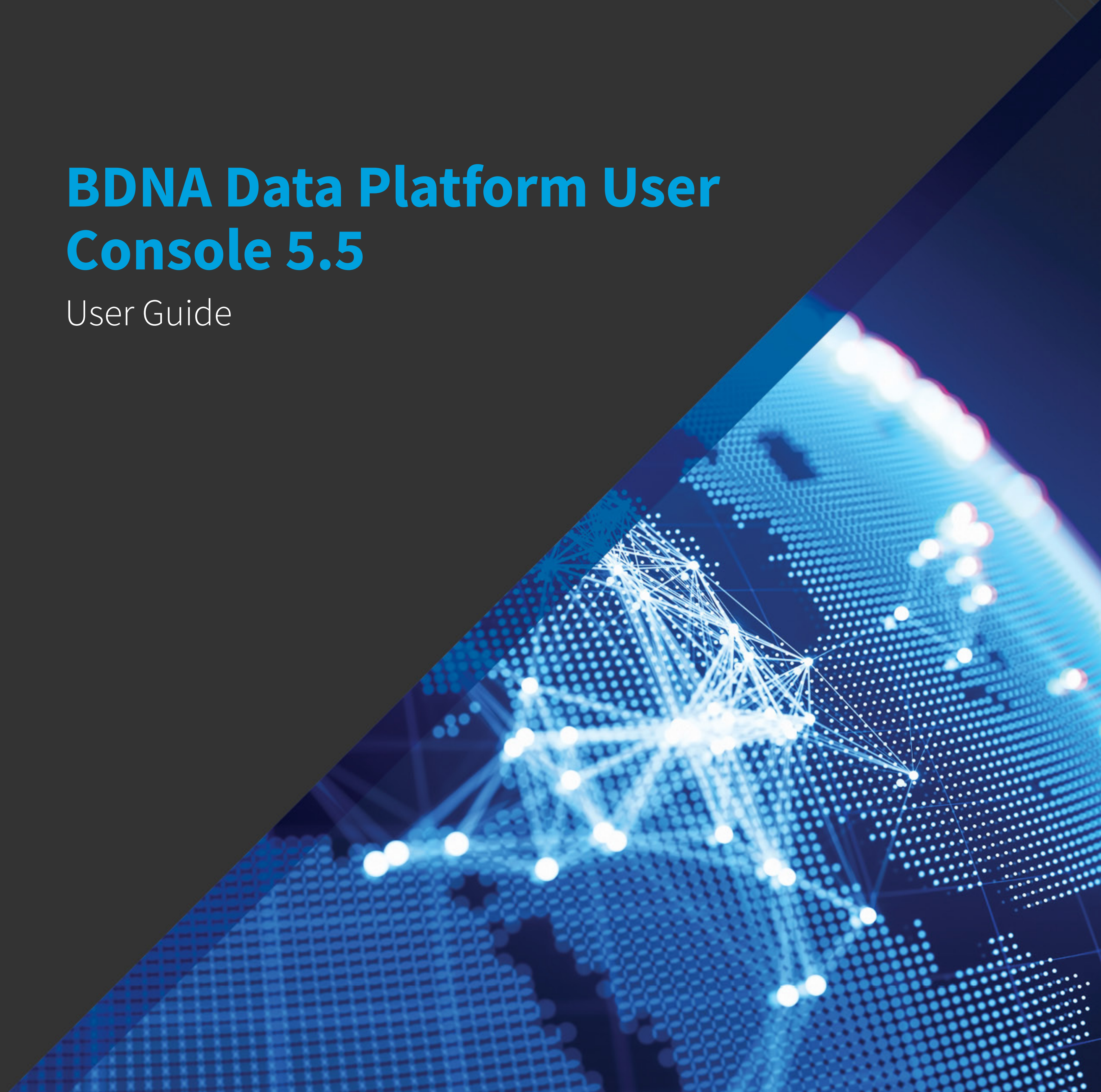
BDNA Data Platform User Console 5.5

User Guide



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BDNA User Console Basics

About the User Console

Welcome to the BDNA User Console *User Guide*. The BDNA User Console *User Guide* will help familiarize you with navigating the BDNA User Console and making the most out of its search and browse capabilities. It will also demonstrate the close integration of the User Console search-and-browse functionality with BDNA Analyze, and how you can generate reports from product data with just a single click of the mouse.

The BDNA User Console instructions assume you have installed both the BDNA Data Platform and the BDNA User Console. In addition, you must have licensed access to all of the components that comprise the BDNA Data Platform, including Technopedia, Normalize, Analyze, and Private Catalog. It also assumes.that the BDNA User Console server is connected to the BDNA Data Platform server and is properly configured.

If you need help configuring the BDNA User Console server, refer to the BDNA User Console *Installation and Configuration Guide*. Instructions for installing and configuring the BDNA Data Platform are contained in the *BDNA Data Platform Installation and Configuration Guide*.

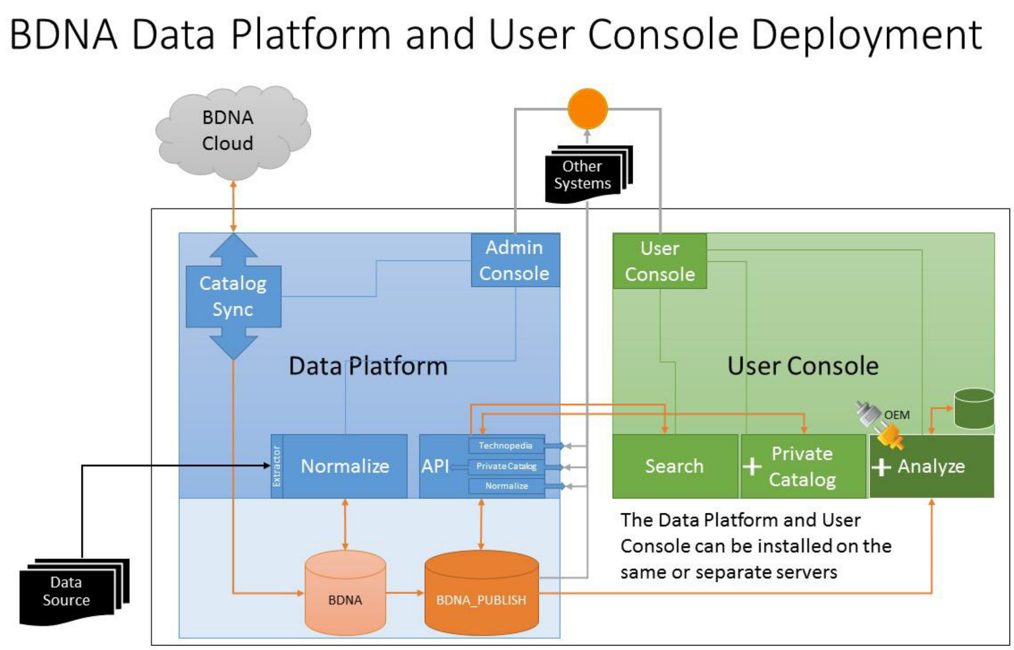
About the BDNA User Console

Depending on your product licensing, the BDNA User Console provides access to one or more features of the BDNA Data Platform:

- Search and browse Technopedia data and view normalized systems. You can also view BDNA Analyze reports through a single interface.
- Perform analysis and reporting with Analyze (an optional component of the BDNA User Console). BDNA Analyze is tightly integrated with the new search functionality. You can start an analysis immediately after finding Technopedia and Normalize data through the search and browse functions. When viewing a report, you can right-click a Technopedia entry and go to the User Console detail page for more detailed information about the object.
- Add content to a Private Catalog (an optional component of the BDNA User Console), where you can manage private attributes, private products and mapping.

Architecture

Figure 1-1: BDNA Data Platform and User Console On-Premise Architecture



How to Login to the BDNA User Console

Note • *You must have the Web address and login credentials for the BDNA User Console. If you do not have them, you must contact your system administrator, IT manager, or supervisor.*

Task ***To login to the BDNA User Console:***

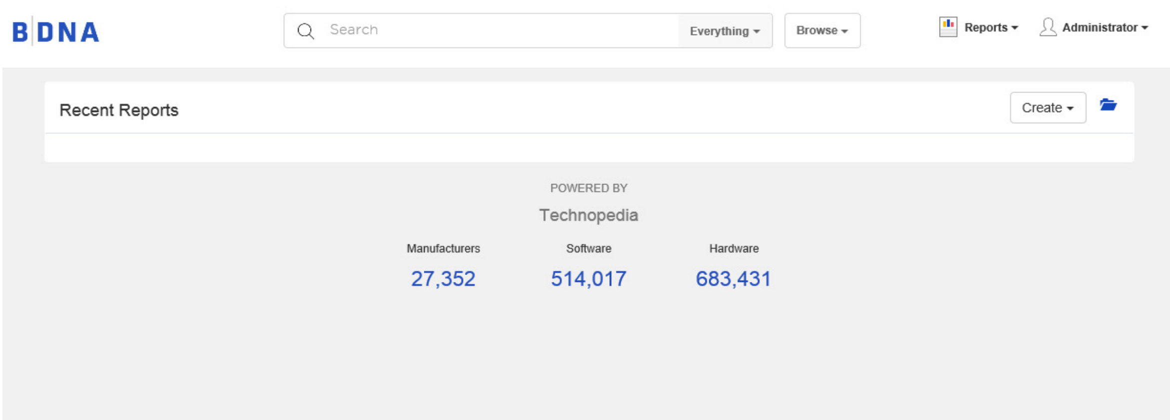
1. Open a web browser and type the address of the BDNA User Console server.
2. An introductory screen opens with a **Login** section in the center of the screen.
3. Type your user name and password in the appropriate fields and click **Login**.

You are now logged in to the BDNA User Console. You can start browsing and searching Technopedia and Normalize data, creating and mapping Private Catalog objects, and creating Analyze reports and dashboards.

Welcome Screen

The first thing you will see after you log in is the initial User Console splash screen. The initial User Console splash screen only shows Technopedia statistics (as shown in Fig 1-2 Administration Console Splash Screen at Initial Startup).

Figure 1-2: Administration Console Splash Screen at Initial Startup



The User Console splash screen changes after you run your first Normalization in the BDNA Administration Console. It will display a “Recent Reports” panel that shows a default set of reports. The reports that appear in the panel depend on the following user operations:

When you run a Normalize IT data source process:

- Normalize Matching Summary
- Hardware Summary
- Software Summary
- Operating System Summary

When you run a Normalize PO process:

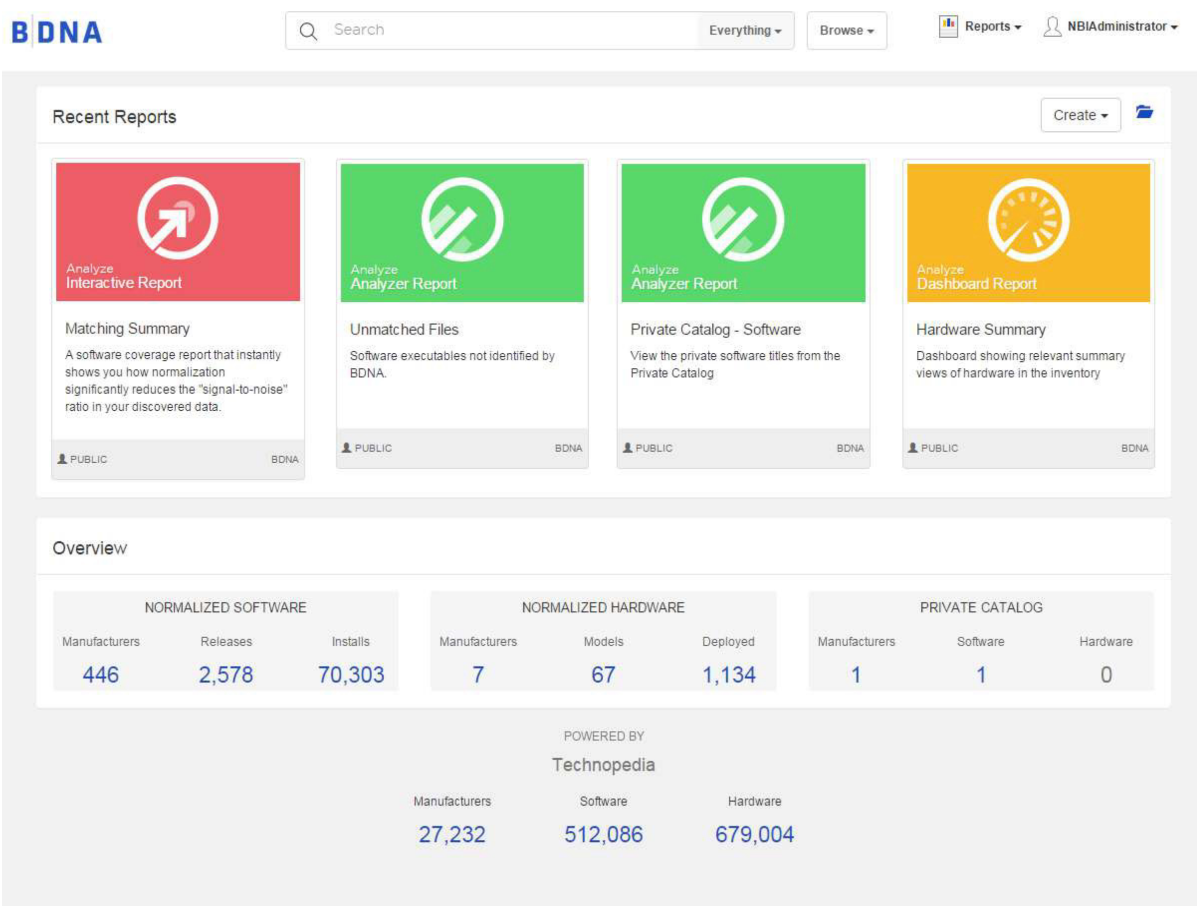
- Purchase Order Normalization

When you run both a Normalize IT and PO process, and the user has not yet clicked on any other report, the following 4 reports are shown:

- Normalize Matching Summary
- Hardware Summary
- Software Summary
- Software Compliance Dashboard

After you run your first Normalization, the User Console Welcome screen changes, as shown in Welcome Screen The Welcome screen provides access to a variety of BDNA User Console features that are explained in detail in Home page

Figure 1-3: Welcome Screen

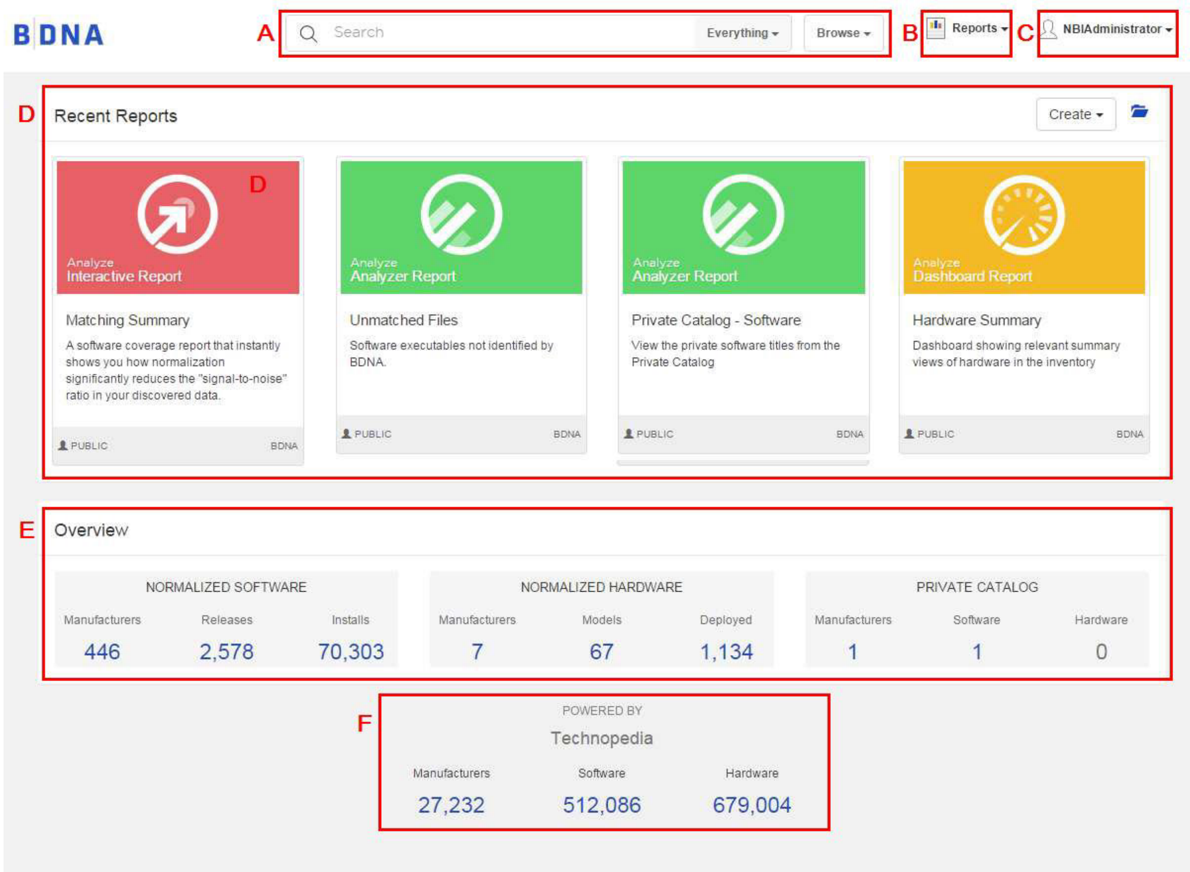


Navigating the BDNA User Console

The BDNA User Console interface provides a central control mechanism from which you can access and consume BDNA data. It integrates and centralizes the searching, browsing, and reporting of both Technopedia and Normalize data.

The information found in this chapter provides an overview of the BDNA User Console interface. It will help familiarize you with navigating the BDNA User Console and getting the most out of its search and browse capabilities. Refer to the individual chapters noted below for more detailed information about searching, browsing, adding hardware and software products to a Private Catalog, and creating reports and dashboards in Analyze.

Figure 1-4: Home page

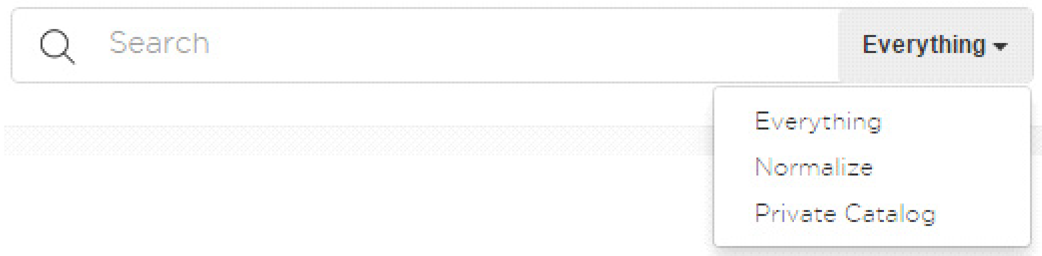


Using the Home Page Controls for Searching and Browsing

Controls for Searching and Browsing

Searching—Use the text-entry field and search scope drop-down menu (as shown in Fig 1-6 Browse drop-down menu) in order to control the overall scope of search parameters.

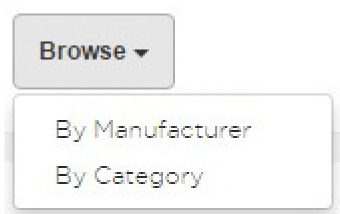
Figure 1-5: Search string entry field and search scope drop-down menu



Note • *Search indexing occurs after every normalization and/or synchronization. A delta-based indexing occurs each time a new Private Catalog entry or a new Analyze report is created or updated.*

Browsing—Use the Browse drop-down menu (as shown in Browse drop-down menu) to view Technopedia objects by Manufacturer or by Category. From the listing of Manufacturers and Categories, you can drill down further in order to view additional details about specific hardware or software products. See <Z_Hyperlink>Chapter 2, “" for more detailed information about the User Console search and browse features.

Figure 1-6: Browse drop-down menu



Reports

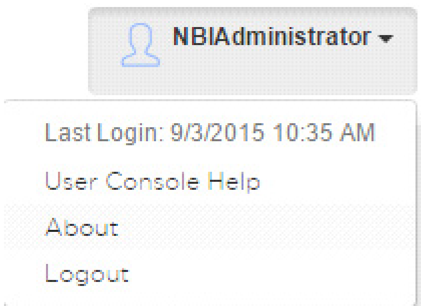
The Report drop-down (as shown in Create drop-down) enables you to create the following:

- Analyzer Reports
- Dashboards
- Interactive Reports
- C. User Information

The User Information drop-down is located in the upper-right corner of the User Console. You can use this drop-down to make a selection from a menu of items that access a variety of information about your BDNA User Console installation. You can also use this drop-down to logout from your current User Console session. Information provided includes:

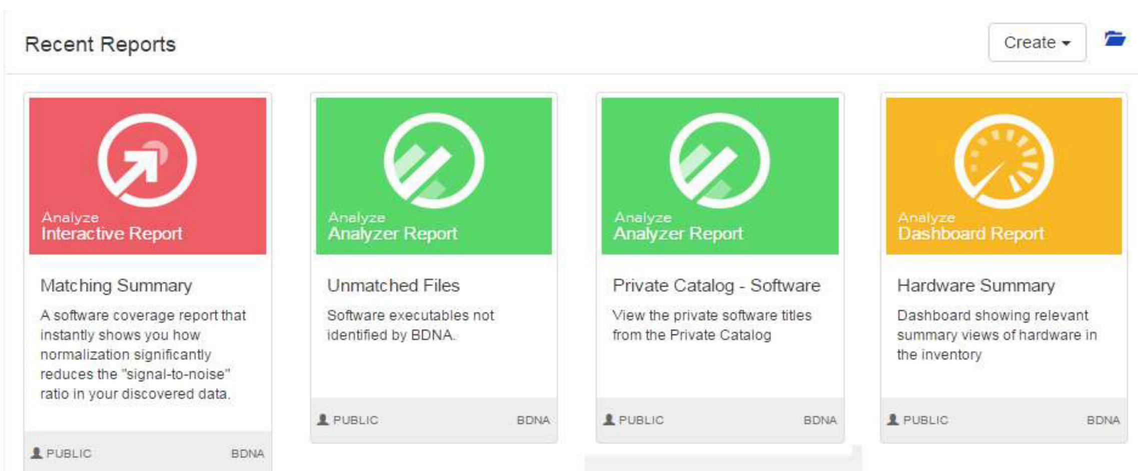
- **Last Login**: Shows last login date and time.
- **User Console Help**: Provides links to the online help.
- **About**: Provides a link that opens a a dialog containing information about your Technopedia, Data Platform, and User Console versions.
- **Logout**: Provides an easy way to log out of the User Console.

Figure 1-7: User Information drop-down



Recent Reports

The Recent Reports panel contains the features and functionality associated with the Analyze component of the BDNA User Console. The most recently accessed Analyzer Reports, Dashboards, and Interactive Reports are displayed in this section. They are shown in chronological order with the most recent entries on the left. See the Recent Reports panel.

