a **Search text** field areavailable so that you can search the Customer Number Database for account IDs and information.

Note: After you obtain the information and are viewing reports, you can use the **Legend** that displays on each page in BRAVO to determine whether an account ID is active, inactive, or has an alert. A green check beside an account ID indicates an active account in the Customer Number Database; a red X indicates an inactive account.



- **To search BRAVO from the home page**

1. In the **Search** field, click the arrow and select a type of search from the menu. You can search by:
   - **Account ID**: If you select Account ID, and type an account ID in the **Search text** field, an Account List displays the account ID name, type, and department.
   - **Name**: If you select Account Name, and type an account name in the **Search text** field, a list of account IDs for that account displays.
   - **Department**: If you select Department, and type the name of a department in the **Search text** field, a list of account IDs for that department displays.
   - **Hardware LPAR name/serial number**: If you select Hardware LPAR name or serial number, type the LPAR name or serial number in the **Search text** field.

     Attention: The search for an LPAR displays results from *all accounts*.
   - **Software LPAR name/serial number**: If you select Software LPAR name or serial number, type the LPAR name or serial number in the **Search text** field.

Using the Help

In the left navigation bar, you can click **Help** to view several different types of help resources. Examples of this are Frequently Asked Questions, downloadable user guides and integrated help.

Locating Reports

In the left navigation bar, you can click **Reports** to view Department and Global Scan Reports. For additional information about these and other reports, see Using reports in Chapter 2. Using BRAVO.

Using the Quick Links

The Quick Links section provides documentation or links to external sites that you may need to access. These links are updated periodically to keep the information current.

Navigating in BRAVO

Links are available at the top of each BRAVO page so that you can navigate from one page to another page in the tool. For example, if you type text into the **Search text** field and then click **Search**, the links at the top of the page display at the top of the page as BRAVO > <*ACCOUNT NAME*>. You can click **BRAVO** to return to the BRAVO home page. You can also click **Back** on the Internet Explorer toolbar.

Chapter 2. Using BRAVO

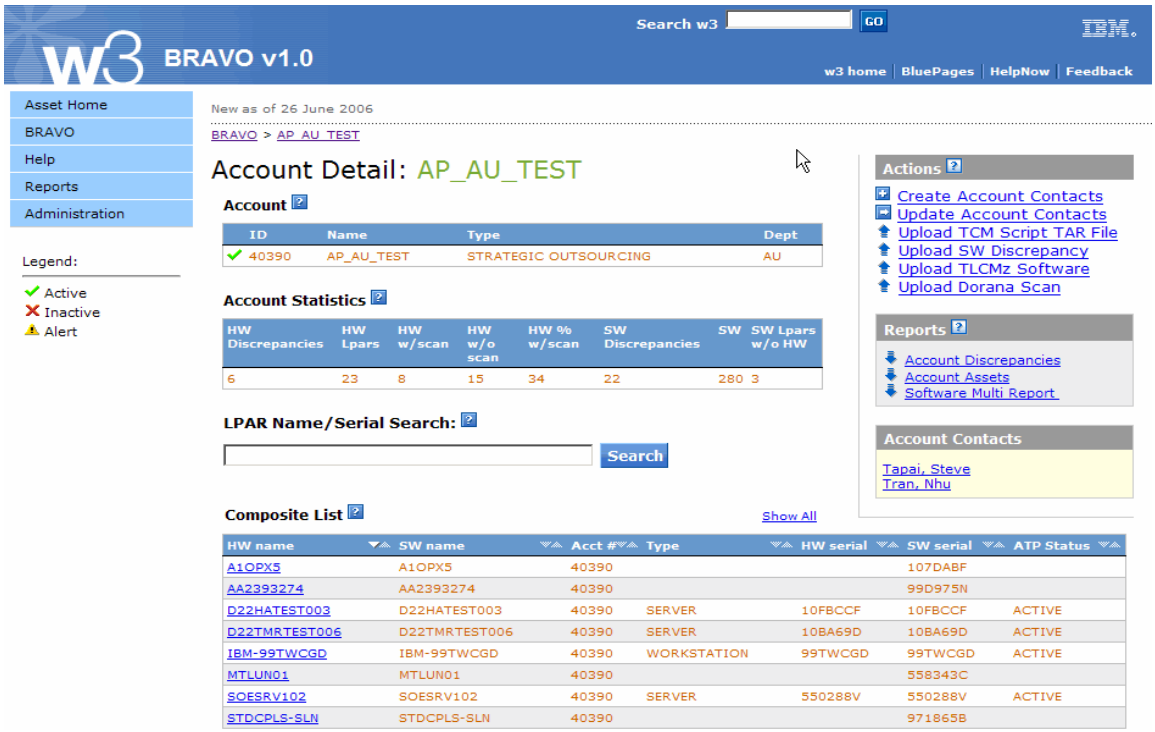
This chapter discusses the following topics:

Managing accounts

After you log into BRAVO and perform a search, your search results display as an account ID, an account name, an LPAR name, or an LPAR serial number. If you searched for an account ID or name, the Account Detail page displays. From the Account Detail page, you can manage accounts, software, hardware, and contacts.

Using the Account Detail page

When you click an account ID in the Account List, an Account Detail page displays tables with information about that account.



You can perform actions and download reports from the following:

- Account table
- Account Statistics table
- LPAR Name/Serial Search field
- Composite List table
- Software LPARs w/o Hardware table
- Hardware LPARs w/o software table
- Hardware w/o Hardware LPAR table

Account table

The Account table contains the account ID, name, type of account, and department associated with the account.

Account Statistics table

The Account Statistics table contains the following information:

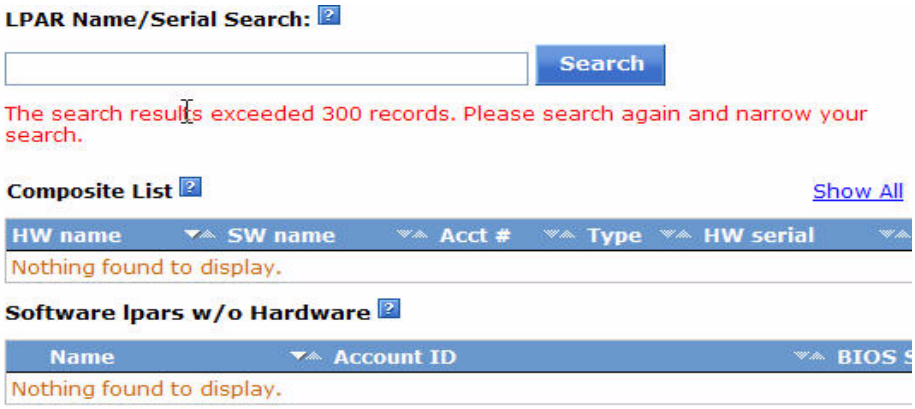
Type	Definition
HW Discrepancies	Number of hardware LPAR discrepancies created as placeholders in the account before the hardware baseline has been updated
HW LPARS	Total number of active hardware LPARs in the hardware baseline and hardware LPAR discrepancies. All HW LPARs come from ATP
HW with scan	Total number of active hardware LPARs that contain installed software information from a scan or manual software load
HW w/o scan	Total number active hardware LPARs that do not contain any installed software information
HW% w/scan	Percentage of total active hardware LPARs that contain installed software from a scan or manual software load
SW Discrepancies	Number of software product discrepancies or software products validated against the list of software products
SW	Total number of active installed software products
SW LPARS w/o HW	Total number of hardware records that do not have a hardware LPAR associated to them

LPAR Name/Serial Search field

In the **LPAR Name/Serial Search** field, you can search for a specific hostname or serial number in an account. After you perform a search by LPAR or serial number, the Account Details page displays information associated with that LPAR or serial number.

In the **Search text** field, you can type a full or partial text string to locate data based on the type of search you selected. The tool will, by default, return only hardware records that are listed as *Active* in the hardware baseline.

Attention: If you have a large account and the search results exceeds 300, the following page displays. If that happens, review the Account Assets report or Software MultiReport and narrow your search to specific LPARs or serial numbers.



Composite List table

This table lists the hardware/software composite records. A composite is created when a hardware LPAR (*hostname*) in the hardware record matches an active software LPAR name (*hostname*). This is done by matching the hostname as it is loaded to BRAVO.

Software LPARs w/o Hardware table

This table lists all active software LPAR scans that are not associated with a hardware asset record.

In the Software LPARs w/o Hardware table, the following information displays:

- **Name** is the host name on which the software resides.
- **Account ID** is the account associated with the software.
- **BIOS Serial** is the logical serial number of the BIOS for the LPAR on which the software resides.