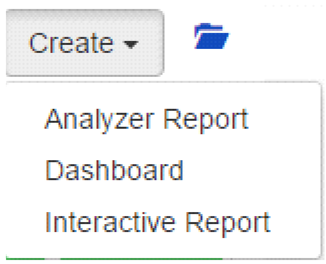


The Folder icon, located at the upper-right corner of the Recent Reports panel, opens the Report Management page, which provides access to the entire list of Reports and Dashboards available to the user.

Also located on the Recent Reports panel, the Create drop-down enables you to create the following:

- Analyzer Reports
- Dashboards

- Interactive Reports
- Create drop-down

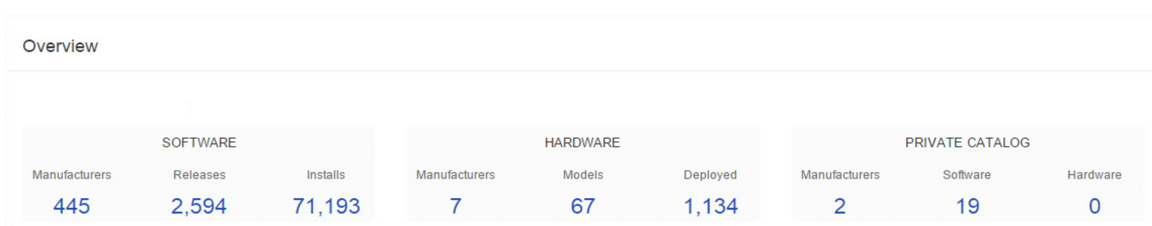


Overview Panel

Also located on the User Console Home page, the Overview panel (as shown in Fig 1-8 Overview panel), provides an at-a-glance summary of the following IT environment data:

- Normalized Software
  - Number of manufacturers with software deployed on the environment.
  - Number of software releases deployed on the environment.
  - Number of software installations on the environment
- Normalized Hardware
  - Number of hardware manufacturers deployed on the environment.
  - Number of hardware models deployed on the environment.
  - Number of systems deployed on the environment.
- Private Catalog
  - Number of Manufacturers defined through Private Catalog module.
  - Number of Software defined through Private Catalog module.
  - Number of Hardware defined through Private Catalog module.

Figure 1-8: Overview panel



Technopedia Summary

The Technopedia Summary (as shown in Technopedia summary) is located below the Overview panel at the bottom of the User Console Home page. It indicates the number of Manufacturers, Software, and Hardware available in the Technopedia Catalog, the world's largest repository of hardware and software products.

Figure 1-9: Technopedia summary

2

Searching and Browsing Basics

This chapter provides detailed instructions on how to use the BDNA User Console search and browse features.

Searching and Browsing Data

The User Console provides an easy-to-use search and browse feature for Technopedia, Normalize, and Private Catalog data.

Controls for Searching

- **Search Scope**—Use the Search Scope entry field and drop-down menu (as shown in Fig 2-1 Search scope drop-down menu) to control the overall scope of search parameters. Select from the following options:
  - **Everything**: The Search Scope includes Technopedia, Normalize, and Private Catalog data.
  - **Normalize**: The Search Scope includes Normalize data only. Applying this scope will reduce search results to Technopedia Catalog items (Manufacturer, Hardware, Software, etc.) that have been mapped to your source data through normalization. This search scope is applicable for both IT assets and Purchase Order (PO) normalization.
  - **Private Catalog**: The Search Scope only includes Private Catalog items. Applying this scope will reduce the search results to those items contained within the Private Catalog.

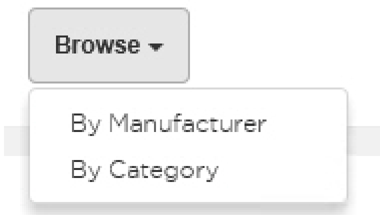
Figure 2-10: Search scope drop-down menu

Note • *Search indexing occurs after every normalization and/or synchronization. A delta-based indexing occurs each time a new Private Catalog entry or a new report is created/updated.*

Controls for Browsing

You can use the Browse drop-down menu (as shown in Fig 2-2 Browse drop-down menu) to view Technopedia objects by Manufacturer or by Category. From the listing of Manufacturers and Categories you can drill down further in order to view additional details about specific hardware or software products.

Figure 2-11: Browse drop-down menu



Viewing Search Results

After you enter a search parameter in the search entry field, a navigation bar (as shown in Fig 2-3 Navigation bar showing search results) displays the search results, including a statistical overview, at the top of the User Console. The navigation bar organizes the search results into groups such as Manufacturers, Taxonomies, Hardware, Software, CPUs, Reports, Systems, and Users (as shown in Fig 2-4 Example of software search results narrowed by SQL Server 2012 search string), which can be used to narrow the results to a specific object.

Figure 2-12: Navigation bar showing search results

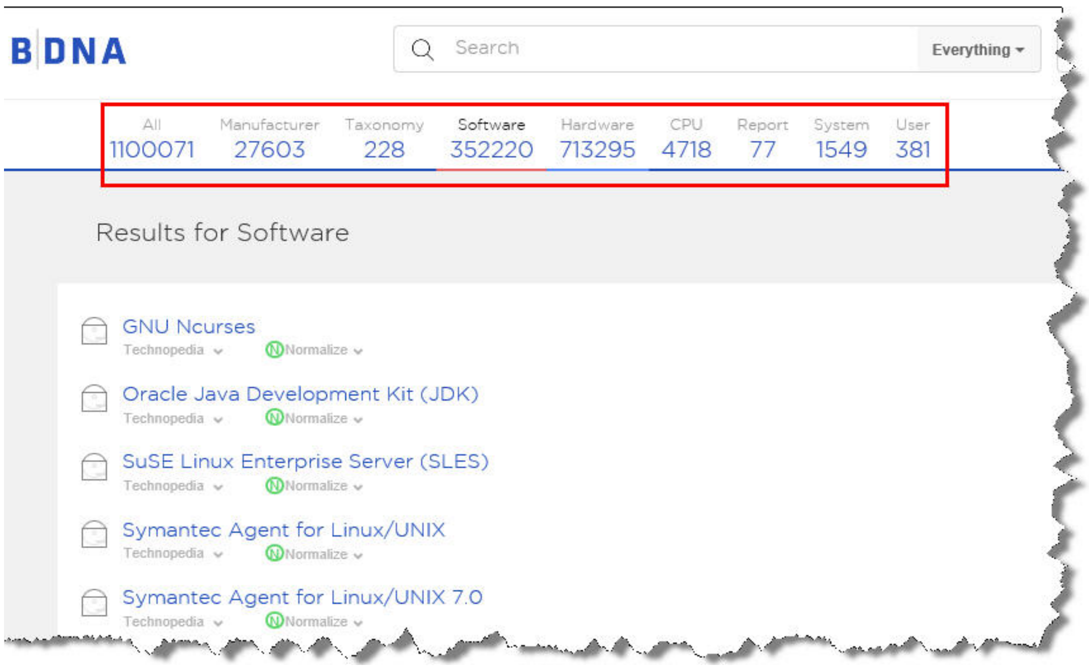
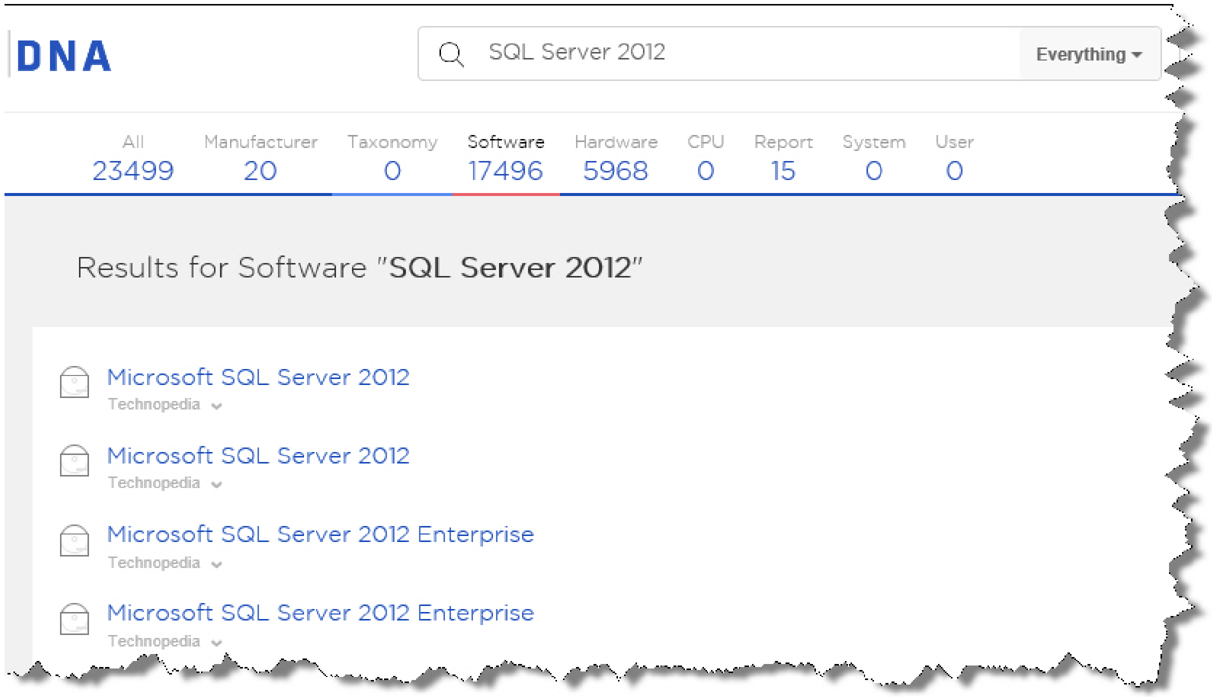
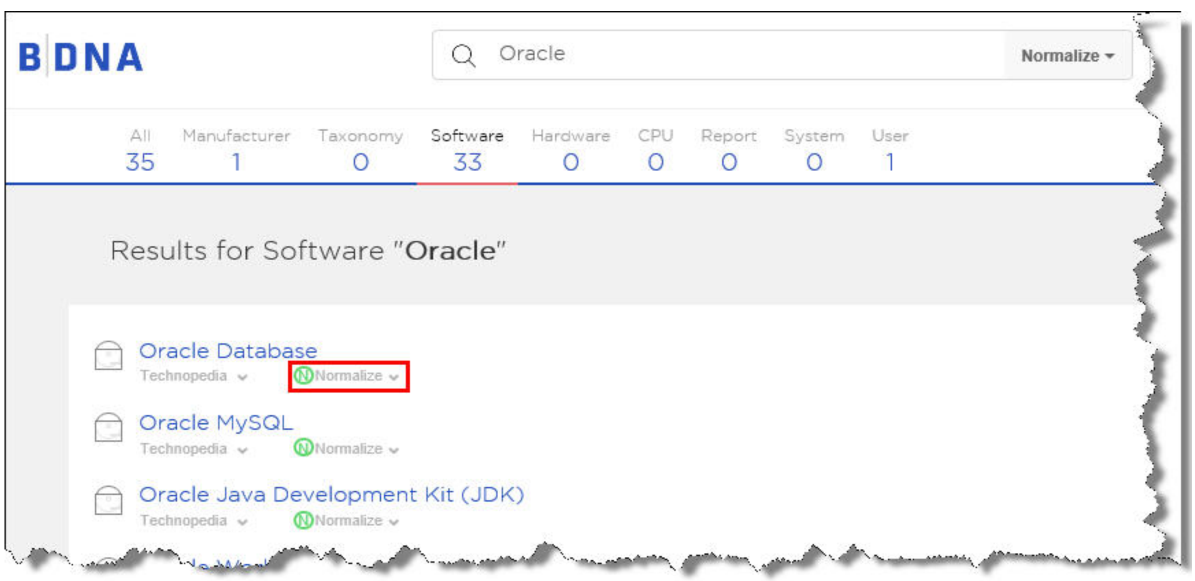


Figure 2-13: Example of software search results narrowed by SQL Server 2012 search string



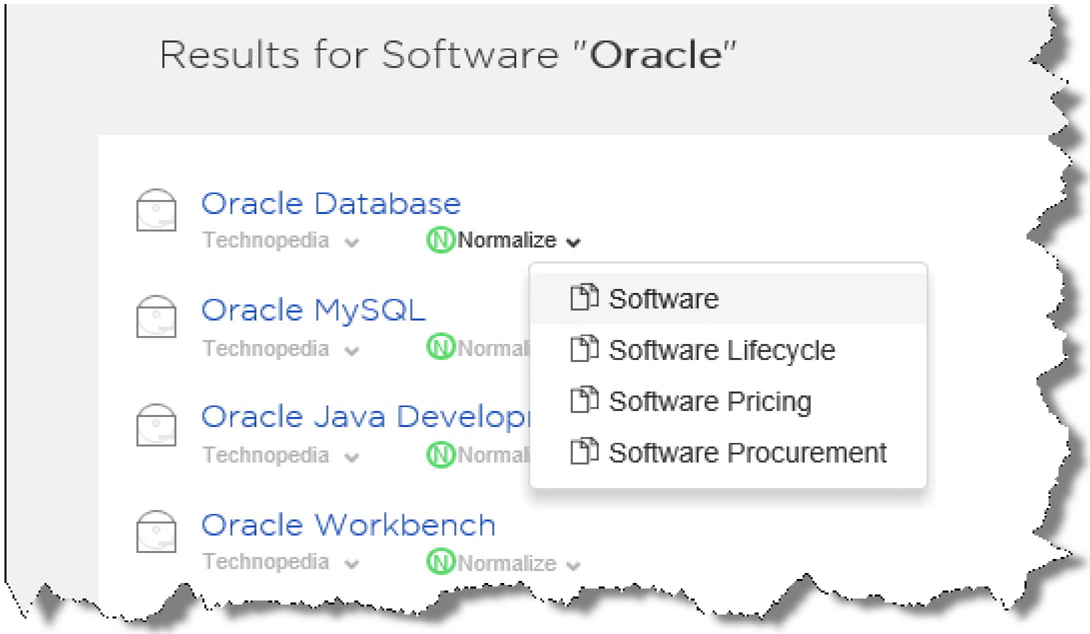
The Search Results page also provides a **Normalize** indicator (as shown in Search results with Normalize indicator), which shows the items that have been normalized against IT Asset or Purchase Order source data.

Figure 2-14: Search results with Normalize indicator



The Normalize indicator provides a drop-down menu, which you can use to select from a list of normalized data types (as shown in Context menu showing list of sample Analyze reports for Normalize data.).

Figure 2-15: Context menu showing list of sample Analyze reports for Normalize data.



Clicking the result takes you to the Detail Page (as shown in Detail page).

Using the Detail Page Controls

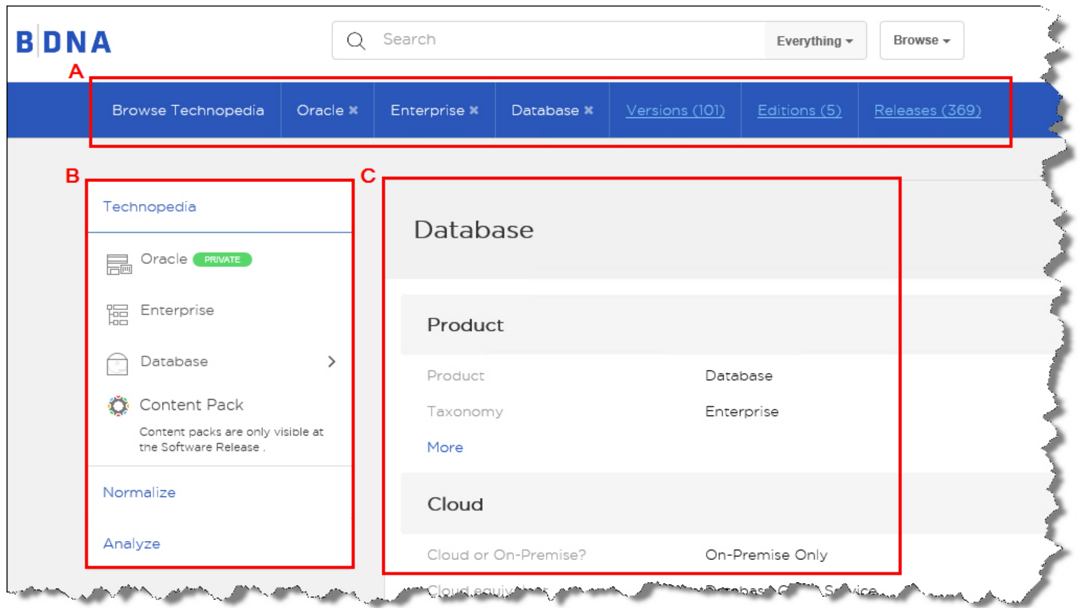
The Detail page (as shown in Detail page) provides numerous ways in which to look at detailed information about objects found in the search results. Navigation controls include:

A. Browser bar

B. Left Navigation panel

C. Detail panel

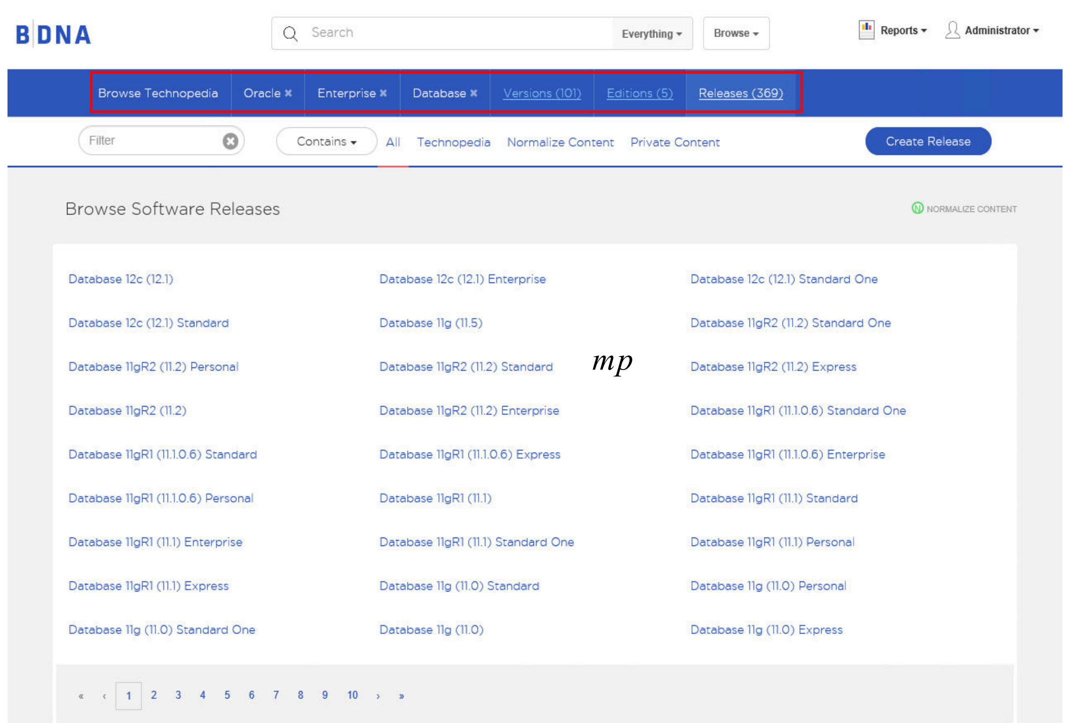
Figure 2-16: Detail page



A. Browser bar

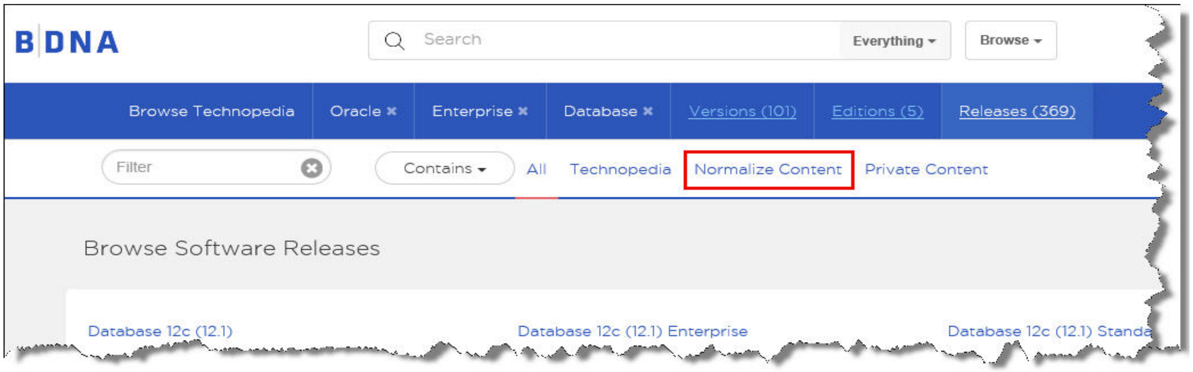
You can use the Browser bar located at the top of the User Console (as shown in) in order to navigate to the desired level of detail shown in the Detail panel (A).Browser bar

Figure 2-17: Browser bar



You can also use the Filter and Scope controls (as shown in Filter and scope controls) in order to narrow the focus to the searched-for objects.

Figure 2-18: Filter and scope controls



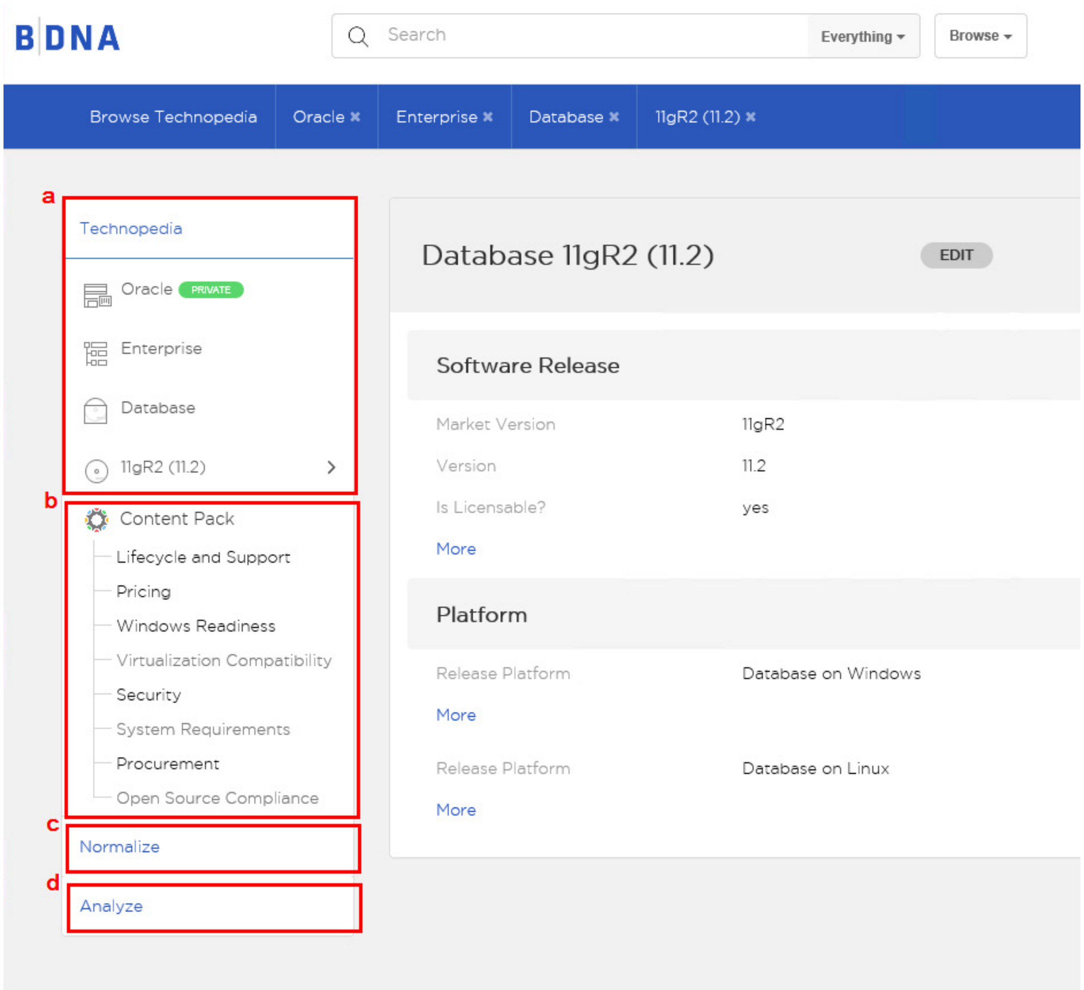
B. Left Navigation panel

The left Navigation panel, located on the left side of the Browse page (as shown in Fig 2-10 Left navigation panel), provides an easy way to navigate to the information that you want to display in the Details panel. The Navigation panel provides the following controls:

- a. Catalog
  - Navigation to Catalog data. For example:
    - Software: Manufacturer, Taxonomy, Product, Release.
    - Hardware: Manufacturer, Taxonomy, Product, Model.
    - CPU: Manufacturer, Model.
- b. Content Packs
  - Navigation to Market Data. For example:
    - Software: Lifecycle and Support, Pricing, Windows Readiness, Virtualization Compatibility, InfoSec, System Requirements, Procurement, Open Source Compliance.
    - Hardware: Lifecycle and Support, HW/SW Pricing, Specifications, Security, Procurement.
    - Medical Devices: FDA, GMDN, MDS2 (Privacy & Security), UDI—Global Unique Device Identification Database (GUDID), UMDNS.
- c. Normalize information
  - Navigation to the Normalize information panel, which shows Installations/Deployments, Purchasing, and Usage counts.
- d. Analyze Reports

- Navigation to the Analyze panel, which contains a list of Technopedia and Normalize predefined analysis reports.

Figure 2-19: Left navigation panel



C. Detail panel

The Detail panel displays detailed information about the items you select in the left Navigation panel. Information provided in the Detail panel can pertain to items in Technopedia (as shown in Detail panel showing Lifecycle data found in Technopedia), Normalize (as shown in Detail panel showing Software Usage data from Normalize, and Analyze (as shown in Detail panel showing a list of reports available in Analyze).

Figure 2-20: Detail panel showing Lifecycle data found in Technopedia

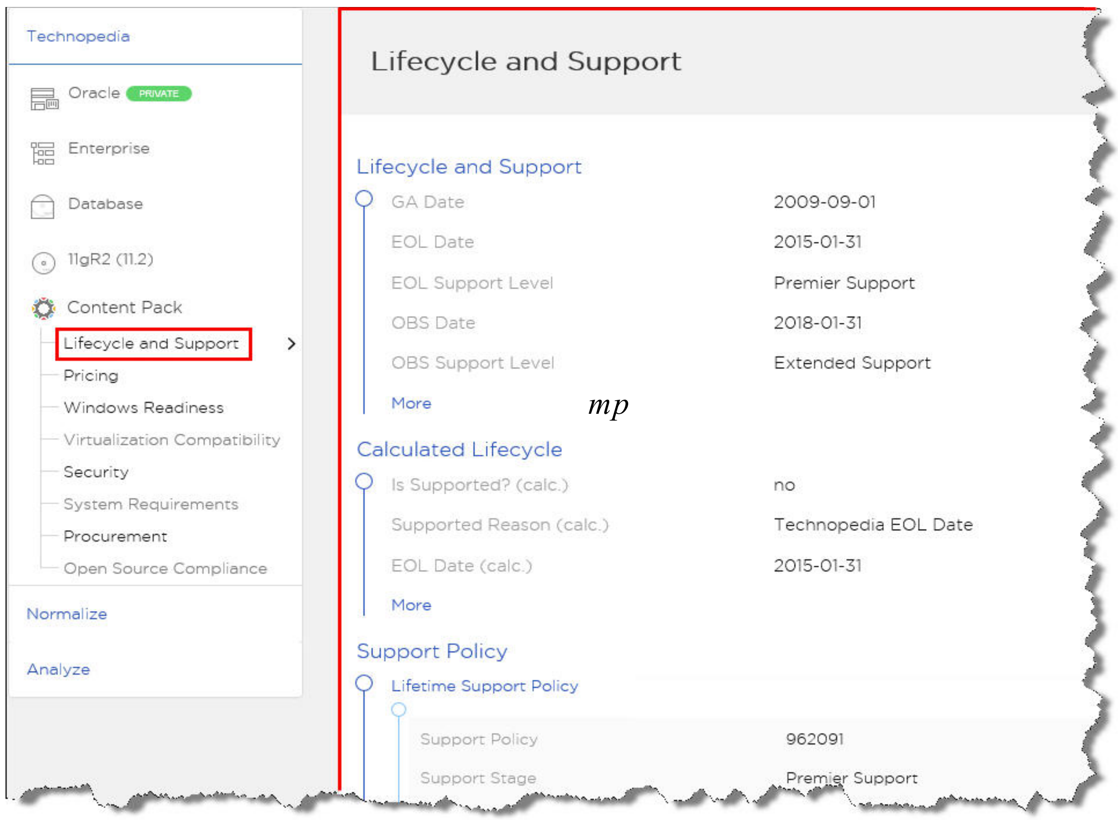


Figure 2-21: Detail panel showing Software Usage data from Normalize

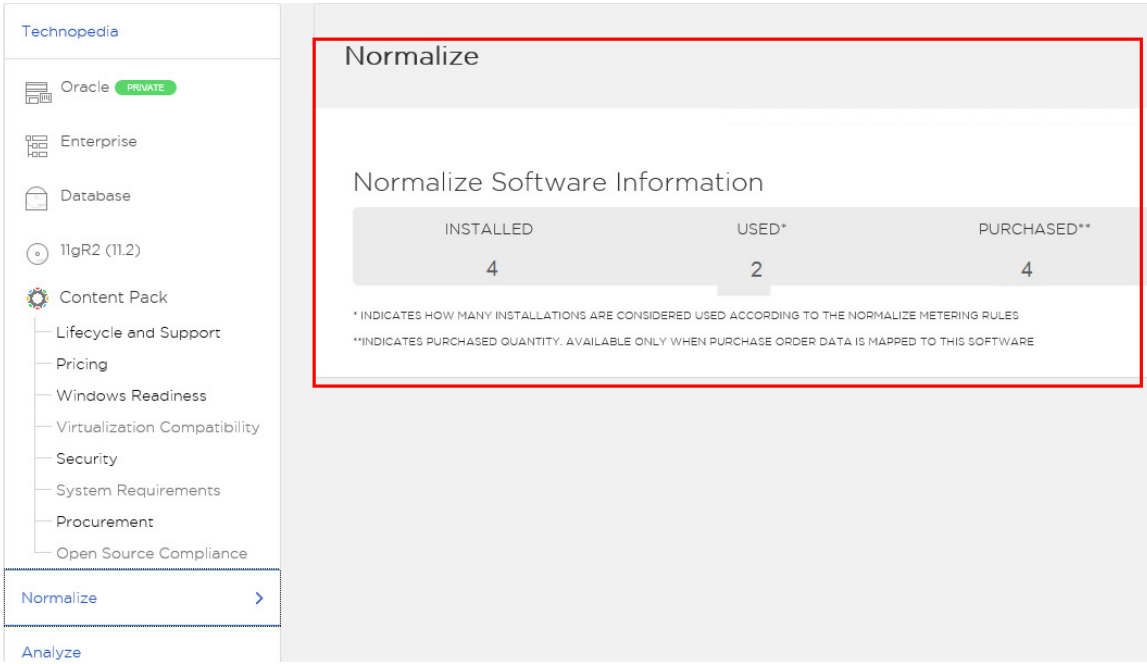
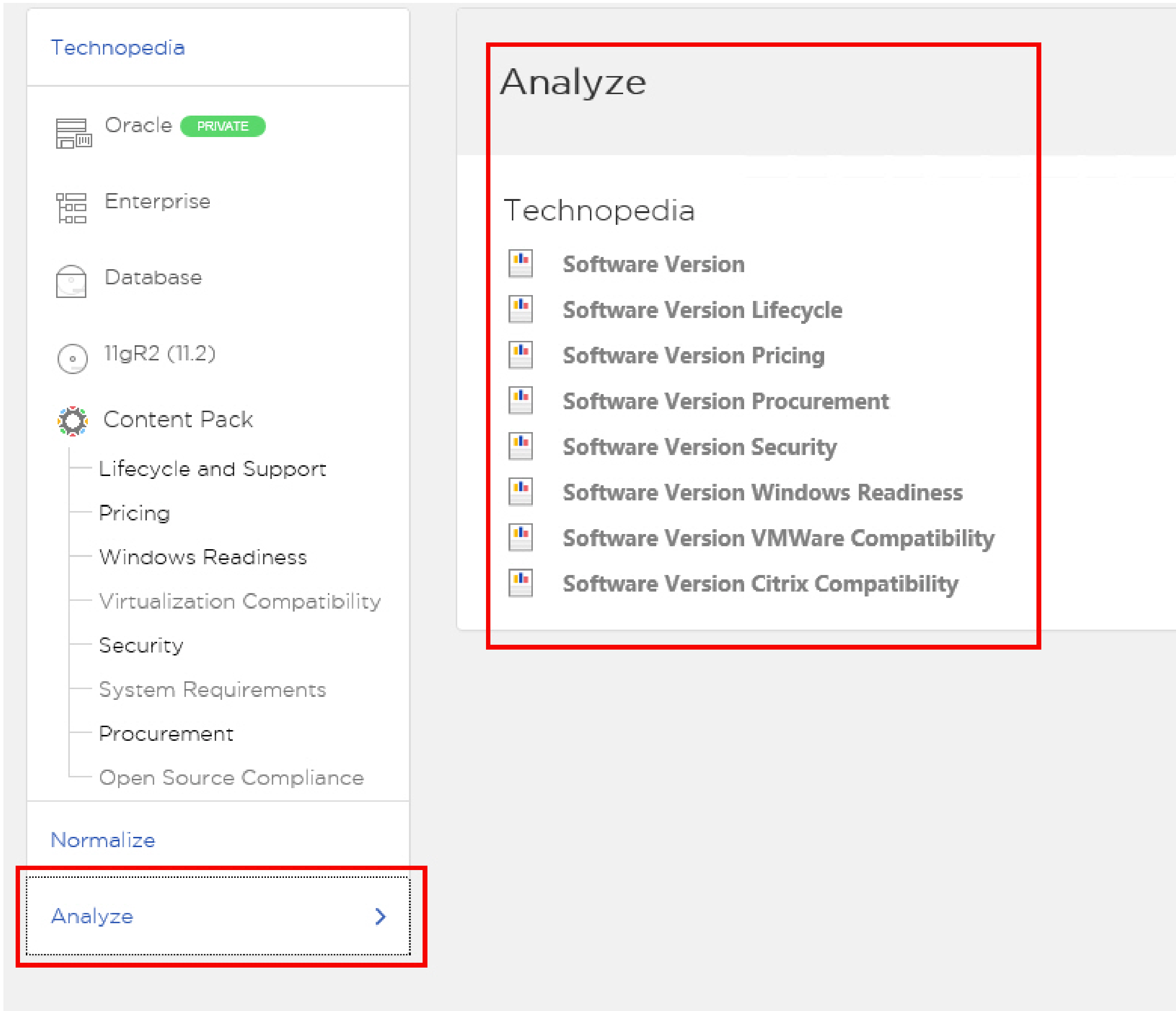


Figure 2-22: Detail panel showing a list of reports available in Analyze


Technopedia
Oracle PRIVATE
Enterprise
Database
11gR2 (11.2)
Content Pack
Lifecycle and Support
Pricing
Windows Readiness
Virtualization Compatibility
Security
System Requirements
Procurement
Open Source Compliance
Normalize
Analyze
Analyze
Technopedia
Software Version
Software Version Lifecycle
Software Version Pricing
Software Version Procurement
Software Version Security
Software Version Windows Readiness
Software Version VMWare Compatibility
Software Version Citrix Compatibility

3

Private Catalog Basics

About Private Catalog

This chapter provides detailed instructions regarding how to create and maintain “Private objects” that can be added to the Technopedia Catalog. You can create Private objects, such as a new manufacturer or a new software release. The chapter provides an end-to-end example of creating a manufacturer, software product, release, and medical device within the Private Catalog, as well as creating the signature package and file mapping for recognition and mapping against source data.

Managing the Private Catalog

Private Catalog requires an additional license and is an optional component available on the BDNA User Console. You can use the Private Catalog to privately define and manage catalog items, such as manufacturers, software, and hardware. You can also modify and add Public objects to Technopedia, such as Pricing and Lifecycle data.

Note • *Private Data is added as a discrete layer to Technopedia. Technopedia data is always preserved intact. Private Data can be consumed through the User Console, Analyze, Publish DB, and API. You can also use the API to manage the Private Catalog via the BDNA Data Platform, all without requiring the User Console. See the BDNA Data Platform API Reference Guide for additional information.*

Adding Objects to the Private Catalog

When you add new objects to the Private Catalog, the search index is updated immediately, but the data is not synchronized and available to Analyze until the next scheduled Technopedia Catalog sync or when the Normalize process is finished.

Creating a Manufacturer in the Private Catalog

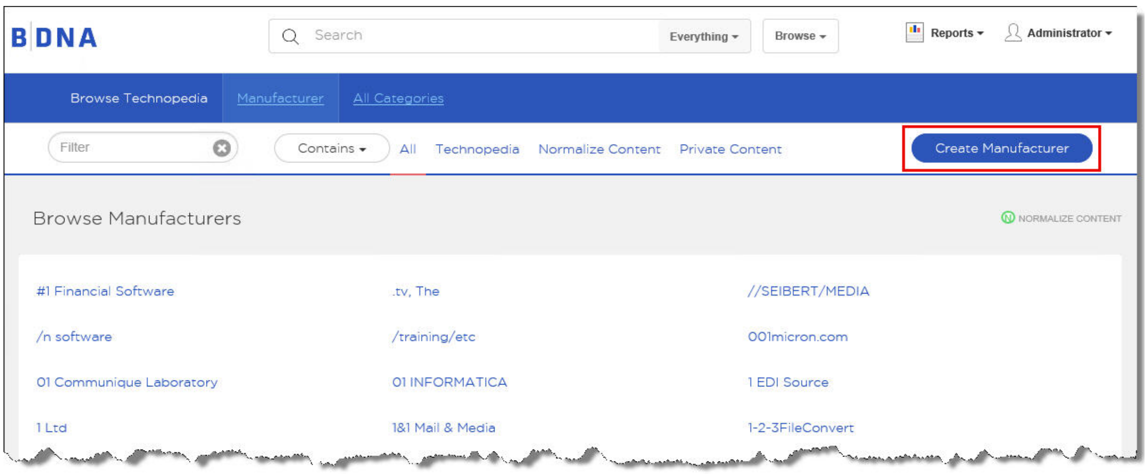
You can create a Manufacturer and add it to the Technopedia Private Catalog. Creating a Manufacturer is the first step in creating and adding new software and hardware products to the Technopedia Private Catalog.

Task ***To create a manufacturer in the private catalog:***

1. On the User Console, use the Browse drop-down and select By Manufacturer in order to navigate to the Browse Manufacturers screen.

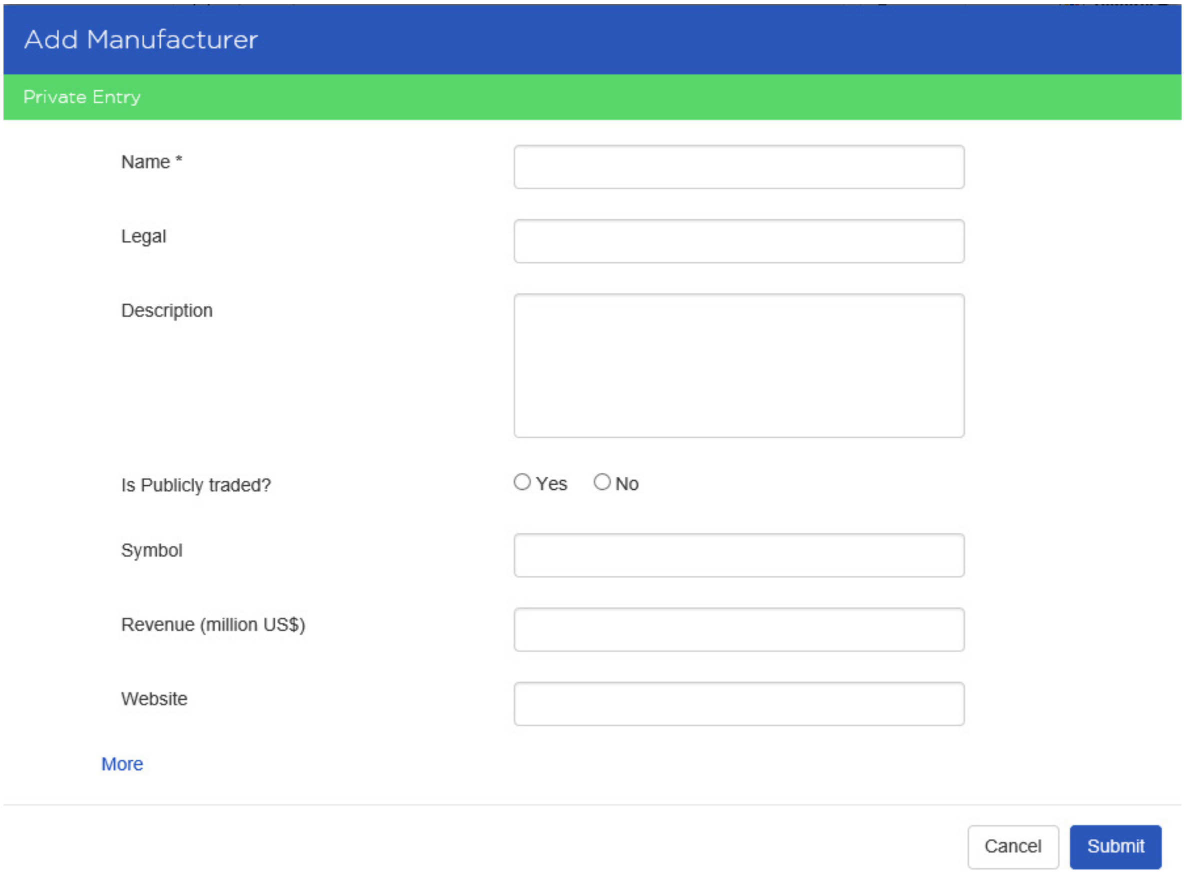
2. Click the Create Manufacturer button in order to open the Add Manufacturer dialog.

Figure 3-23: Browse Manufacturers screen



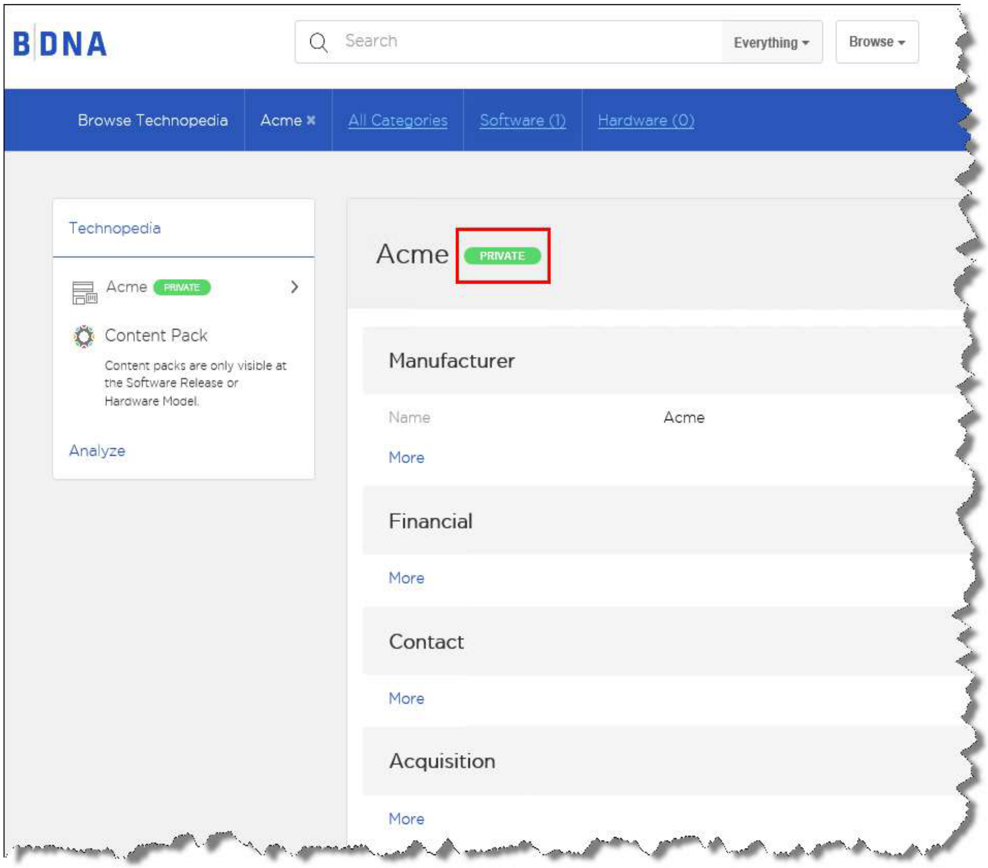
3. Add detailed information about the Manufacturer in the text entry fields provided. Click More to extend the dialog for additional entries of detailed information. Click Submit to save the information.

Figure 3-24: Add Manufacturer dialog



4. The manufacturer information is added to the Technopedia Private Catalog. In addition, the Manufacturer number is incremented and a green Private label appears, indicating that this entry has been added to the Private Catalog.