Hardware LPARs w/o software table

This table lists all active hardware asset records that are not associated with a software scan. The table provides the following information:

- **LPAR Name** is the name of the machine, otherwise known as hostname, machine name, or node name.
- **Account #** is the number of the account associated with the LPAR.
- **Type** is the asset type of the machine identified in the hardware baseline. Types are Server, Mainframe, AS400, or Workstation.
- **Serial** is the serial number of the asset obtained from the hardware baseline.

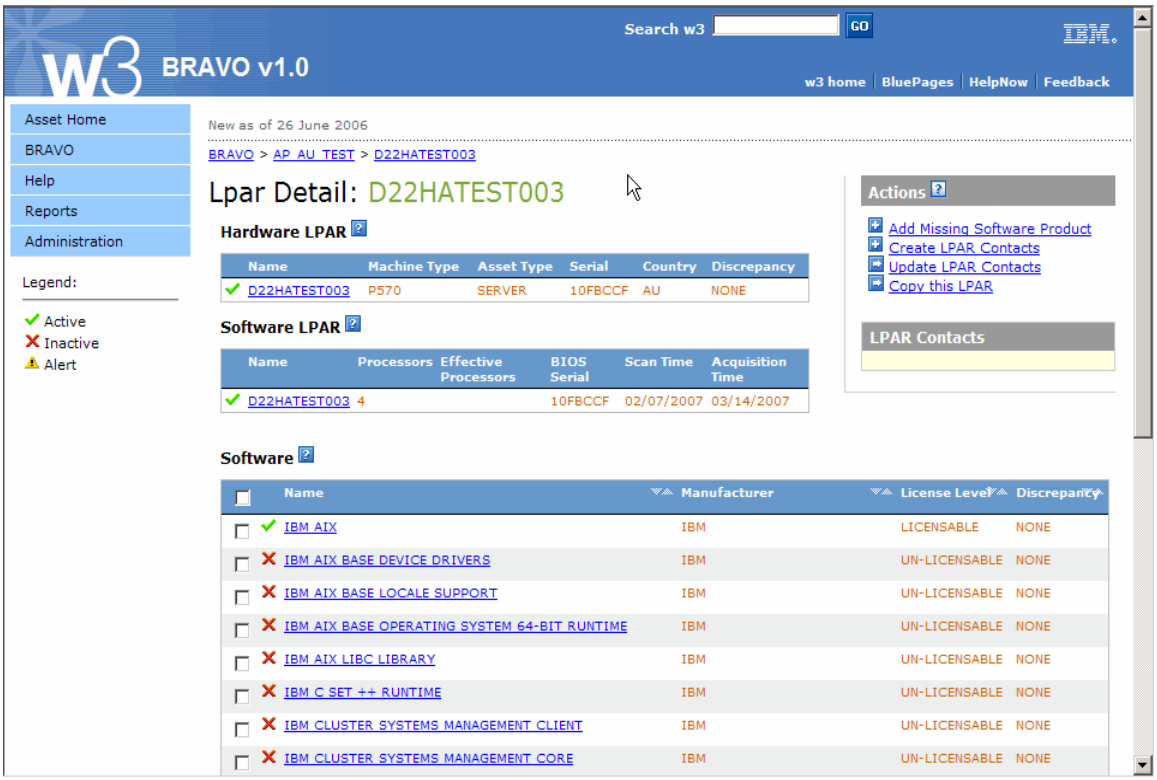
- **ATP Status** is the hardware deployment status from the hardware baseline. The ATP status can be ACTIVE, INACTIVE, HWCOUNT, REMOVED, or not displayed (if not populated in the hardware baseline).

Hardware w/o hardware LPAR table

The Hardware w/o hardware LPAR table lists all hardware assets in BRAVO that do not contain a hardware LPAR value (*hostname*). A hardware LPAR value must be in the hardware record before a composite can be built.

Managing software and hardware

When you log into BRAVO and search for an LPAR name or serial number, the Lpar Detail page displays.



Using the Lpar Detail page

The LPAR detail page displays the hostnames for the account. By default, BRAVO displays only the active hostnames. By clicking **Show All** above the table, you can view assets that are inactive or removed (where the asset was removed from the hardware baseline previously). The tool also returns software scans that are active. Inactive or removed software scans are not displayed.