Figure 3-25: Manufacturer added to the Private Catalog

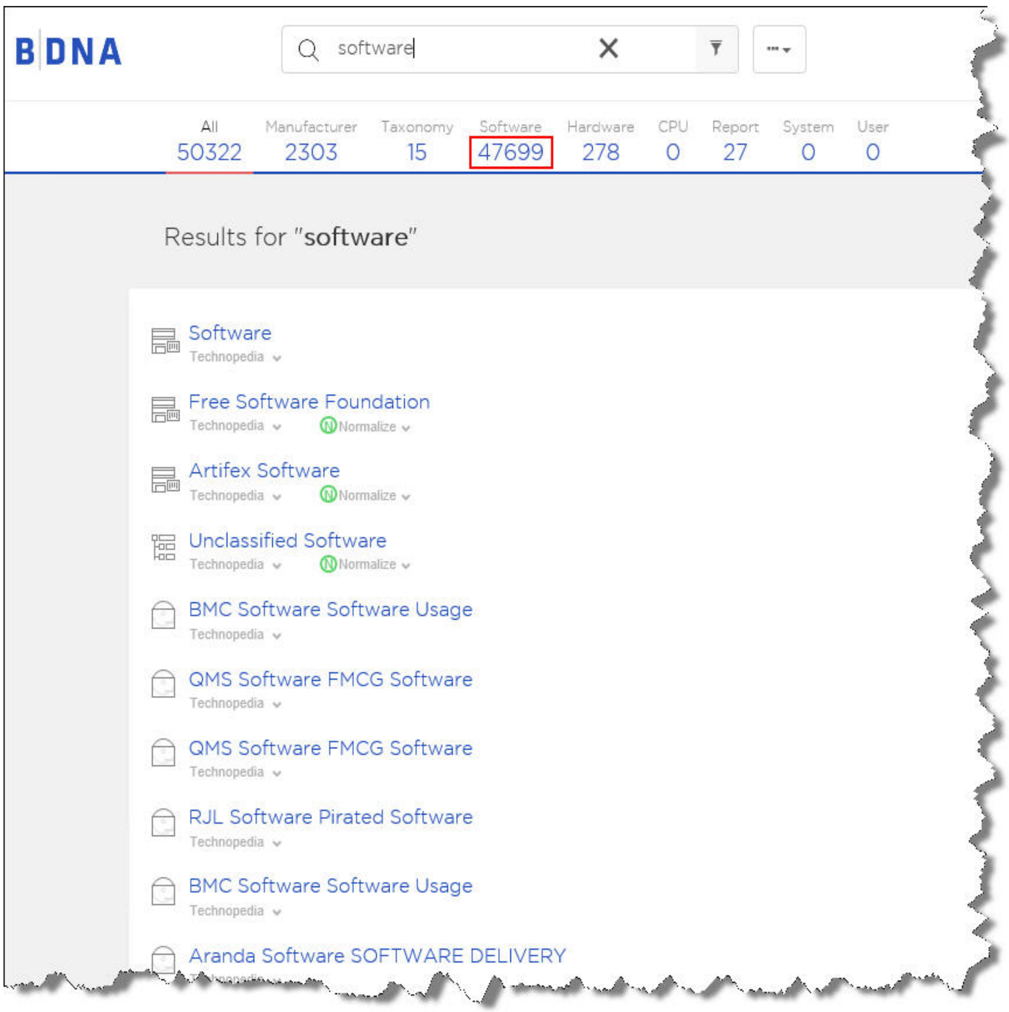


Creating a Software Item in the Private Catalog

Task ***To create a software item in the private catalog:***

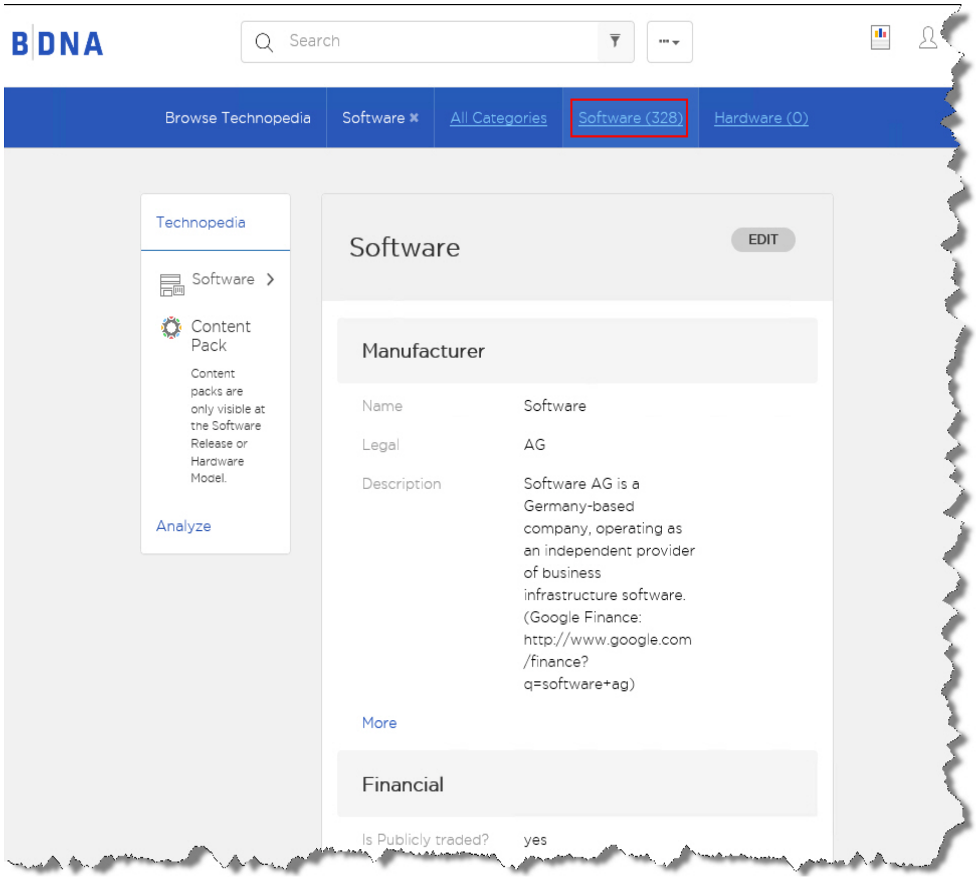
1. On the User Console, enter “Software” into the search entry field.
2. On the Results page, click the number of Software objects (outlined in red in Results of Software search string in order to open the Software details page.

Figure 3-26: Results of Software search string



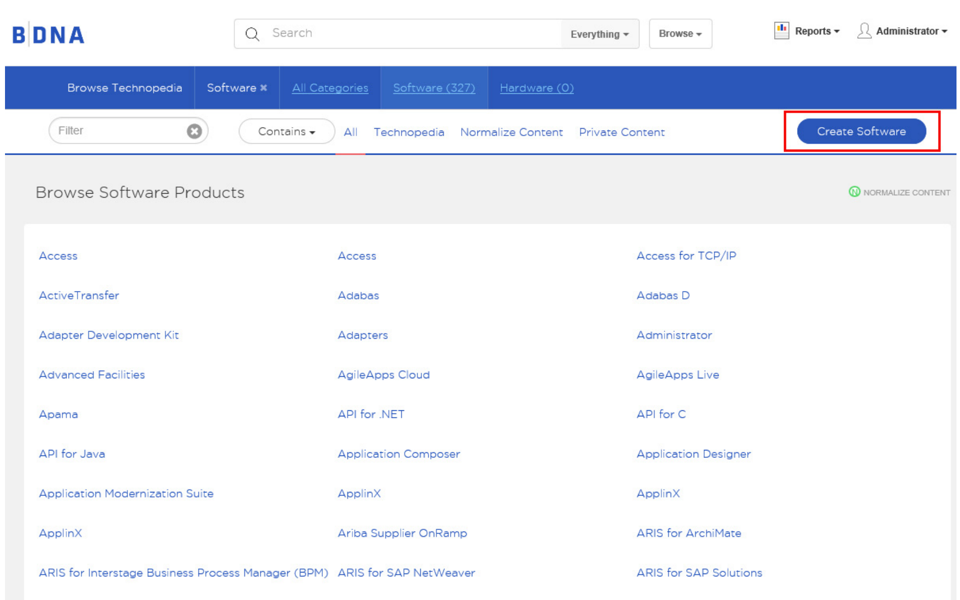
3. In the Software Details page, click the Software link (outlined in red in Fig 3-5 Software details), to open the Private Content page.

Figure 3-27: Software details



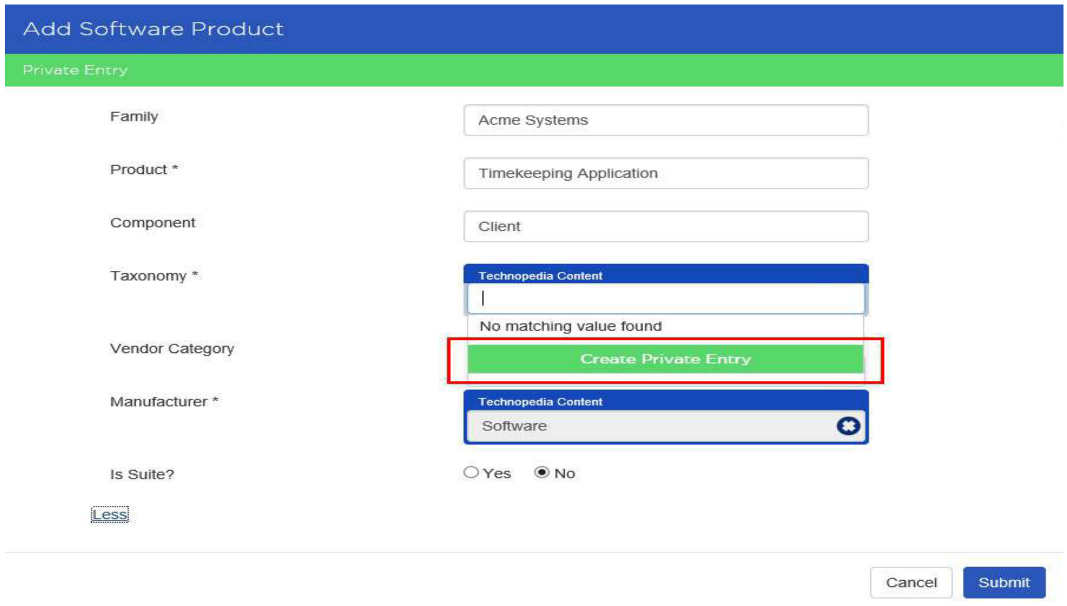
4. In the Private Content page click Create Software (outlined in red in Browse Software Products screen—Create Software button), to open the Add Software Product dialog.

Figure 3-28: Browse Software Products screen—Create Software button



5. Add detailed information about the Software Product in the text entry fields provided. Note that entry fields may provide data that has already been used and stored by the application. If necessary, you can also add new data by clicking the Create Private Entry button. Clicking the Create Private Entry button opens a dialog that enables you to create data that is saved by the application and is then available for subsequent data entries. Click Submit to add the Software Product to the Private Catalog.

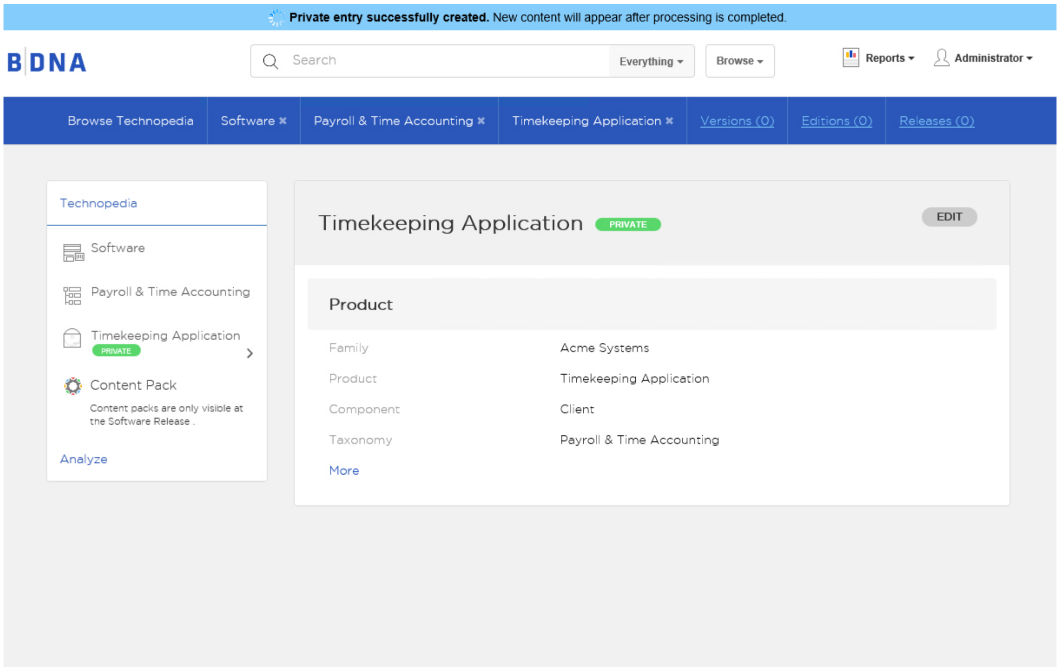
Figure 3-29: Add Software Product dialog



6. The Private Entry software product information is added to the Technopedia Private Catalog.

Note • *When you create a Private entry it may take several minutes for the entry to appear in the BDNA User Console.*

Figure 3-30: Entry added to Private Catalog



Creating a Software Release in the Private Catalog

Software objects are listed according to the following hierarchy.

1. Manufacturer
2. Product
3. Version
4. Edition
5. Release

You must add a Version number to the software object prior to adding a Release number. You can add the Version number during the Create Release process.

Task ***To add a Software Release to a software product:***

1. On the BDNA User Console, navigate to the software product you have added to the Technopedia Private Catalog, as shown

   Figure 3-31: Create Release button on Browse Software Releases page

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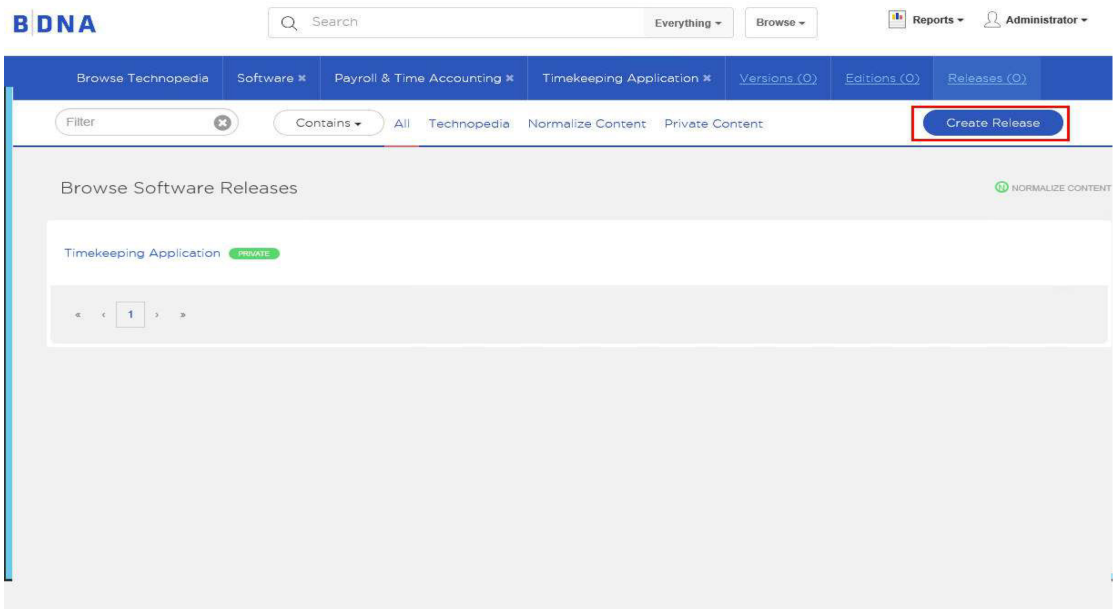
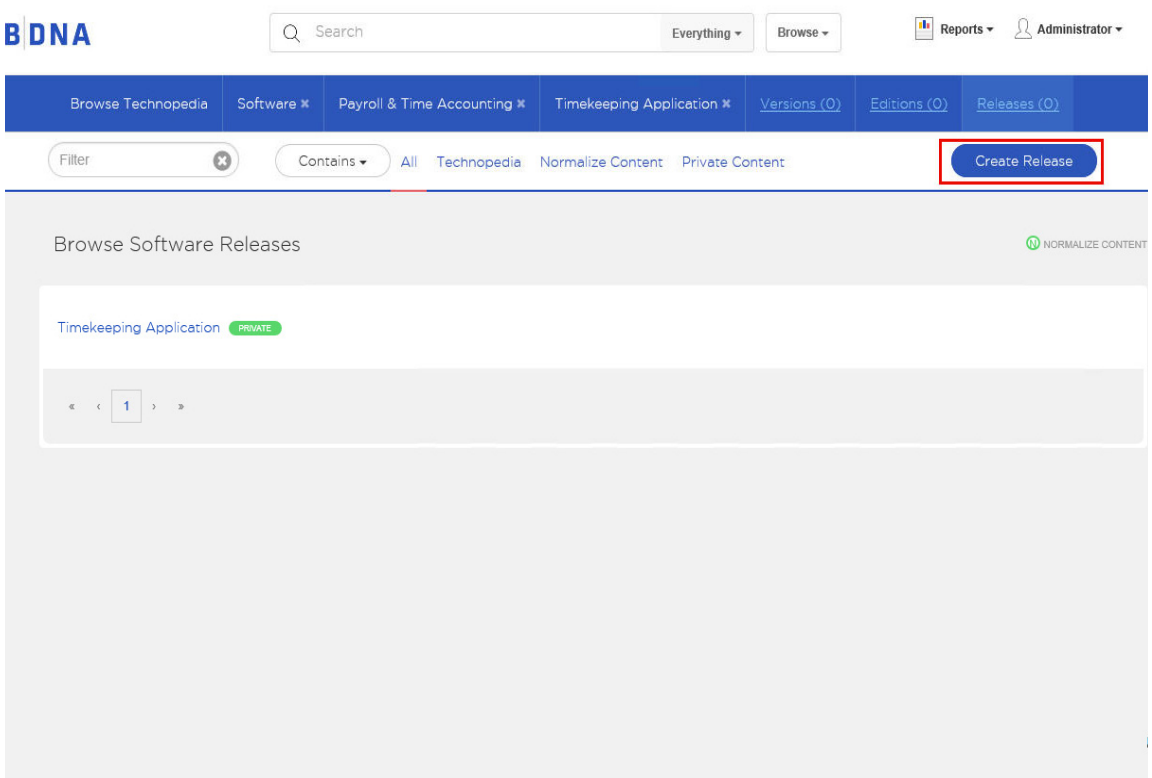


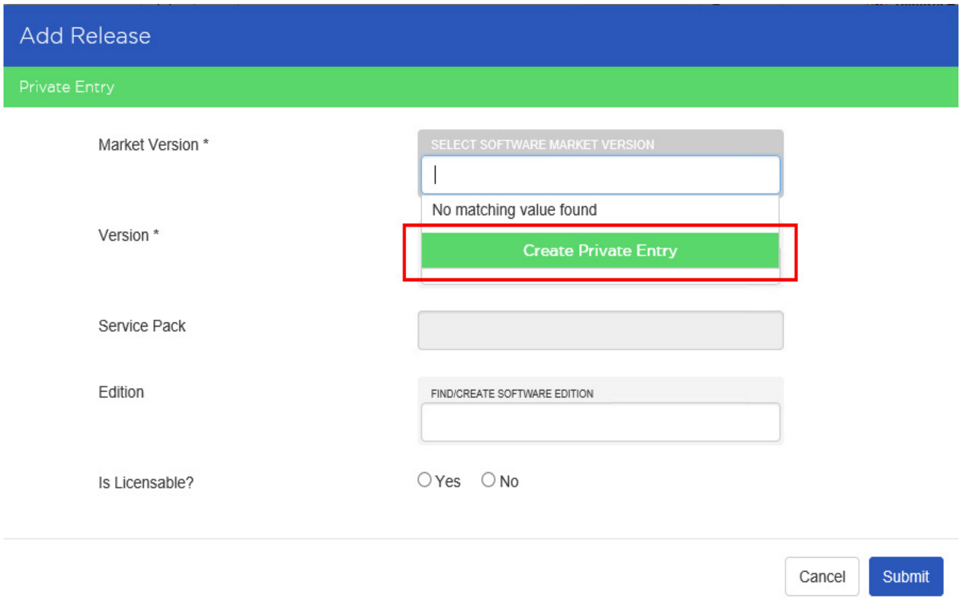
2. Click the Create Release button.

Figure 3-32: Browse Software Releases page—Create Release button



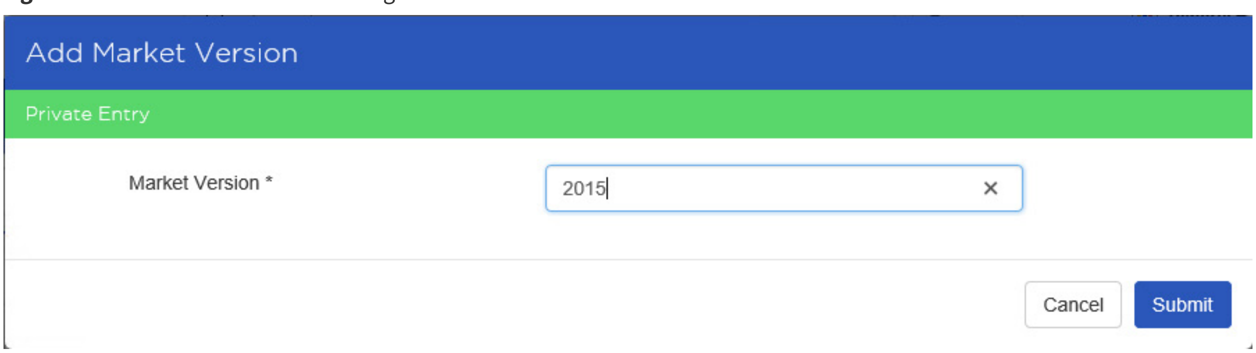
3. Add detailed information about the Software Product Release in the text entry fields provided. If necessary, click Create Private Entry to create a private entry that populates the required field. When you click Create Private Entry, an add data dialog opens.

Figure 3-33: Add Release dialog



4. The Add Market Version data dialog enables you to add the data that will be used for the Software Release private entry.