The Lpar Detail page contains the following information:

- Hardware LPAR table

- Software LPAR table
- Software table
- Validate button

Hardware LPAR table

If a hardware LPAR exists, the details about the LPAR are collected using ATP and are displayed in the Hardware LPAR table as follows:

- **Name** is the machine, otherwise known as hostname, machine name, or node name.
- **Machine Type** is a four character identifier from the hardware baseline.
- **Asset Type** is the machine, which could be a server, mainframe, workstation, or other host.
- **Serial number** is the serial number of the asset from the hardware baseline.
- **Country** is the location of asset from hardware baseline.
- **Discrepancy** identifies that the hardware was previously entered in as a MISSINGHW LPAR. The hardware baseline must be updated to correct these discrepancies.

In the Hardware LPAR table, you can click a hardware name so that the Hardware Detail page displays with more information, such as the hardware type, serial number, country, and discrepancy. If Comment History is available for the hardware, you can view the action, user, and time the comment was created.

Software LPAR table

The Software LPAR table contains the name of a software product, the number of processors, the BIOS serial number, the date and time the asset was validated, and the date the software was acquired. This data is collected from the automated software scan or from uploaded manual software scans.

- **Name** is the machine, otherwise known as hostname, machine name, or node name.
- **Processors** is the number of physical processors found on the asset.
- **Scan Time** is the date and time the automated tool scanned the asset.
- **Acquisition Time** is the date and time when the data file was uploaded to BRAVO.

If **No Software Records** displays in the table, no software records exist for this hostname. The scan data or missing software discrepancies should be added to BRAVO for this asset.

Software table

The software source table displays the unique ID representing the scan infrastructure that was the source of the software inventory data. This ID is referred to as a “SigBank Account ID.” SigBank IDs are managed by the Asset Tools team.

The Software table contains the following information:

- **Name** is name of the software found during the scan.
- **Manufacturer** is the name of the software manufacturer that is listed in the Signature Bank database.
- **License level** is the license level listed in the Signature Bank database. A license can be considered Licensable, Unlicensable, or Component. Licensable means that a license was purchased for the software. Unlicensable means that the software is freeware. Component means that the software came with another piece of software that was installed.
- **Discrepancy** identifies the type of software discrepancy status submitted for an asset record. This includes None, Valid, Invalid, or False Hit.

In the Software table, you can click one or more of the checkboxes beside the software products to validate them; or, you can click **Name** in the table header to select all of the software products in the table and validate all of them at the same time.

Note: Validating the installed software across all assets is mandatory for all mainframe software and is recommended for distributed software.

Performing actions in BRAVO

You can perform the following tasks in BRAVO.

- Validating installed hardware
- Validating installed software
- Creating an effective processor count
- Creating a software discrepancy
- Adding missing software
- Uploading TLCMz (formerly SoftAudit) software
- Uploading a Dorana scan
- Uploading a TAR file
- Copying an LPAR

Validating installed hardware

BRAVO receives updates from ATP daily. Hardware data from ATP that is loaded into BRAVO should be validated to ensure the information about the hardware assets is accurate for software reconciliation. Any discrepancy found in BRAVO should be changed by using the file upload process in ATP. For more information about the file upload process in ATP, go to the Asset Management Tools Home page at .http://tap.raleigh.ibm.com/.

Validating installed software

Validating installed software that has a status of *none* is mandatory for all mainframe software. Validating distributed software is recommended, but not required. Review the list of installed software products and submit discrepancies for *missing* or *false hits*.

- **To validate installed software**

1. Locate and click the account ID number for which you are validating software.

   The Account Detail page displays.
2. Locate and click the LPAR name that requires the validation.

   The Lpar Detail page displays.
3. Select the software products that you are validating, or click **Name** in the table header to select all software listed in the table.
4. Click **Validate**.

   The software in the table displays the results as VALID.

Creating an effective processor count

An effective processor count is the actual number of physical processors on a hardware asset. Sometimes a scan reports physical *and* logical processors. This hyperthreading might cause the count of physical processors in an asset scan to be inaccurate. You should add a physical processor if the actual number of physical processors differs from the number of logical processors provided by an automated scan tool.

- **To create an effective processor count**

1. Locate and click the account ID.

   The Account Detail page displays.
2. Locate and click the LPAR for which you are creating the effective processor count.

   The Lpar Detail page displays.
3. Click the LPAR name.