Figure 3-34: Add Market Version dialog



5. Click Submit. The Software Product Release information is added to the Private Catalog.

***Note** • Using the same process as adding a Software Product Release, you can add Software Product Versions and Software Product Editions to your Technopedia Private Catalog. You can also use the Private Catalog to create Hardware Products and product models.*

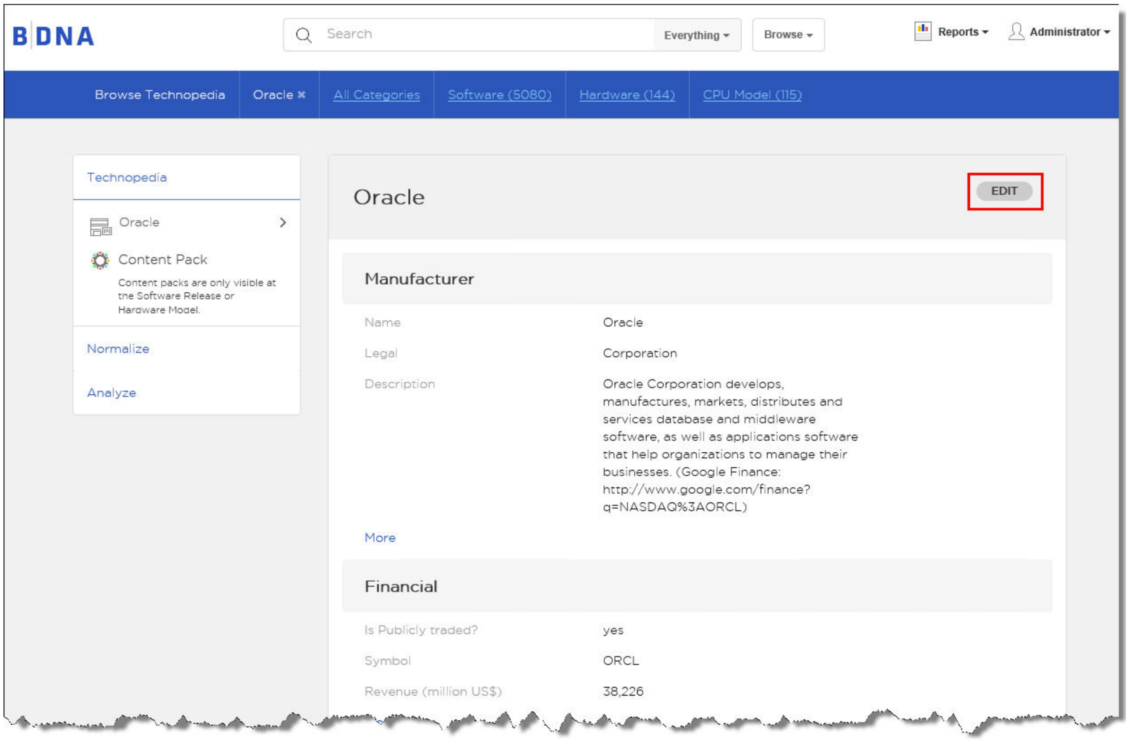
Editing a Technopedia Object

You can edit the detail information of a Technopedia object. When you edit the details of a Technopedia object, the object is added to the Private Catalog.

Task ***To edit a Technopedia object:***

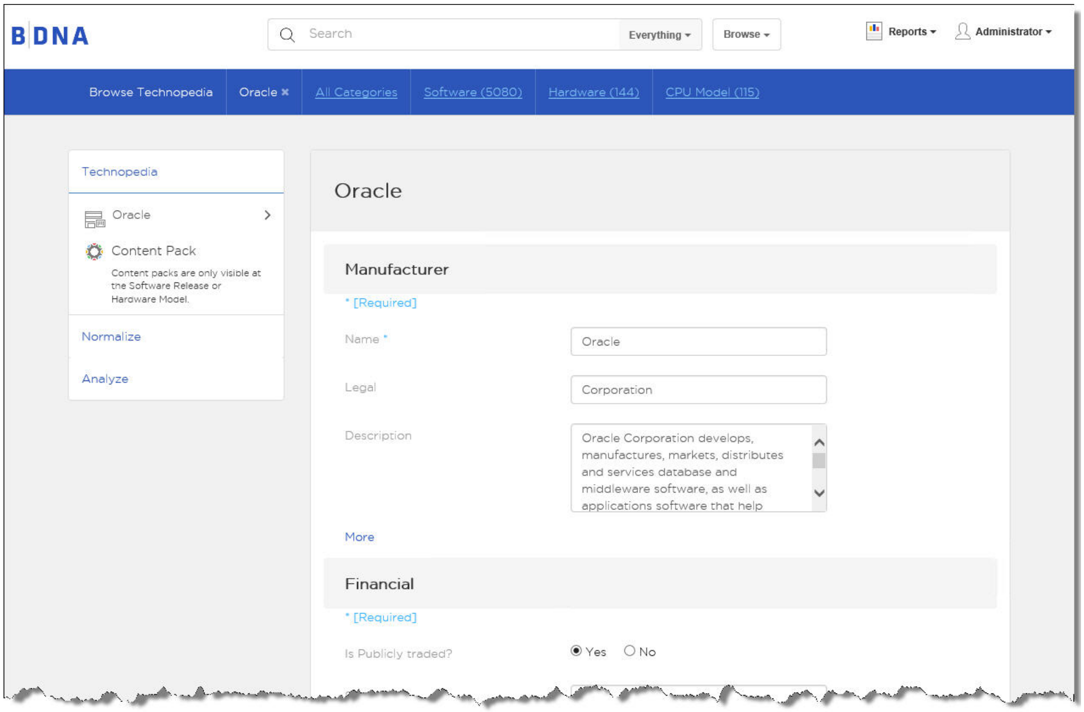
1. Click Edit to open the detail page for the object.

Figure 3-35: Edit Technopedia object



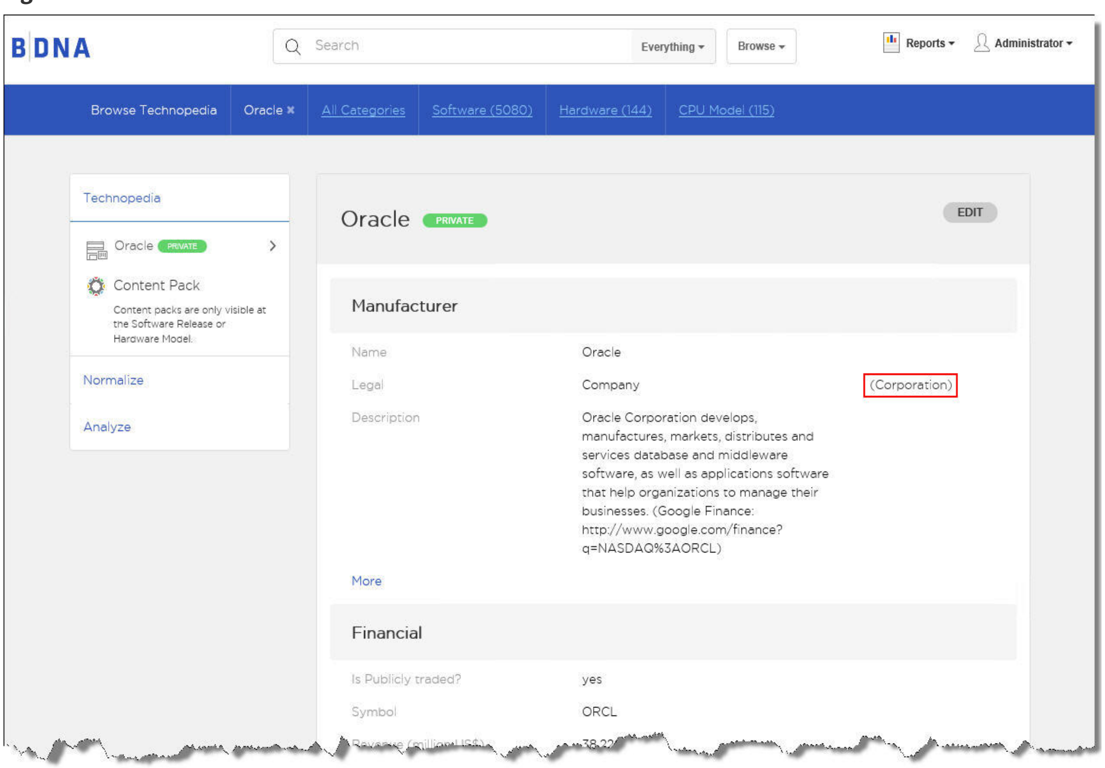
2. You can make changes in the detail page for the object.

Figure 3-36: Edit details screen



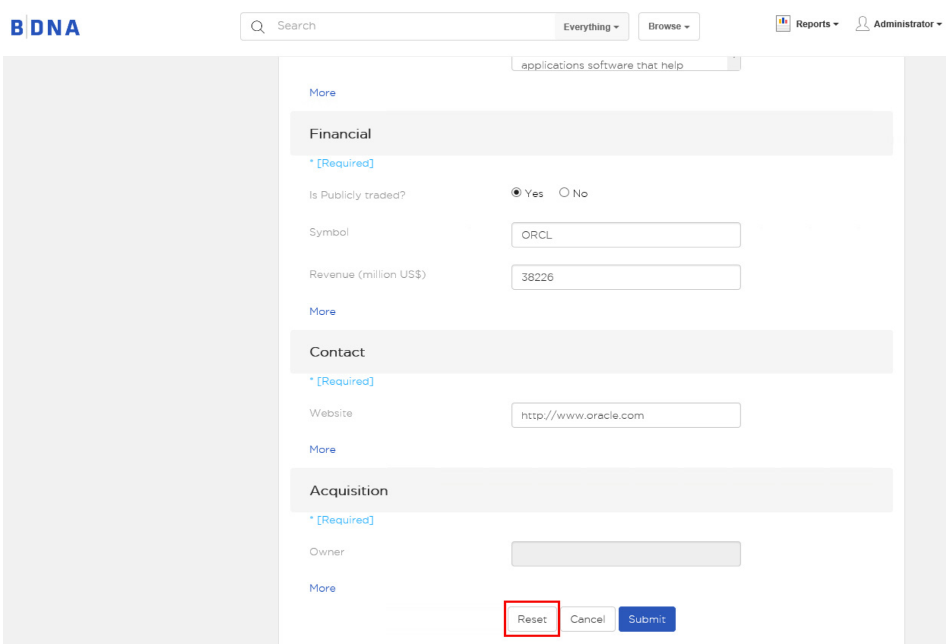
3. When you submit your changes, the object becomes part of the Private Catalog, as indicated by the green label on the details page. Note that the original data remains in parentheses (outlined in red in Edited details).

Figure 3-37: Edited details



4. To restore the original detail information, click the Reset button, located at the bottom of the Detail page.

Figure 3-38: Reset button



Creating Normalize Mapping for Private Catalog Software

Software items added to your Technopedia Private Catalog can be normalized if you provide a mapping that links the items to the Technopedia Catalog. On the BDNA User Console, there are two methods for defining Normalize mapping for Private Software:

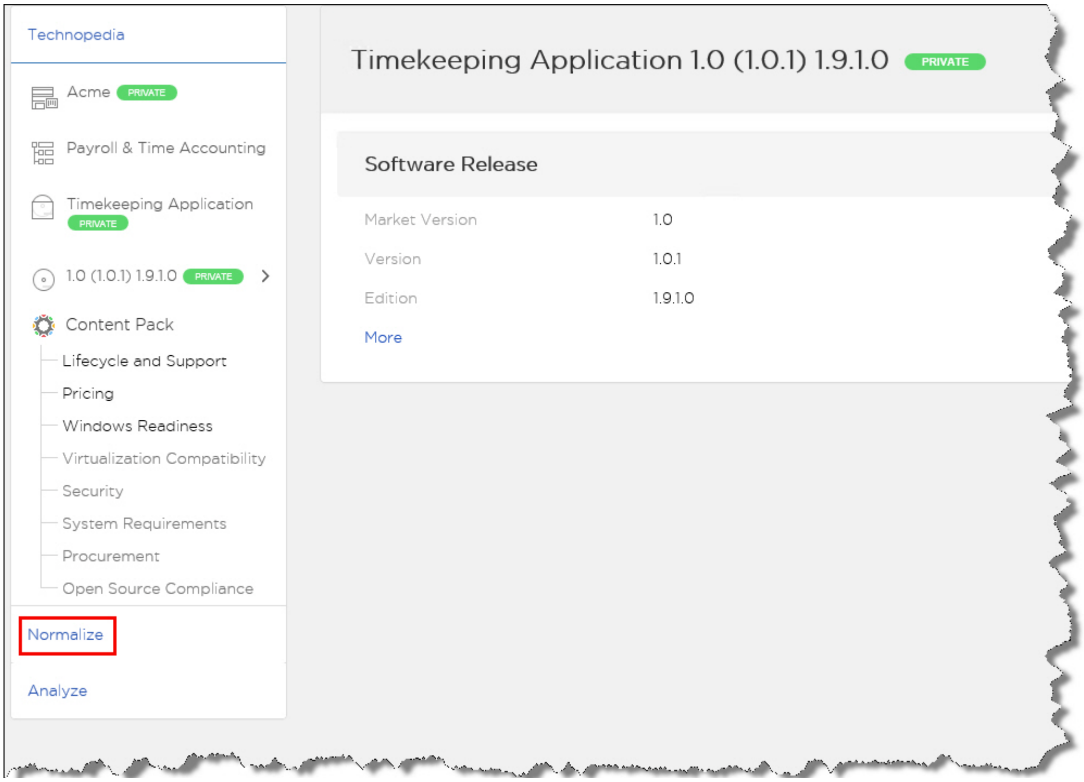
- Mapping a Software Release from the Detail Page, using the Normalize panel (see To map a Software Release from the Detail Page, using the Normalize panel:)
- Mapping a Software Release from the Report Management Page, by clicking the Unmatched Package or Unmatched File reports (see To map a Software Release from the Report Management Page, by clicking the Unmatched Package or Unmatched File reports:

Task ***To map a Software Release from the Detail Page, using the Normalize panel:***

1. On the User Console, navigate to the detail screen of the Software Release you want to map to Normalize.

2. Click Normalize in the left Navigation panel to open the Normalize panel Detail page.

Figure 3-39: Software Release detail screen



3. Click the plus sign in the Normalize Software Information detail panel in order to map a Package or a File. Note the links to unmatched packages and unmatched files outlined in red as shown in the Normalize Private Mapping screen. Click these links in order to open pages showing details of unmatched packages and files, as shown in the additional figures below.

Figure 3-40: Normalize Private Mapping screen

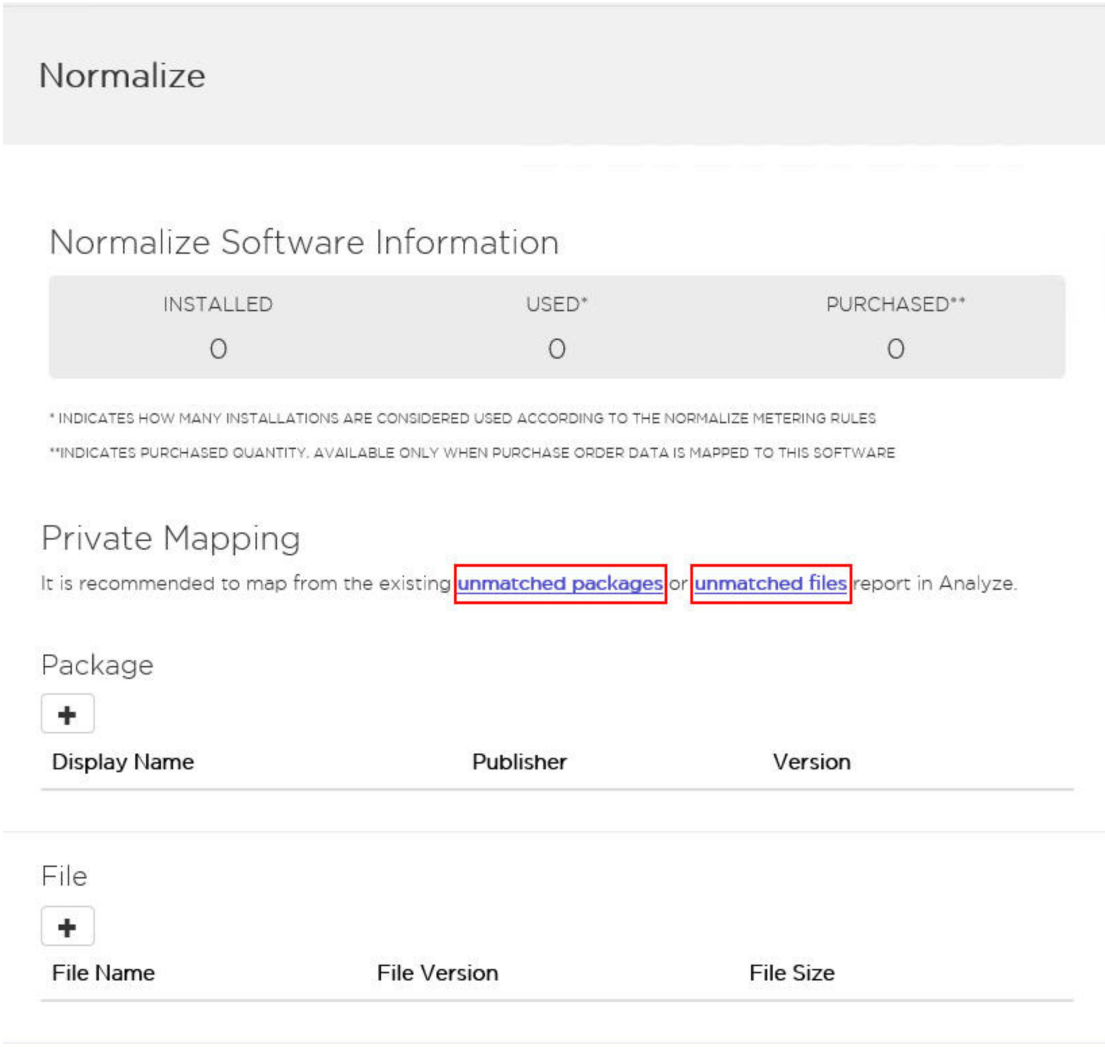

Normalize
Normalize Software Information
INSTALLED
0
USED*
0
PURCHASED**
0
* INDICATES HOW MANY INSTALLATIONS ARE CONSIDERED USED ACCORDING TO THE NORMALIZE METERING RULES
**INDICATES PURCHASED QUANTITY. AVAILABLE ONLY WHEN PURCHASE ORDER DATA IS MAPPED TO THIS SOFTWARE
Private Mapping
It is recommended to map from the existing unmatched packages or unmatched files report in Analyze.
Package
Display Name
Publisher
Version
File
File Name
File Version
File Size

Figure 3-41: Unmatched Package report

▸ 1 Filter Unmatched Package

Category	Reasons	PKG ID	PKG Display Name	PKG Publisher
		CBBBE1C3315E8B4A9AF269B73FBB7	APP STUDIO FACTORY 1.4.5 I386	AQUAFADAS
		BB0C8C089881F0A3D96CDD1F7378	SMP 7.1 SP1 (LINUX) 2011091301	CARDINAL HEALTH
		43BCF78EABD4577ADF4414EB99AFF	Greenfoot 1.5.1	Deakin University
		301C1871420873B60CD88129ED733	Destiny Media Player	Destiny Software Productions In
		4C6E6DD780CEE08C189A41841FB75	Host Integrity Monitoring Client	Jason Frisvold <friz@godshell.com
		FD039343FDAB9B195CF3A3FDBC454	Host Integrity Monitoring Client	Jason Frisvold <friz@godshell.com
		7DA83DE52AA1CF46DB4C1DBEF3C8	Host Integrity Monitoring Server	Jason Frisvold <friz@godshell.com
		45FF83B0F9E9618879258D6A6A01C	Archiver and Backup Program with C	NULL
		9EF94600831FB16C51322B4772E2AE	BARCODY 2.13 I386	NULL
		5E6FBBF065340CC66495C0679C20C	Buffering stdin and stdout	NULL
		7BC789D5A0753E3D7A856978F1F73	Continous Build Server	NULL
		11440859FCAAE03FEFD07FE2DF95A	Development Kit for newt	NULL
		189243D838A47D114EA2EEFA9456E	Embedded database for the Clouder	NULL
		2AC31D615CF40E7BEA6994564469B	GAS MASK 0.5.1 I386	NULL
		4FA15653932AE6A489C4405ED86C9	Ganglia Library http://ganglia.source	NULL
		E3F6BE178591C6852C1E706294EABI	Gas Mask 0.5.1	NULL
		21046058A15DDF9D009F061D92F22	IHS6 6.0-0 base.application_files.prog	NULL
		0F89CAF88CE645745BC637DB18F3D	IHS6 6.0-0 base.doc.man.x86_64	NULL
		68B06AF5B758445A2FFA3302F9CE4F	IHS6 6.0-0 ssl.x86_64	NULL
		70A6C8774308D37F072FBF08FB01BI	IHS6 6.0-1 base.application_files.prog	NULL
		A880C2964ECABE45DDE65A633EE6A	IHS6 6.0-1 base.doc.man.x86_64	NULL
		C2BBB6DDBBDAD47C6C251C711FD	IHS6 6.0-1 ssl.x86_64	NULL

Unmatched Files report

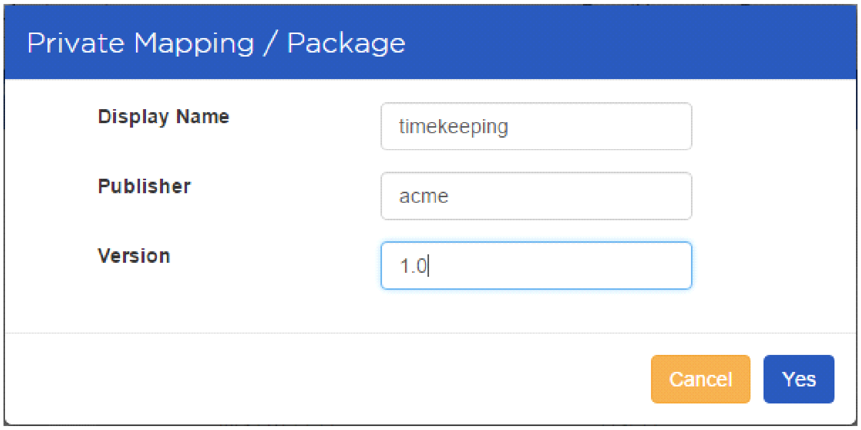
▸ 1 Filter Unmatche

Category	Reasons	FILE ID	FILE Name	FILE Description
		264	Ezcapt.exe	Easy Capture
		679909	aim_toolbar293.exe	AIM Toolbar
		679906	AIM7_7.0.3.16_beta1.exe	AIM7
		2683	ati2evxx.exe	ATI External Event Utility EXE Modul
		31172	ati2evxx.exe	ATI External Event Utility EXE Module
		681	CheckVer.exe	ATI Component Version Applet
		182	CheckVer.exe	ATI Component Version Applet
		35320	atiiprxx.exe	ATI Problem Report Wizard
		42	DrvUI64A.exe	Uninstall ATI Display Driver on Wi
		21	EnumDev.exe	Enumerate Graphics Devices
		69	EnumDev.exe	Enumerate Graphics Devices
		710	AtiCimUn.exe	ATI Uninstall Application
		642	AtiCimUn.exe	ATI Uninstall Application
		93	AtiCimUn.exe	ATI Uninstall Application
		78	atiicdxx.exe	CDS Dynamic Link Library
		14	atiicdxx.exe	CDS Dynamic Link Library
		1962	Ati2mdxx.exe	ATI2MDXX
		2682	Ati2mdxx.exe	ATI2MDXX
		231208	Ati2mdxx.exe	ATI2MDXX
		35341	atiphexx.exe	ATI Desktop Control Panel

1. Enter Package details.

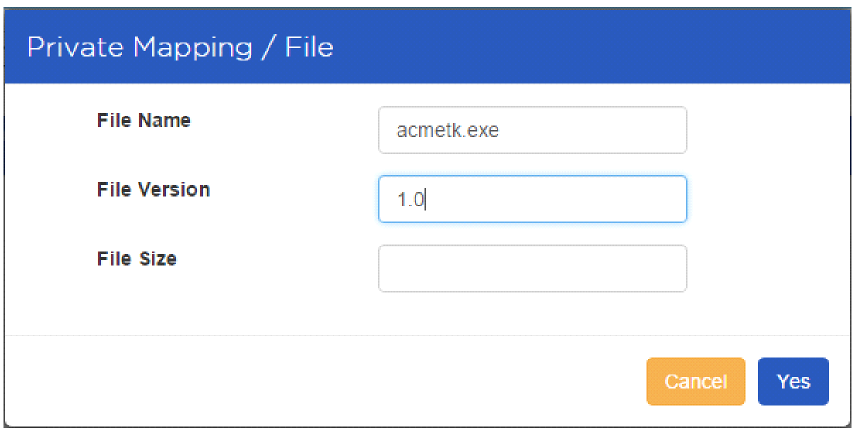
2. Click Yes to submit Package details and complete the mapping process. Click Cancel to cancel the operation.

Figure 3-42: Private Mapping/Package dialog



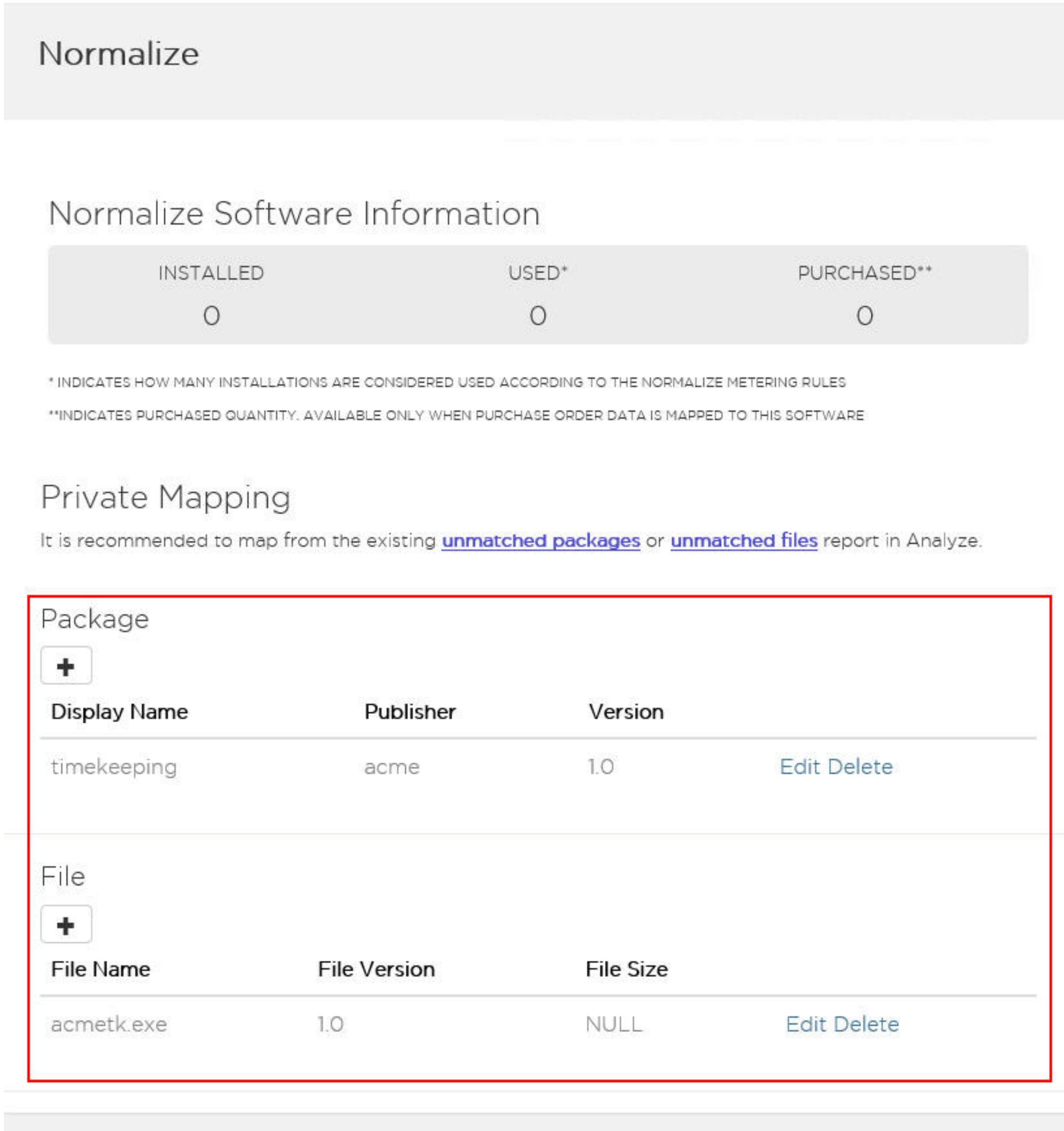
3. Click Yes to submit File details and complete the mapping process. Click Cancel to cancel the operation.

Figure 3-43: Private Mapping/File dialog



4. Mapping results are shown in the Normalize Software Information detail panel.

Figure 3-44: Mapping Results

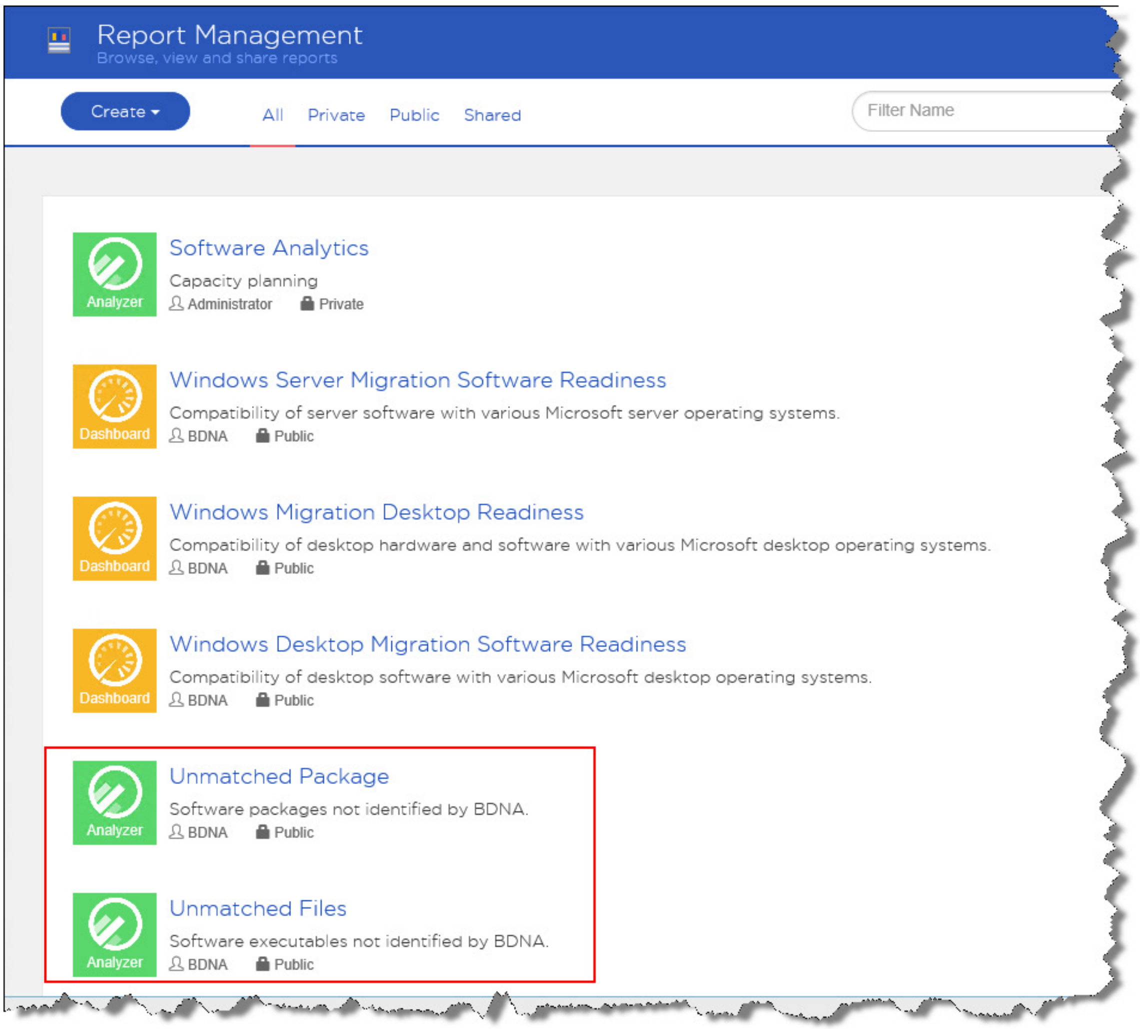


***Note** • The mapping process searches for and uses the first matching item. It scans a list of Package names first, looking for the first match. If no match is found, it scans through a list of filenames until it finds a match.*

Task ***To map a Software Release from the Report Management Page, by clicking the Unmatched Package or Unmatched File reports:***

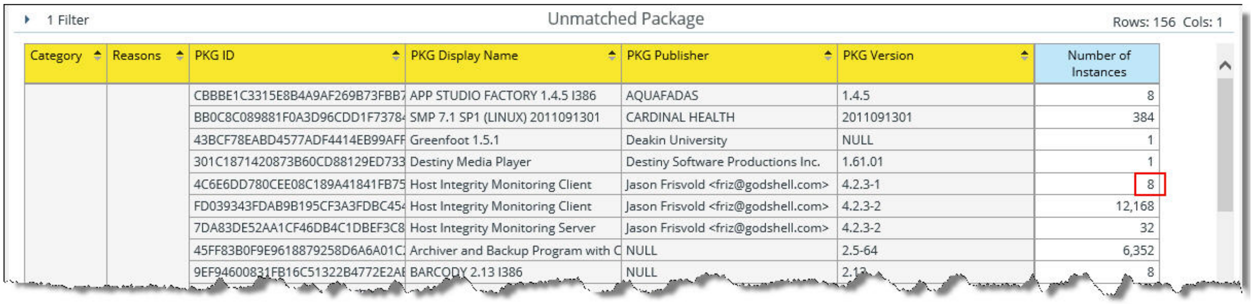
1. On the User Console, click the Reports drop-down to open the Report Management page.
2. Click the Unmatched Package or Unmatched Files report.

Figure 3-45: Report Management page showing links to Unmatched Package and Unmatched Files reports



3. On the open report, find the **Number of Instances** measure. Right-click on any of the Number of Instances and then click **Mark as Private**.

Figure 3-46: Unmatched Package report with number of instances

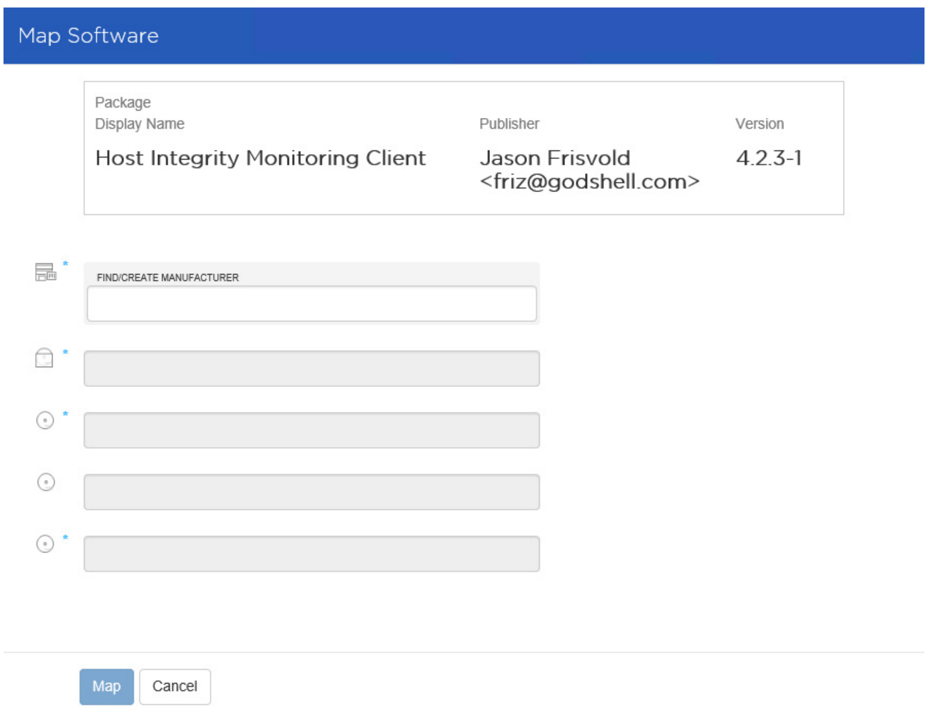


1 Filter — Unmatched Package — Rows: 156 Cols: 1

Category	Reasons	PKG ID	PKG Display Name	PKG Publisher	PKG Version	Number of Instances
		CBBBE1C3315E8B4A9AF269B73FBB7	APP STUDIO FACTORY 1.4.5 I386	AQUAFADAS	1.4.5	8
		BB0C8C089881F0A3D96CDD1F7378	SMP 7.1 SP1 (LINUX) 2011091301	CARDINAL HEALTH	2011091301	384
		43BCF78EABD4577ADF4414EB99AFF	Greenfoot 1.5.1	Deakin University	NULL	1
		301C1871420873B60CD88129ED733	Destiny Media Player	Destiny Software Productions Inc.	1.61.01	1
		4C6E6DD780CEE08C189A41841FB75	Host Integrity Monitoring Client	Jason Frisvold <friz@godshell.com>	4.2.3-1	8
		FD039343FDAB9B195CF3A3FDBC45	Host Integrity Monitoring Client	Jason Frisvold <friz@godshell.com>	4.2.3-2	12,168
		7DA83DE52AA1CF46DB4C1DBEF3C8	Host Integrity Monitoring Server	Jason Frisvold <friz@godshell.com>	4.2.3-2	32
		45FF83B0F9E9618879258D6A6A01C	Archiver and Backup Program with C	NULL	2.5-64	6,352
		9EF94600831FB16C51322B4772E2AE	BARCODY 2.13 I386	NULL	2.13	8

4. The Map dialog opens with the Display Name and Publisher of the package or file. Select the name of your Private Manufacturer, Software, Version, and Release, then click Map to complete the mapping procedure.

Figure 3-47: Map software dialog



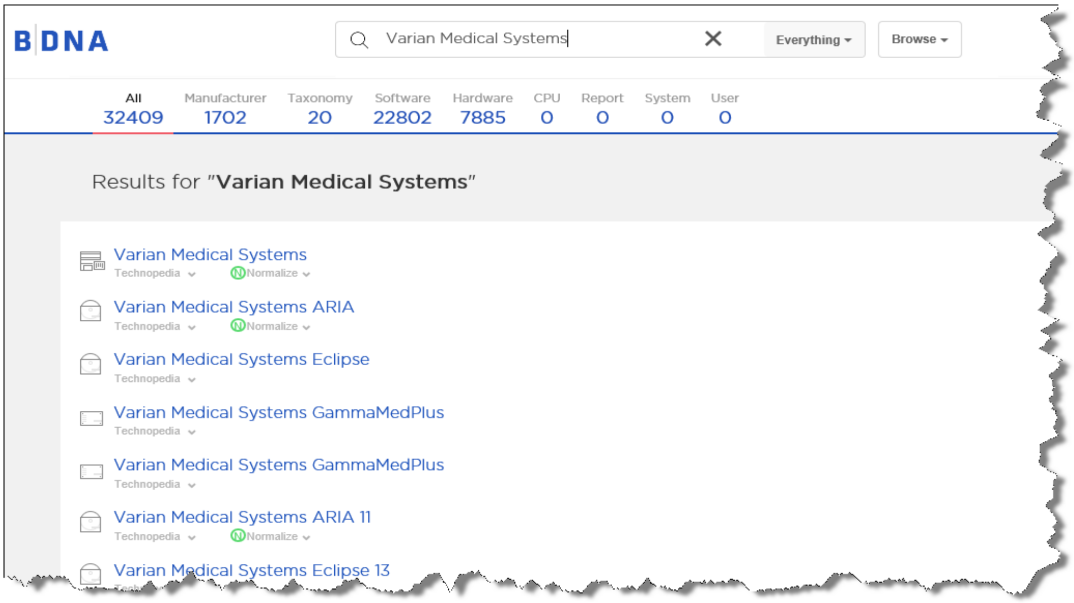
Creating a Medical Device in the Private Catalog

If licensed for the Medical and Health Care vertical, you can create a medical device and add it to the Technopedia Private Catalog. Medical devices can be created for a preexisting.manufacturer, as in the example shown here, or for a new manufacturer. Refer to Creating a Manufacturer in the Private Catalog for detailed instructions on creating a new manufacturer.

Task ***To create a medical device in the Private Catalog:***

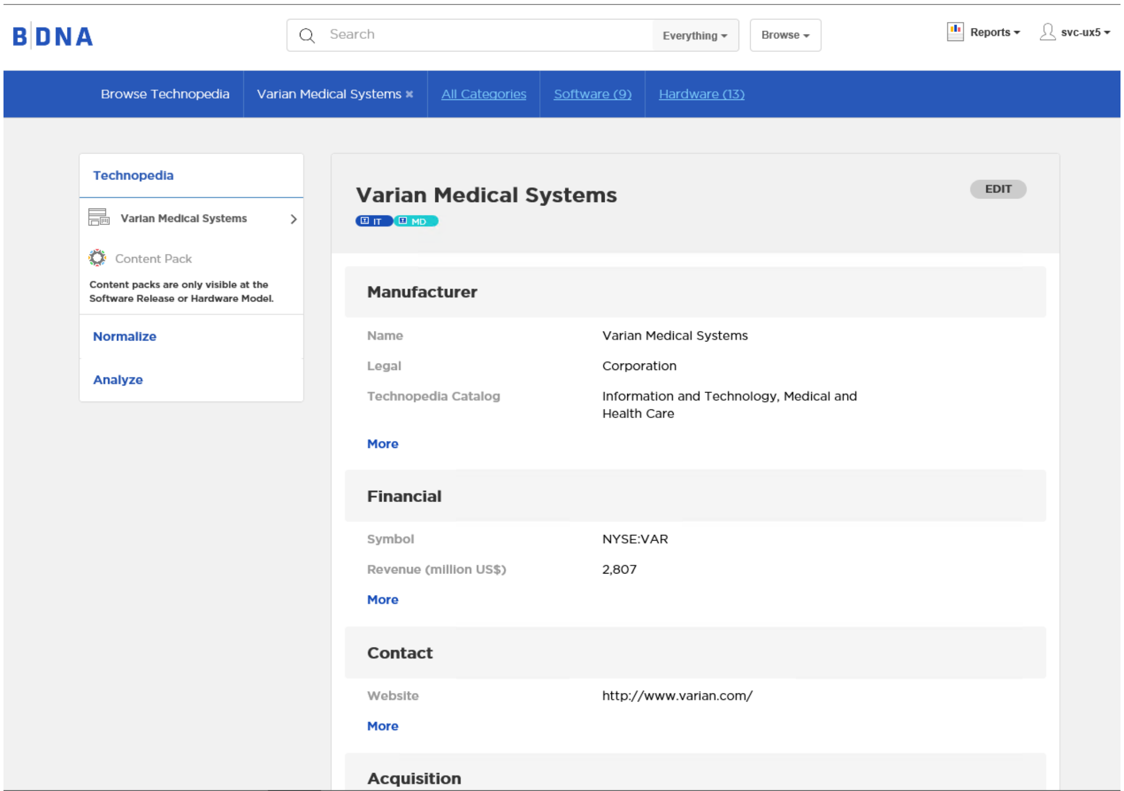
1. On the User Console, use the Search Scope entry field and type the name of a manufacturer (for example, Varian Medical Systems). A list of results appears.

Figure 3-48: Search Results screen



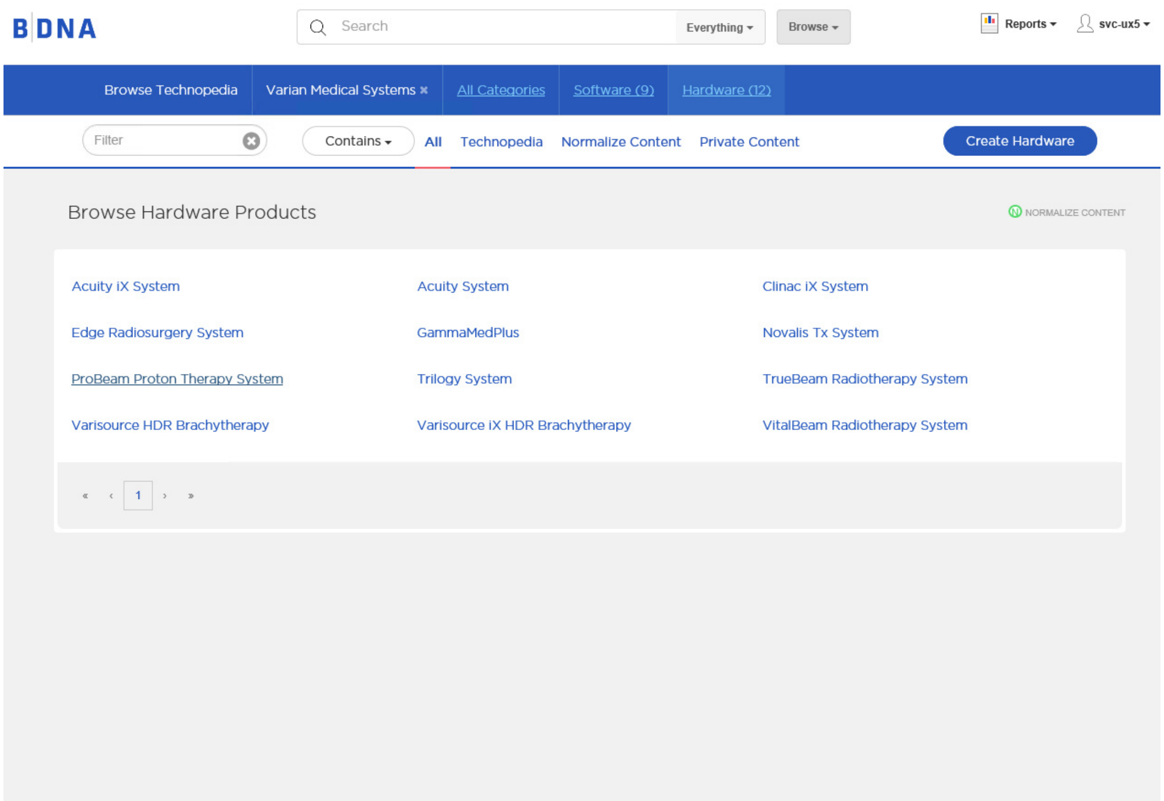
2. From the list of results that appears, select the manufacturer name. A page opens containing details about the Manufacturer.