   The Software Home page displays.
4. Click **Create Effective Processor Count**.

   The Create Effective Processor Count page displays.
5. In the **Effective Processor Count** field, type the correct processor count.
6. Ensure that the **Status** field shows **ACTIVE**.
7. Click **Create**.

Creating a software discrepancy

You can update a software discrepancy to add software products to an LPAR if the software products are missing from the baseline.

- **To update a software discrepancy record**

1. Navigate to the required account.
2. Click the account ID.

   The Account Details page displays.
3. Click the LPAR for which you are creating the software discrepancy.

   The Lpar Detail page displays.
4. Click the name of the software product.

   The Software Detail page displays.
5. Click **Update Software Discrepancy**.

   The Update Software page displays.
6. Make the necessary updates.
7. Click **Update**.

Adding missing software

The Add missing software function provides the option to add an installed software product to an LPAR that is currently missing. This software may be missing on the LPAR because a scan did not identify the product or because the system could not be scanned. After the software is added, the product is displayed as a MISSING software discrepancy and is included as a valid and active installed product on reports from BRAVO and fed to other systems, such as TRAILS as an installed product.

If the system is scanned after this addition, and the software is found, the discrepancy status is updated to NONE, and is viewed in the same way as other products.

- **To add missing software**

1. Navigate to the Lpar Detail page and locate the Software LPAR table.
2. In the right navigation menu, click **Add Missing Software Product**.

   The Select Missing Software page displays.
3. Type the name of the software in the **Software Name/Mfg Search** field.

   Note: A partial text string is accepted.
4. Click **Search**.

   A list of software products from the Signature Bank repository displays on the Select Missing Software page.
5. Click the name of a software product to add the software as a discrepancy for missing software.

- **To upload software discrepancies via the template**

1. Navigate to the required account.
2. Click the account ID.

The Account Details page displays.

3. Click **Software Discrepancy Upload template**.

   Note: If manual scanning was used for an account, you must select the exact product names from the **Software Catalog** tab in the SW Discrepancy Upload Template because it contains the manual scan information. Copying and pasting the information is best; however, pay attention that no additional spaces are added to the ends of fields, or the template will not load properly. If an account is automatically scanned, then you can use the Signature Bank to locate software products.

4. Complete the fields in the template.
5. Click **Upload**.

Uploading TLCMz (formerly SoftAudit) software

A user can upload a TLCMz (formerly SoftAudit) scan file from the account detail page. This scan file is read by the system to determine the serial number and LPAR name of the asset. The user is able to determine if the scan file should apply to additional mirrored LPARs as well, in the tool.

• To upload the software

1. Locate and click the account ID for which you are uploading software to a mainframe server.

   The Account Detail page displays.

2. In the Actions menu, click the link to **Upload TLCMz Software**.

   An Upload page displays.

3. Locate the file, and click **Upload File**.
4. Review and validate the serial number and LPAR name that was read from the scan file.
5. If required, select additional LPARs from the given mainframe hardware list for which to apply the scan file.
6. Click **Submit File**.

Uploading a Dorana scan

A user can upload a Dorana scan file from the account detail page. This scan file is read by the system to determine the serial number and LPAR name of the asset. The user is able to determine if the scan file should apply to additional mirrored LPARs as well, in the tool.

• To upload the software

1. Locate and click the account ID for which you are uploading software to a mainframe server.

   The Account Detail page displays.

2. In the Actions menu, click the link to **Upload Dorana Scan**.

An Upload page displays.

3. Locate the file, and click **Upload File**.
4. Review and validate the serial number and LPAR name that was read from the scan file.
5. If required, select additional LPARs from the given mainframe hardware list for which to apply the scan file.
6. Click **Submit File**.

Uploading a TAR file

If you are using a standalone script process to collect software data, you can upload a TCM script TAR file to collect software data. The TAR file is created from multiple TAR.Z scan results files.

The TAR file is uploaded directly to the asset management server. The file goes into a queue for loading to the database, and the results display in BRAVO once the upload is complete.

For information about creating TAR files, go to http://tap.raleigh.ibm.com/standalone/TAR/TARInstructions.doc.

• To upload a TAR file

1. Locate the account ID for which you will upload the TAR file.
2. Click **Upload TCM Script TAR File**.

   The TCM Upload page is displayed.
3. Click **Browse** and locate the file on your workstation.
4. Select the file.
5. Click **Upload**.
6. Click **TAR file submission logs** in the left navigation of the Asset Management Tools Home page to view the results.