Figure 3-49: Details Page



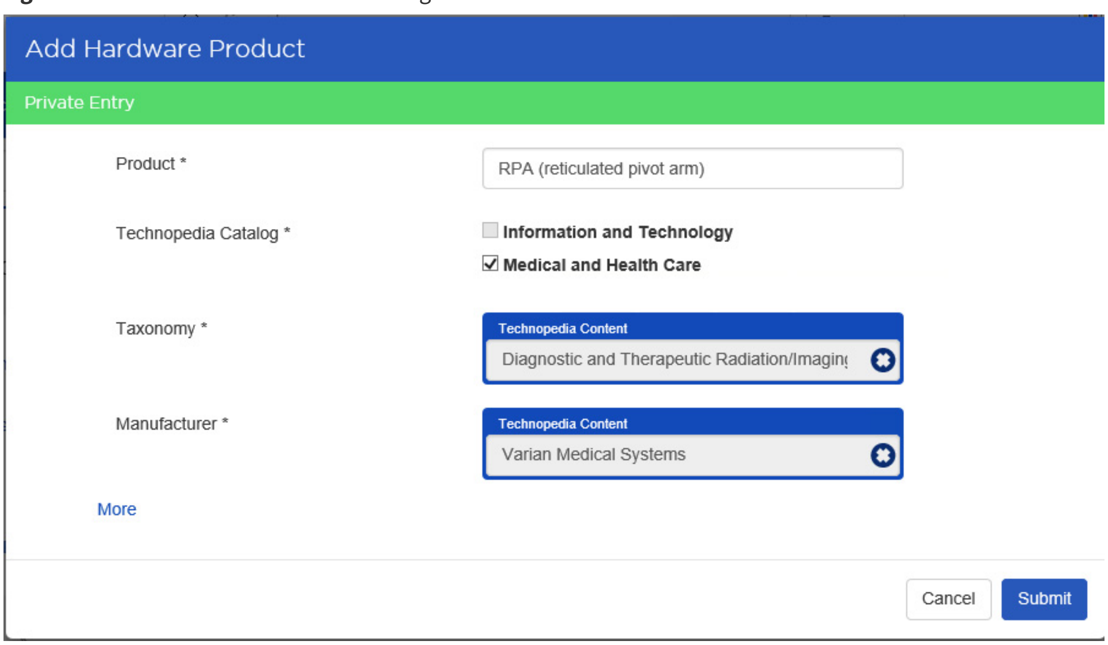
3. On the details page, click the Hardware link in the navigation panel. The Browse Hardware Products page opens.

Figure 3-50: Browse Hardware Products Page



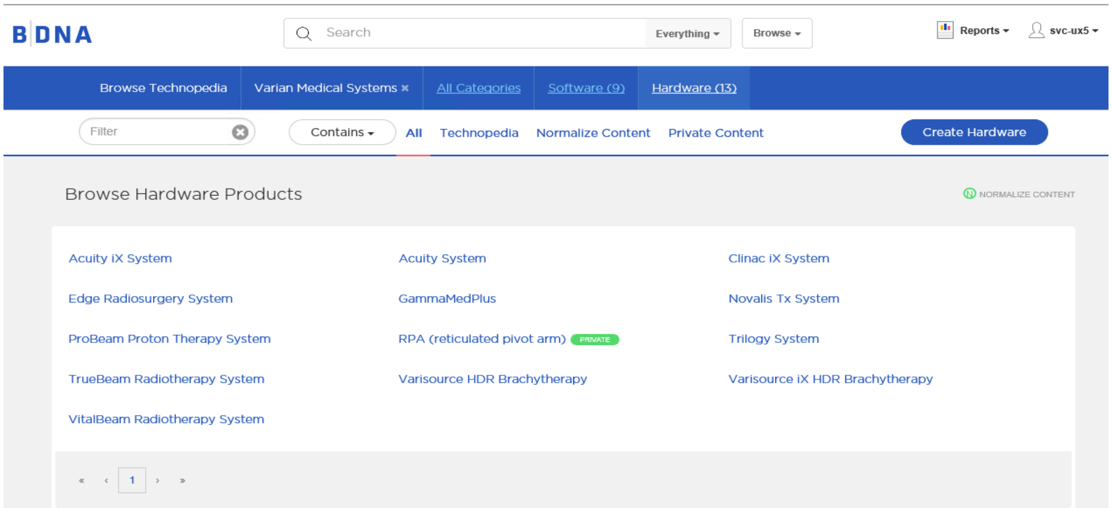
4. Click the Create Hardware button to open the Add Hardware Product dialog. Enter the information for the new product in the dialog and click Submit. The Browse Hardware Products page reopens.

Figure 3-51: Add Hardware Product Dialog



5. The new hardware is now listed on the Browse Hardware Products page. Note the green “Private” label next to the name, indicating that this product has been added to the Private Objects table.

Figure 3-52: Updated Browse Hardware Products Page



4

BDNA Analyze Basics

About Analyze

This chapter provides overview information about Analyze, an optional component of the BDNA User Console. About BDNA Analyze

The BDNA User Console is the gateway to BDNA Analyze analysis and reporting, providing easy-to-use tools for creating and sharing reports and dashboards.

- The BDNA User Console provides access to:
    - **Interactive Reporting**—Design detailed reports that provide additional features like defining groups, using a styling template, and formatting column headings, titles, fonts, and colors.
    - **Analyzer Reporting**—Use for ad-hoc analysis. It takes advantage of in-memory processing and caching in order to provide high performance, on-the-fly analysis. It also allows business and data analysts to explore and manipulate data and extract meaningful information.
    - **Dashboard Designer**—You can combine predefined reports and views in a single dashboard in order to present information in powerful and interactive visualizations.

Viewing Logs

Analyze logging information is stored in a queryable database table, `PUBLISH_LOGGER_TB`. All Analyze ETL for Catalog Sync and Normalize IT/PO processes are written to the `PUBLISH_LOGGER_TB` table in the `BDNA_PUBLISH` database. Logger tables include:

- `BDNA_A_LOGGER`: Contains all logs of Analyze ETL processes.
- `BDNA_A_LOG_LAST_INV`: Contains logs for the most recently executed Analyze inventory.
- `BDNA_A_LOG_INVENTORY`: Contains logs for all executed Analyze inventories.
- `BDNA_A_LOG_LAST_PROCESS`: Contains logs for the most recently executed Analyze process.
- `BDNA_A_LOG_PROCESS`: Contains logs for all executed Analyze processes.

Sample Queries

The queries shown below retrieve information from the logger tables:

Example 1. Query all logs:

```
select * from BDNA_A_LOGGER order by 1 desc
```

Example 2. Query logs for last inventory:

```
select * from BDNA_A_LOG_LAST_INV order by 1 desc
```

Best Practices for Interactive and Analyzer Reports

To improve the performance of Analyze reports, BDNA makes the following recommendations:

1. Disable "auto-refresh," build your report, and "refresh" it when you are done (see Disabling Auto Refresh Mode in Analyzer Reports, and Disabling Auto Refresh Mode in Analyzer Reports). When you proceed this way the queries are sent only once to the Server and the Database. This method is recommended when you know beforehand which attributes and measures are to be included in your report. However, when exploring interactive data, you may have to leave "auto-refresh" enabled. If that is the case, we suggest you follow the recommendations provided in point #2 as often as possible.
2. When building reports, consider dragging the dimensional attributes first, and adding the measures last. Adding measures typically involves aggregation operations such as count, sum, and averaging. When used at the beginning of your report building session, aggregation operations must be recalculated each time you add another dimensional attribute, triggering aggregations and group-by operations that incur costly and time-consuming processing cycles on your database.

Creating Reports

The BDNA User Console provides you with two reporting components: Interactive Reports and Analyzer Reports. Each reporting component fulfills a specific reporting need. Read the description below to decide which reporting component is right for you:

Table 4-1 • Choosing the Right Reporting Component

Use	If
Interactive Report	You want a report that looks professional and provides you with significant control over formatting elements such as fonts, font color, column widths, background colors, column sorting, and more.
Analyzer Report	You want to analyze business data quickly, focusing on the interaction, exploration, and visualization of data. You want to perform advanced sorting and filtering on your data; you want to drill through reports into the underlying data. You want to see chart visualizations or include conditional formatting.

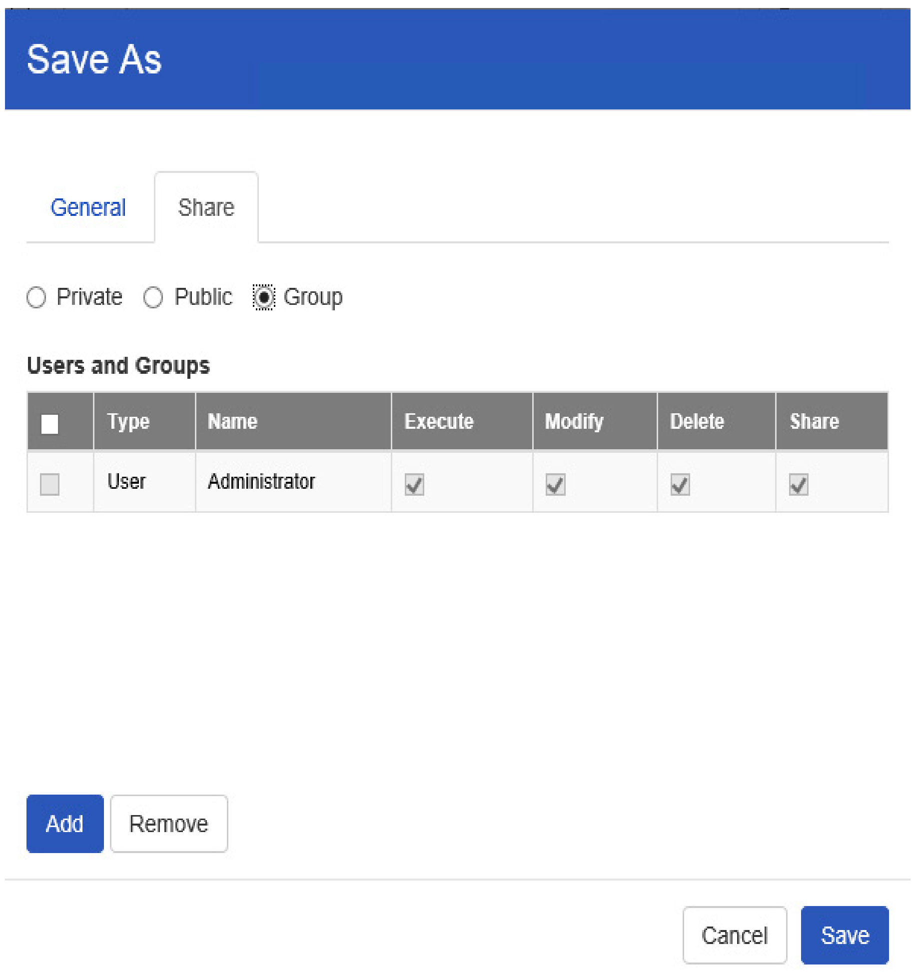
Access Level Control

Access Level Control is initially set during the installation and configuration process. You can modify Access Level Control within the BDNA User Console.

Task ***To modify Access Level Control within the BDNA User Console:***

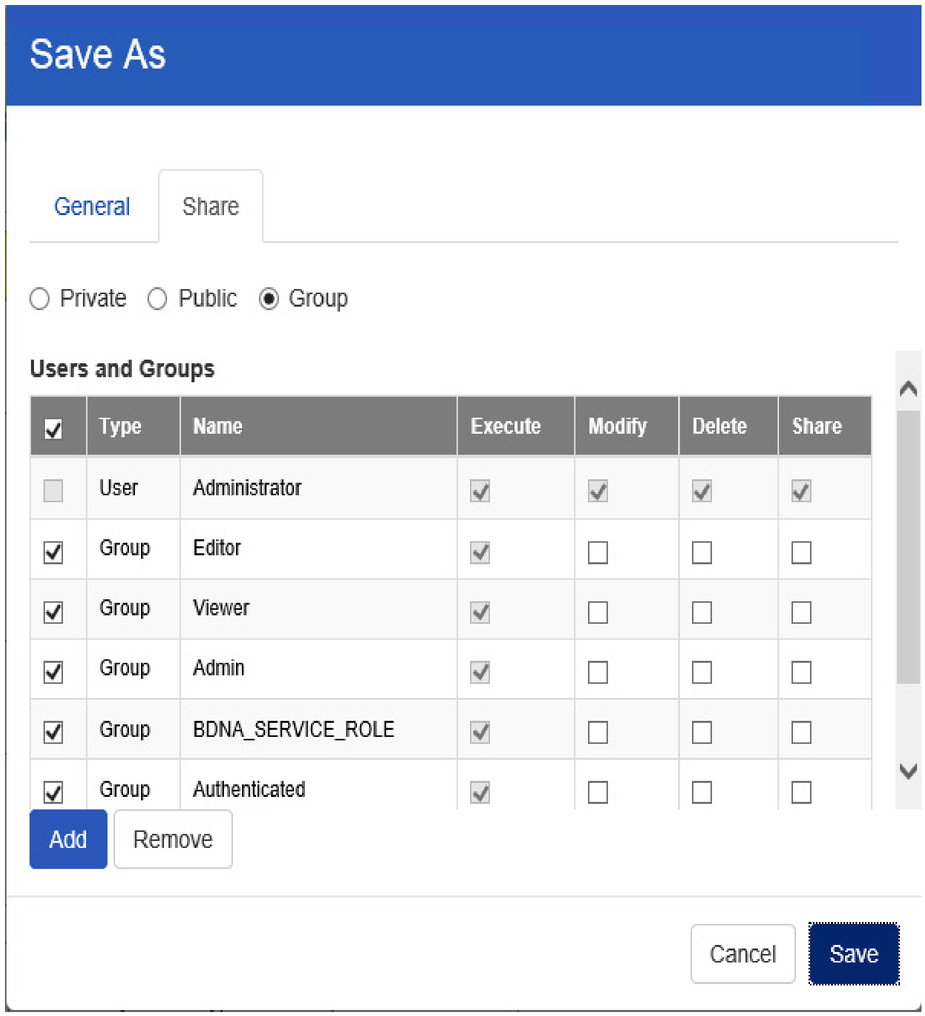
1. Create a new Interactive Report, Analyzer Report, or Dashboard using BDNA Analyze.
2. Save the new report using the Save icon in the report layout menu.
3. The Save As dialog opens, allowing you to enter a report name within the General tab.

Figure 4-53: Save As Screen



4. Click the Share tab, and the share dialog opens. Place a check in the access level checkboxes to set the Access Level Control you want to grant.

Figure 4-54: Share Tab Screen



Access Level (Permissions) are defined as follows:

- Execute—Execute an existing resource
- Modify—Update an existing resource
- Delete—Delete an existing resource
- Share—Grant roles/users permission to resources

Note • *Resources are reports, analysis views, dashboards, data integration jobs, etc.*

Permission Matrices

Table 4-2 • Administrator

Access	Administration	IT Assets	IT Procurement	Technopedia	User Defined
Execute	X	X	X	X	X
Delete					X
Modify					X
Share	X	X	X	X	X

Table 4-3 • Editor

Access	Administration	IT Assets	IT Procurement	Technopedia	User Defined
Execute		X	X	X	X
Delete					X
Modify					X
Share					

Table 4-4 • Viewer

Access	Administration	IT Assets	IT Procurement	Technopedia	User Defined
Execute		X	X	X	X
Delete					X
Modify					X
Share					

Table 4-5 • Authenticated

Access	Administration	IT Assets	IT Procurement	Technopedia	User Defined
Execute					X
Delete					
Modify					
Share					

5

Analyzer Reports

About Analyzer Reports

Analyzer is an analysis tool that provides you with a rich Web-based, drag-and-drop user interface, which makes it easy for you to create reports based on exploration of your data. You can also display Analyzer reports in a dashboard. Unlike standard reports which tend to be static or minimally interactive after they are created, Analyzer reports allow you to explore your data dynamically and to drill down into the data to discover previously hidden details. Analyzer reports present data multi-dimensionally and lets you select what dimensions and measures you want to explore. Use Analyzer reports to drill, slice, dice, pivot, filter, chart data and to create calculated fields. Users of Analyzer reports can query the data in a database without having to understand how the database is structured.

The data source used for an Analyzer Report is based on a Mondrian schema (also referred to as an Analysis Model). Mondrian schemas are XML models that have cube-like structures which use fact and dimension tables found in a relational database.

Note • *The field view in the sample report below is organized* ***by Category*** *(hierarchies and levels within a dimension). You can organize the field view in your Analyzer report alphabetically (****A-Z****), by* ***Number*** *(measures) -* ***Text*** *(names, categories, etc.) -* ***Time*** *(months, quarters, and years), and by* ***Schema****, which displays the dimensions as defined in the Mondrian schema.*

Task ***Follow the steps below to start creating the Analyzer report.***

1. In the User Console, go to the Reports menu and select Create Analyzer Report. A **Select Data Source** dialogue box will appear.

2. Select your **Schema** and **Cube** from the list. For the purposes of this exercise, select **Normalize: IT Assets.**

Note • *A schema is the structure of the relational database and includes tables, fields, views, and more. A cube is a data structure that allows information in a database to be analyzed quickly and from multiple perspectives.*

3. In the **Available Fields** panel on the left, click and drag **SW Category** to the **Rows** panel within the **Layout** panel.

   Figure 5-55: Software Category Column

SW Category
Applications
Databases
Middleware
Monitoring Tools
Operating Systems
Printers
Utilities

   The **SW Category** column appears in the workspace.

4. In the list of fields, click and drag **SW Install Count** to the **Measures** area within the **Layout** panel

   Figure 5-56: Software Category and Install Counts

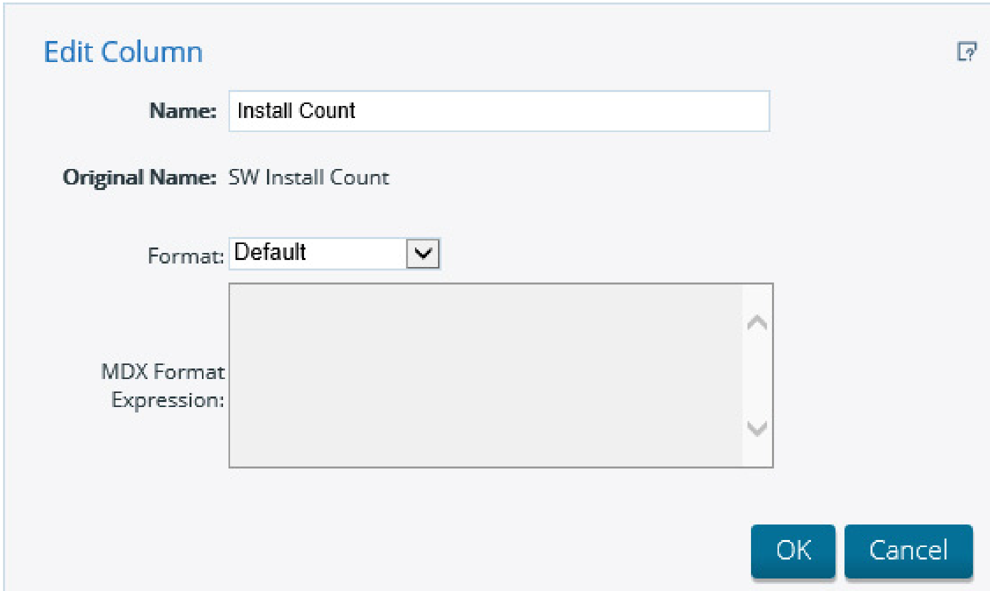
SW Category	SW Install Count
Applications	827,250
Databases	22,752
Middleware	54,330
Monitoring Tools	2
Operating Systems	38,524
Printers	44
Utilities	174,365

   The **SW Install Count** column appears in the workspace.

5. Right-click the SW Install Count column, then select Column Name and Format.

6. In the **Name**: field, change the column name to Install Count. Click **OK**.

Figure 5-57: Edit Column Screen



The data auto-updates and displays the new name.

Figure 5-58: Updated SW & Install Columns

SW Category	Install Count
Applications	827,250
Databases	22,752
Middleware	54,330
Monitoring Tools	2
Operating Systems	38,524
Printers	44
Utilities	174,365

7. Right click on “Install Count” and select “Sort Values High to Low”.

Figure 5-59: New Counts Screen

SW Category	Install Count
Applications	827,250
Utilities	174,365
Middleware	54,330
Operating Systems	38,524
Databases	22,752
Printers	44
Monitoring Tools	2

The **Install Count** column is sorted high-to-low.

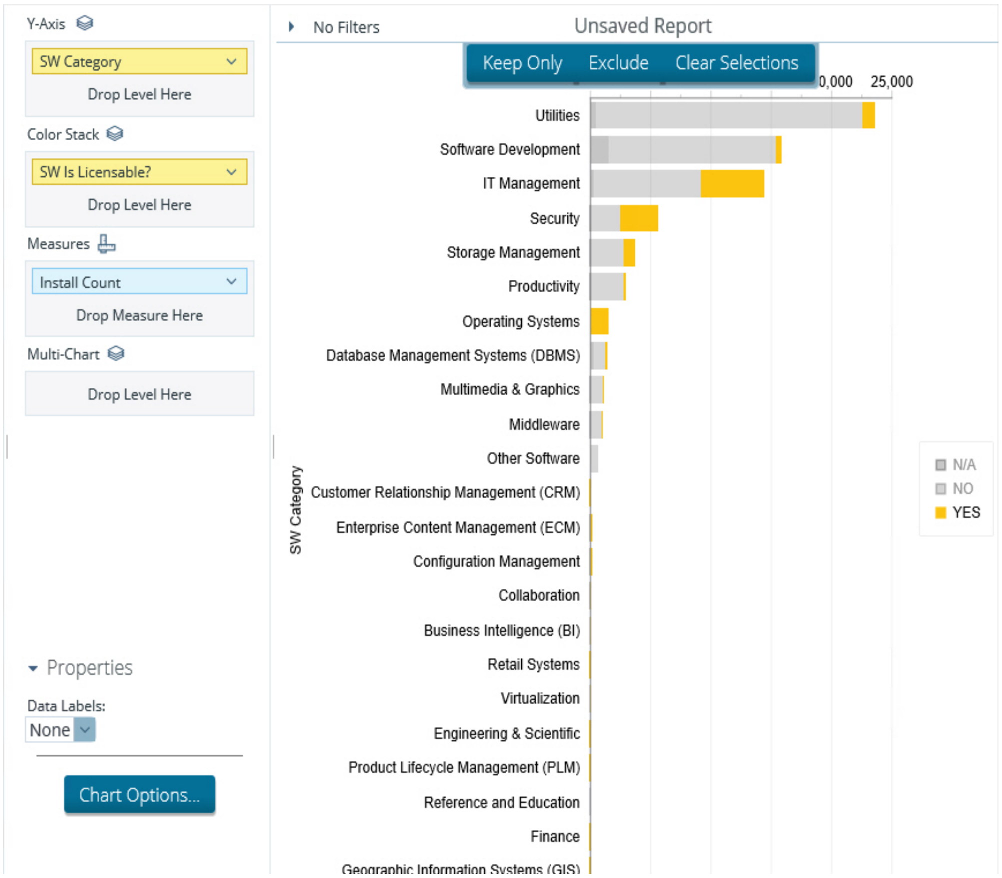
8. Click and drag the **"Is Licensable?"** column to the **Columns** panel within the **Layout** panel.