Copying an LPAR

You can copy all product validations from the *FROM* LPARs to each corresponding product on the *TO* LPARs if you have identical LPARs. In other words, you can copy all the information that has been validated on one asset onto another asset. Your copy does not overwrite any product validation that has already been completed on the *TO* LPARs. The copy function applies the validations on the entire LPAR, and not just the product that you manage within a product tower.

• To copy an LPAR during a mainframe validation

1. Navigate to the LPAR name.
2. Validate software products on the *FROM* LPAR.
3. On the Lpar Detail page, in the Actions menu, click **Copy This LPAR**.

A list of LPARS for the account is displayed.

4. Select one or more LPARs ON THE SAME CPU as the *FROM* LPAR.
5. Click **Copy** at the bottom of the window.

   You receive an e-mail informing you that your copy is in progress.
6. Review the list of *TO* LPARs and make any validation changes, if needed.

Managing contacts

You can manage the contacts for BRAVO accounts by searching Blue Pages for a contact responsible for an account and adding the name of that contact to the list of account contacts. This contact information is useful for Asset Management Analysts when they have discrepancies that they need to discuss with the technical contact for an account.

You can also search Blue Pages for a technical contact responsible for a specific LPAR and add the name of that contact to the list of LPAR contacts. LPAR contacts are usually created for mainframe assets so that the asset management analysts can contact a person listed as the LPAR contact to make sure the software products are being validated.

Creating account contacts

You can add an account contact using Blue Pages.

- **To create an account contact**

1. On the Account Detail page, in the Actions pane on the right side of the window, click **Create Account Contacts**.
2. Search Blue Pages for the contact name.
3. Click the “+” beside the contact name to add the name to the list of account contacts.

Updating account contacts

You can update an account contact using Blue Pages.

- **To update an account contact**

1. On the Account Detail page, locate the Actions pane in the right side of the window.
2. Click **Update Account Contacts**.
3. Select **Refresh all existing contacts from Blue Pages**, **Add Account Contact**, or the “-” beside the contact name to delete it.

- **To create an LPAR contact**

1. On the Accounts Detail page, click a hardware name in the Composite List.

   The Lpar Detail page displays
2. Click **Create LPAR Contacts**.

3. Search Blue Pages.
4. Click the "+" beside the contact name to add the name to the list of LPAR contacts.

- **To update an LPAR contact**

1. On the Accounts Detail page, click a hardware name in the Composite List.

   The Lpar Detail page displays
2. Click **Update LPAR Contacts**.
3. Search Blue Pages.
4. Select **Refresh all existing contacts from Blue Pages**, **Add Account Contact**, or the "-" beside the contact name to delete it.

Using reports

All users of BRAVO can access the reports generated by BRAVO. For best results, save reports to your workstation.The following reports are available:

- Account Discrepancies report
- Account Assets report
- Software Multi report
- All LPARS with this software report
- Department Scan reports
- Global Scan reports

Account Discrepancies report

An Account Discrepancies report provides a list of all products and their current discrepancy status.

Note: Account discrepancies reports for distributed software are available in TRAILS.

	B	C	D	E	F	G	H	I	J	K	L	M
1	Account Name	Account Type	Department	Hostname	Software Name	Discrepancy Type	Invalid Category	Updated By	Last Updated On	Version	Research Flag	Comment
2	IBM	STRATEGIC OUTSOURCING AS400	Q000	D22TMRTEST006	IBM AS/400 LICENSED INTERNAL CODE	MISSING		user@us.ibm.com	9/20/2007 5:16	1		Software Discrepancy Load
3	IBM	STRATEGIC OUTSOURCING AS400	Q000	D22TMRTEST006	MICROSOFT WINDOWS 2000 SERVER	VALID		user@au1.ibm.com	9/20/2007 5:17	V5R1		Software Discrepancy Load
4	IBM	STRATEGIC OUTSOURCING AS400	Q000	D22TMRTEST006	GNU ZIP COMPRESSION UTILITY TOOL - GZIP	NONE		STAGING	9/20/2007 5:16			

The following explains the types of discrepancies in the Discrepancy Type column.

- **NONE**: The product has not been validated yet.
- **FALSE HIT**: The scanning tool identified a product that is not installed on the system.

- **INVALID**: Software is installed but is not currently running.

  Note: If the product does not fall into any of the following Invalid Software Categories, it should be marked *Valid*.

  - **Blocked in IFAPRD**: The product is listed in the IFAPRD member as *Disabled*.
  - **Customer managed**: The customer manages the support and installation of the product.
  - **Duplicate product - In Use**: If the scanning tool has identified a product multiple times, mark this one as a duplicate product and add a comment that includes the product name that it duplicates. Make sure that the correct occurrence is marked as a valid product.
  - **Misidentification**: The scanning tool identified this as one product, but it is really another product. Add a comment and note the correct product name.
  - **Part of Another Product**: The product is a free feature of or included in another product and not available separately. Add a comment as to what product this is part of.
  - **Shared DASD - (not in use on this LPAR)**: The product is on Shared DASD and used on another system but not needed on this system. Add a comment as to what LPAR this product is used on.
  - **Vendor Key Required but Not Present**: The product is installed but cannot run because a key is required and has not been installed.
  - **Restrictive vendor key**: Some vendors combine several related products into a package and supply keys specific to some combination of those products, such as the ones you have licensed. The other products are installed, but are not accessible by this restricted key; for example, SAS. Mark these other products that cannot be accessed as: Invalid. Restrictive Vendor Key. Add a comment to state the name of the associated product package.

Account Assets report

The Account Assets report is useful when an account has a large amount of hardware and software data. You can use this report to reconcile hardware and software data before loading it into TRAILS.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Account ID	Account Name	Account Type	Department	Hostname	Asset Type	ATP Serial Number	BIOS Serial Number	Hardware	Software	Hardware Status	Machine Type	Customer Number	Scantime Date	Processo Count
2	44555	AUTO_TEST	STRATEGIC OUTSOURCING AS400	Q000	D22TMRTEST	WORKSTATION	1234AVT	11TACAB	Y	Y	ACTIVE	6221	40390XX	9/10/2007	
3	44555	AUTO_TEST	STRATEGIC OUTSOURCING AS400	Q000	D22TMRTEST	AS/400	99LAZKL		Y	Y	ACTIVE	9406	20000XX		
4	44555	AUTO_TEST	STRATEGIC OUTSOURCING AS400	Q000	D22TMRTEST	AS/400	1234567		Y	N	ACTIVE	9406	45000XX		
5	44555	AUTO_TEST	STRATEGIC OUTSOURCING AS400	Q000	No LPAR	AS/400	2343ULP		Y	N		9402	25600XX		
6	44444	AP_TEST	STRATEGIC OUTSOURCING AS400	Q000	No LPAR	SERVER	23F1000		Y	N	INACTIVE	8658	20000XX		

Download the Account Assets report and save it to your workstation as a Microsoft Excel file. Open it in Microsoft Excel and sort the Hardware column.

- If a **Y** is in the hardware field and the software field, a green check displays in TRAILS.
- If a **Y** is in the hardware field, and an **N** is in the software field, an LPAR in ATP does not have a corresponding software scan.
- If an **N** is in the hardware field, and a **Y** in the software field, a software scan exists, but ATP could not find the hostname in ATP.

Sometimes a software scan finds the BIOS serial number while ATP is updated with the physical serial number. You might have duplicate serial numbers with different hostnames, which results in a discrepancy. You can find the discrepancy using this report. If one of the servers is in error, you can correct it by updating the Hardware Asset Management Source System.

Software Multi report

The Software Multi Report is a complete set of installed software data that provides information in three separate views. This information is provided as a way to easily provide the asset management analysts, system administration teams, and account teams with installed software data collected by scans and/or manually loaded in a single report.

	A	B	C	D	E	F	G	H	I	J	K
1	REPORT DATE: September 25, 2007 8:53:46										
2	HOSTNAME	MODEL	SERIAL NUMBER	SCANTIME	OS	OS VERSION	PROCESSOR COUNT	SOFTWARE NAME	SOFTWARE VERSION	LICENSE	ACCOUNT
3	AA2393123	IBM 2000M4J	99D975A	2007-06-20 11:0	MICROSOFT WINDOWS XP PROFESSIONAL	5	1	MICROSOFT OFFICE STANDARD EDITION	10.0.6626.0,8	LICENSABLE	ACCONTBD
4	AA2393274	IBM 2373M4J	99D975N	2006-09-13 11:0	MICROSOFT WINDOWS XP PROFESSIONAL	5	1	MICROSOFT PROJECT STANDARD EDITION	10.0.2915.0	LICENSABLE	ACCONTBD
5	AA2393274	IBM 2373M4J	99D975N	2006-09-13 11:0	MICROSOFT WINDOWS XP PROFESSIONAL	5	1	MICROSOFT VISIO PROFESSIONAL EDITION	11.0.3216.56	LICENSABLE	ACCONTBD
6	IBM-99TWABC	IBM 20000JM	99TWABC	2007-06-20 11:0	MICROSOFT WINDOWS XP PROFESSIONAL	5	1	IBM WEBSPHERE EVERYPLACE CONNECTION MANAGER	MANUAL	LICENSABLE	DISCREPANC

This report is provided as a .zip file that may contain multiple Excel files based on the size of the account. The report is generated once a day and each tab of the report includes the date and time that the report was generated. Each file contains multiple tabs to display each view. The data pulled into this report includes all active software LPARs and active installed software. Software products that have been marked as INVALID or FALSE HIT, as a result of the validation effort, are not included in the report. Logical system data, such as the BIOS Serial Number, from an automated scan is included, but hardware information from the hardware LPAR record is not included in this report.

Following is a description of each of the three views available within the report.

- **Heartbeat View:** This view provides a list of all assets (software LPARS) that currently have associated installed software. This includes logical system data when the machine was scanned with an automated scanning tool that can provide the information. It also provides a scan, or load, time as well as the “Bank Account,” or data source, of the software LPAR. The Bank Account is a name given to the scanning infrastructure from which the software data was collected. A Bank Account of

Discrepancy indicates that software was loaded manually as a missing software product.

- **Product Count View:** This view provides a count of each installed product grouped by Operating System. The counts include the number of machines installed on and the number of total processors installed on.
- **Software View:** This view provides a complete list of active installed software on each machine. Due to a limitation with Microsoft Excel, there may be multiple tabs of software due to the size of the account. Software products that have been marked as INVALID or FALSE HIT, as a result of the validation effort, are not included in the report. This also includes logical system data when the machine was scanned with an automated scanning tool that can provide the information. It also provides a scan, or load, time as well as the “Bank Account” of the software LPAR.

All LPARS with this software report

On the Software Detail page, you can request a report that lists every asset in the account that has a particular software product; for example, all workstations that have IBM Lotus Notes, or all servers that have IBM Director.

	A	B	C	D	E	F	G	H	I	J
1	Account ID	Account Name	Account Type	Department	Hostname	Software Name	Discrepancy Type	Last Updated By	Last Updated On	Research Flag
2	40000	AABBCC	STRATEGIC OUTSOURCING	BAA	BE-S-0000	PKWARE PKZIP	NONE	STAGING	6/7/2007 2:28	
3	40000	AABBCC	STRATEGIC OUTSOURCING	BAA	BEABBJUMD0000	PKWARE PKZIP	NONE	STAGING	6/7/2007 2:29	
4	40000	AABBCC	STRATEGIC OUTSOURCING	BAA	BEABBJUMA0000	PKWARE PKZIP	NONE	STAGING	8/17/2007 1:09	

This report can be useful if the software problem exists on more than one asset.

Department Scan reports

When you click **Reports** on the left navigation bar, you have the option to select **Department Scan Reports**. These reports are available on the interface (rather than a downloadable report) to assist the asset management analysts to identify the current status on scan data.

The Department Scan Report allows the user to select an asset management department from a menu and obtain the scan report for that department only. The report contains the scan data by account and provides contact names for hardware and software analysts listed in the Customer Number Database. The account ID link can be used to take the user directly to an account's detail page in BRAVO.

Global Scan reports

When you click **Reports** on left navigation bar, you have the option to select **Global Scan Report**. These reports are available on the interface (rather than a downloadable report) to assist the asset management analysts identify the current status on scan data. The Global Scan Report provides software scan information by country and its associated geography and region.

This data is broken out by asset type, such as Server, Workstation, AS/400, Mainframe, and NA (for information on systems with no associated hardware).

You can view the total list of active LPARS that do not have a software scan, the total active hardware records on the account, the total active composites (software tied to hardware), and the percent of the total active hardware records that contain scan information.

If you click the geography, region, or country, you can see the same data for that area only.