Figure 5-60: Is Licensable Screen

	Is Licensable?		
	N/A	No	Yes
SW Category	Install Count	Install Count	Install Count
Applications	7,152	449,999	370,099
Utilities	23	141,717	32,625
Middleware	58	22,531	31,741
Operating Systems	-	199	38,325
Databases	30	6,351	16,371
Printers	-	29	15
Monitoring Tools	-	2	-

At this point you have a functioning report and you can view your data in chart form. Click **Switch to Chart Format** to examine your report data in a chart format, located on the top right of the tool bar next View As. The default display is a bar chart but if you click **Choose Chart Type** you can select a different chart type to display your data. Use the "Layout" pane to re-arrange the rows and columns. For example, leave "SW Category" on the Y-Axis ad move "Is Licensable?" to the Color Stack.

Figure 5-61: Unsaved Reports



9. Save your report before continuing the exercise.

Adding Filters to a Report

Filters are used to restrict or limit the data that is presented in a report. For example, a report shows Software install count by category. A filter on **HW Subcategory** restricts the data so that Software for Desktops only are shown. If you add a Windows 7 Compatibility filter of "Not Compatible/EOL", the report displays data pertaining to "Desktop licensable software installations that are not Windows 7 compatible", exclusively. If you were to add a filter on the **SW Manufacturer** field to include "Microsoft," the report displays data pertaining to "Desktop Microsoft licensable software installations that are not Windows 7 compatible," exclusively.

Note • *You can click Undo or Reset to return to the previous version of the report.*

When using custom reports using Private Catalog attributes in filters (such as the “PRI Is Private?” attribute), make sure to update the filter to have ‘Not Available’ instead of ‘-’.

Adding Query Parameters to Reports

You must be logged into the BDNA User Console, and have an Analyzer report open for editing in order to continue.

Task ***Follow the below procedure to parameterize your MDX query***

1. Right-click on the dimension member you want to create a parameter for, and select **Filter** from the context menu.
2. Select the value you want to set as the default parameter value, then click the right arrow to move it to the list on the right.
3. Click the checkbox at the bottom of the window, then type in a name for the parameter in the **Parameter Name** field.
4. Click **OK**.

   Your parameter is now created as a filter in BDNA User Console.

   ***Note** • If you create a dashboard with this Analyzer report, then this filter can be used by Dashboard Designer as a prompt that will pass the value to a parameter as well.*

Exporting the Report

BDNA User Console allows you to export your report as a PDF, a Microsoft Excel spreadsheet, or a CSV file.

Task ***Follow the instructions below to export your report:***

1. In the BDNA User Console toolbar, click the **Report menu** and select **Export --> To PDF, To Excel, or To CSV.** The export options list appears.
2. Select **Export to PDF**. A PDF of the report appears.
3. Examine your report.

   Notice that BDNA User Console appends metadata about the report itself in the PDF. Information about the report author, the location of the source file, fields used, filter summary, are included.

Command Line

Reports can be used in a patchset as automation updates. They can also be used for backup or migration purposes, i.e. from one machine to another. The purpose of these commands is to:

- Import/export canned reports
- Import/export canned templates

- Import/export user reports
- Import/export user templates

If the user has access to the Pentaho User Console, they can download and upload the reports under the /UserReports folder. Follow the below steps in order to migrate reports:

1. Run the command to export the report. The filename should be the full filename. You can find the filename in the ‘Report’ menu, then navigate to ‘About this Report.’
    - ‘xanalyzer’ is an extension filename for analyzer report.
    - ‘prpti’ for interactive reports.
    - ‘xdash’ for dashboard.

    Note • *Spaces in the report title are replaced with an underscore within the report filename. For instance, “Analyze.exe / EXPORT=“/UserReports/my_first_report.xanalyzer.” The filepath needs to be passed into the import command; otherwise, it will fail. The location of the Analyze.exe is ($:\Program Files\BDNA\User Console\Bin).*
2. The report file is saved in folder “%NORMALIZE_BI_HOME%\Database\Reporting\UserReports\”.
3. Copy the report to another server.
4. Run the command in order to import the report. The filename should be the full filename with the absolute path. For example, “Analyze.exe/ import=“%NORMALIZE_BI_HOME%\Database\Reporting\UserReports\My_First_Report.xanalyzer”.
5. Perform the catalog sync.

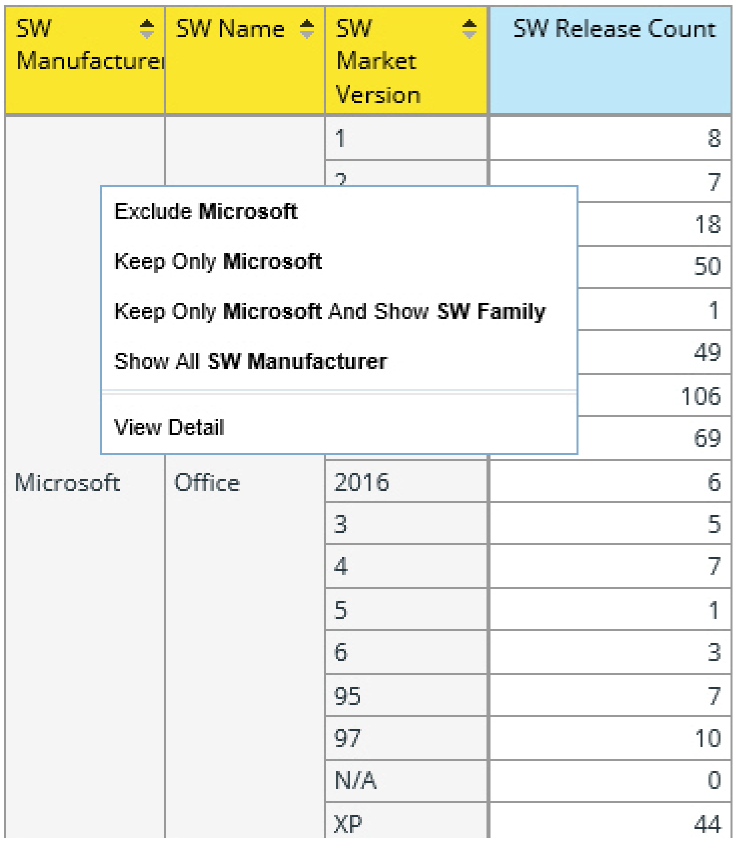
Member Properties

If a dimension has a number in parenthesis next to it in the field list, that means that it has **member properties** associated with it.

Report Drill-Downs

You can right-click on objects in an Analyzer report and click View Detail to open a detail page that contains more information about the object.

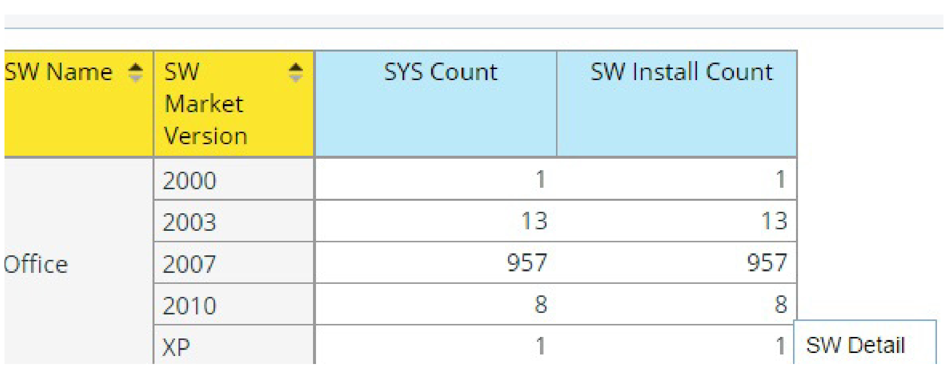
Figure 5-62: Report Drill-down



SW Manufacturer	SW Name	SW Market Version	SW Release Count
Microsoft	Office	1	8
		2	7
			18
			50
			1
			49
			106
			69
		2016	6
		3	5
		4	7
		5	1
		6	3
		95	7
		97	10
		N/A	0
		XP	44

You can also drill-down from an Analyzer Report to a Summary Report. Right-click on a report value and click SYS Detail to open the Summary Report.

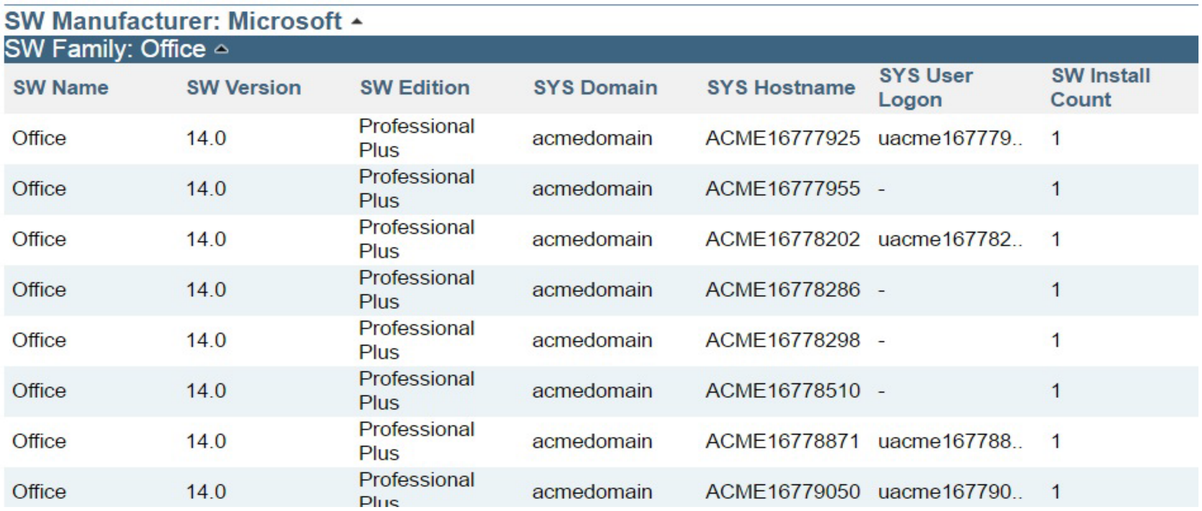
Figure 5-63: Click SYS Detail to open a Summary Report



SW Name	SW Market Version	SYS Count	SW Install Count
Office	2000	1	1
	2003	13	13
	2007	957	957
	2010	8	8
	XP	1	1

The Summary Report opens showing data that corresponds to the data in the Analyzer Report.

Figure 5-64: Summary Report


SW Manufacturer: Microsoft
SW Family: Office

SW Name	SW Version	SW Edition	SYS Domain	SYS Hostname	SYS User Logon	SW Install Count
Office	14.0	Professional Plus	acmedomain	ACME16777925	uacme167779..	1
Office	14.0	Professional Plus	acmedomain	ACME16777955	-	1
Office	14.0	Professional Plus	acmedomain	ACME16778202	uacme167782..	1
Office	14.0	Professional Plus	acmedomain	ACME16778286	-	1
Office	14.0	Professional Plus	acmedomain	ACME16778298	-	1
Office	14.0	Professional Plus	acmedomain	ACME16778510	-	1
Office	14.0	Professional Plus	acmedomain	ACME16778871	uacme167788..	1
Office	14.0	Professional Plus	acmedomain	ACME16779050	uacme167790..	1

The following table shows a list of Technopedia Cubes and Measures that have the right-click, drill-down function enabled.

Table 5-6 • Technopedia Cubes and Measures with drill-down function

Cube	Measure
Technopedia: Manufacturer	SW Count HW Count
Technopedia: Software	SW Count
Technopedia: Software Virtual Compatibility	SW Count
Technopedia: Software Windows Readiness	SW Count
Technopedia: Software Procurement	SW Count
Technopedia: Software Security	SW Count
Technopedia: Hardware	HW Count
Technopedia: Hardware Procurement	HW Count
Technopedia: Hardware Security	HW Count
Technopedia: CPU	CPU Count

The following table shows a list of Normalize Cubes and Measures that have the right-click, drill-down function enabled.

Table 5-7 • Normalize Cubes and Measures with drill-down function

Cube	Measure
Normalize: IT	SYS Count
	SW Install Count
	SW Use Count
	OS Instance CVE Count
	HW Instance CVE Count
	SW Instance CVE Count
	ENT Count
Normalize: IT Assets	SYS Count
	SW Install Count
	SW Use Count
	ENT Count
Normalize: IT Procurement	ENT Count
Normalize: IT Security	SYS Count
	SW Install Count
	SW Use Count
	OS Instance CVE Count
	HW Instance CVE Count
	SW Instance CVE Count

Freezing Panes in Your Table

To provide more space to view an entire table/report, you can freeze the column headers and/or the row labels.

Task ***To freeze panes in your table:***

1. Open a new or existing report and navigate to the **Report Options** dialog by using one of the following methods:
    - Click the **Report** menu in the upper-left and select **Report Options**.

      or

    - Go to the **Properties** section of the **Layout** panel and click **Report Options**.
2. Select **Freeze column headers** and/or **Freeze row labels**, then click **OK**.

Disabling Auto Refresh Mode in Analyzer Reports

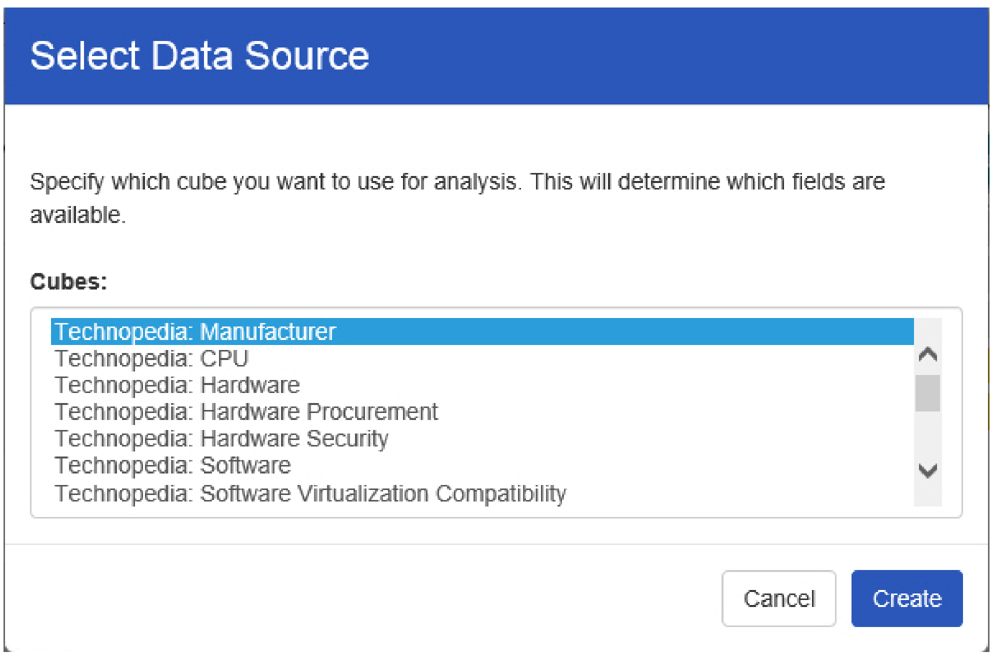
When you disable the **Auto Refresh Report** feature in Analyze, you can design your report layout first, including calculations and filtering, without querying the database until you are done. Once the report layout is complete, you can re-enable Auto Refresh Report. Data retrieval will occur once and your report will display the requested data.

Task ***Follow the instructions below to disable auto refresh and build a report.***

1. In the BDNA User Console User Console, go to **the Create Reports drop-down** and select **Analyze Report**. BDNA User Console opens.
2. Select your Data Source, (schema and cube), **Technopedia: Hardware** from the list.
3. Uncheck the **Auto Refresh Report** box.

Note • *Auto Refresh Report is enabled by default.*

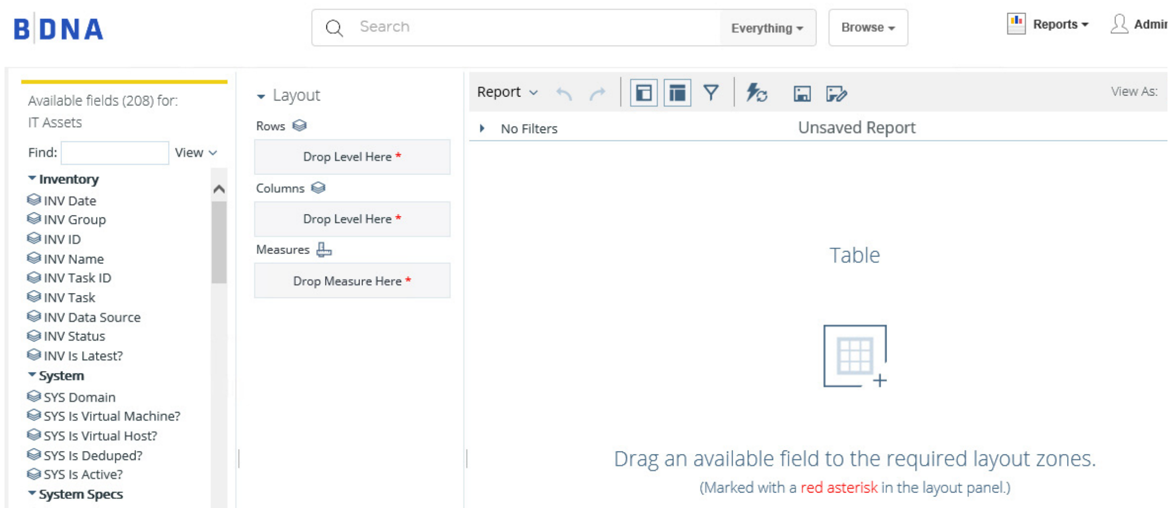
Figure 5-65: Select Data Source Screen



4. Click **OK**. The Analyze workspace appears.

5. To begin creating your report layout, select a field and drag it to the **Layout** panel at the left of the workspace.

Figure 5-66: Layout Screen



A message appears when you place the first field allowing you to refresh the report. Right-click menus are available for each of the fields you have dragged to the field layout area. You can continue to build your report and only query the database when the layout is complete. You will build your report in the field layout area exclusively while Auto Refresh is disabled. The blue carpenter square icons denote **Measure** items and the yellow steps icons denote **Level** items. They also indicate the position of the fields once they are placed in the report. Notice that the Analyze workspace is disabled (greyed out) if you are not in live query mode

Note • *Click the enable/disable **Auto Refresh** button in the toolbar to toggle between the two modes.*

6. When your report is complete, click **Refresh** in the pink band of the field layout area. Alternatively, use the toggle button.

The Analyzer report updates based on the report definition and displays the results. You can continue to edit the report as needed and click **Refresh**, or enable the **Auto Refresh** ability to run the query again.

Creating Hyperlinks to BDNA User Console Solution Repository Content

This feature allows you to create hyperlinks in an Analyzer report that will link to content in the BDNA User Console Solution Repository. This is used to open a related report from the source report in order to obtain more information.

The instructions below show you how to create hyperlinks to reports inside your BDNA User Console Solution Repository. You must adjust the instructions to work with your own data.

***Note** • Hyperlinks take precedence over the drill down feature in charts. That means that if a hyperlink has been defined and you click on a bar in a bar chart, for example, the data associated with the hyperlink, (not the drill down chart), displays. See Drilling in Charts for details about drill down feature in charts.*

1. Create a simple report.
2. Select a row label or column header, right-click, and choose **Hyperlink**. The **Link on (*Name of Field Level*)** appears.

   ***Note** • In the example above, Department is a row label and Region is a column header. Under these, are the individual members that belong to that field/level (for example, Executive Management, Finance and so on are members of Department).*

3. Click **Enable Link** to activate the hyperlink feature.

   You are not creating a hyperlink to the field header itself but rather to the members under the field level. You can disable linking at any time by clearing the Enable Link checkbox.

4. Click the down arrow next to **Link to** and choose BDNA User Console **Repository File**.
5. If you choose BDNA User Console Repository File, you can link to a report that contains a parameter that can be associated with the content in your report. Click **Browse** to locate your file in the BDNA User Console Repository. When you have found the file click **Open**.

   The **Link on *Field Name*** dialog box appears. If a destination parameter that matches the field name in your Report is found, field name is associated to that parameter. Click the checkbox next to the destination parameter name to enable it.

   If there are more parameters available for linking in the report or other content, they are also listed. You can override the values to the available parameters or leave them as is. You can also define how hyperlink content will display (Open in **New Tab**, **Window**, **Current Window**). Finally, you can enter a **Tool Tip** that displays when users hover over the hyperlinks.

6. Click **OK**.

   Hyperlinks appear in your report. Click on the links to make sure the report associated with them appears correctly.

7. Save your Report.

Creating Hyperlinks to a URL

This feature allows you to create hyperlinks in a report that will link to a URL for system to system linking, for example.

Task ***The instructions below show you how to create hyperlinks to a URL.***

***Note** • You must adjust the instructions to work with your own data.*

1. Create a simple report.
2. Select a row label (or column), right-click, and choose **Hyperlink**.

The **Link on (*Name of Field*)** appears.

3. Click **Enable Link** to activate the hyperlink feature.
4. Click the down arrow next to **Link to** and choose **URL**.

   The **Link on *Field Name*** appears.
5. Enter the URL path. You must use the {*FieldNameInsideCurlyBraces*} format to pass a parameter in your URL such as where {**Years**} is the parameter:

   ```
   http://www.bing.com/search?q={Years}
   ```

   You can also define how hyperlink content will display (Open in **New Tab**, **Window**, **Current Window**). Finally, you can enter a tool tip that displays when users hover over the hyperlinks.
6. Click **OK** to return to your report.

   Hyperlinks appear in your report. Click on the links to make sure the URL appears correctly.

Conditional Formatting of Measures

Conditional formatting in the data grid means that cells will be physically affected by the data they contain. The most common form of conditional formatting is stoplight reporting, where cell backgrounds are colored red, green, or yellow depending on user-defined thresholds. Analyze offers some simple pre-defined methods of conditionally formatting numeric data. Follow the directions below to implement conditional cell formatting.

1. Right-click a measure in the grid, then select **Conditional Formatting** from the context menu.

   A sub-menu with conditional formatting types will appear.
2. Select your preferred number format from the list.

   Consult Conditional Formatting of Measures for more information on simple conditional formatting types. The report will refresh and apply the formatting choice you specified.

Table 5-8 • Conditional Formatting Types

Indicator Type	Description
Color scale	The background cell color will be shaded according to the value of the cell relative to the highest and lowest recorded values in that measure. There are several color progressions to choose from.
Data bar	The cell background is partially filled with a solid color proportional to the scale of the cell's value relative to the highest and lowest recorded values in that measure.
Trend arrow	An upward or downward arrow is displayed to the right of the cell value depending on whether it contains a positive or negative value.

Setting Chart Options

The **Set Chart Options** allow you to define the chart display (colors, legend, number of charts per row, bullet styles, and more). To access the Chart Options dialog box, click the **Report** menu in the upper-left and choose, **Chart Options**.

Figure 5-67: Report menu

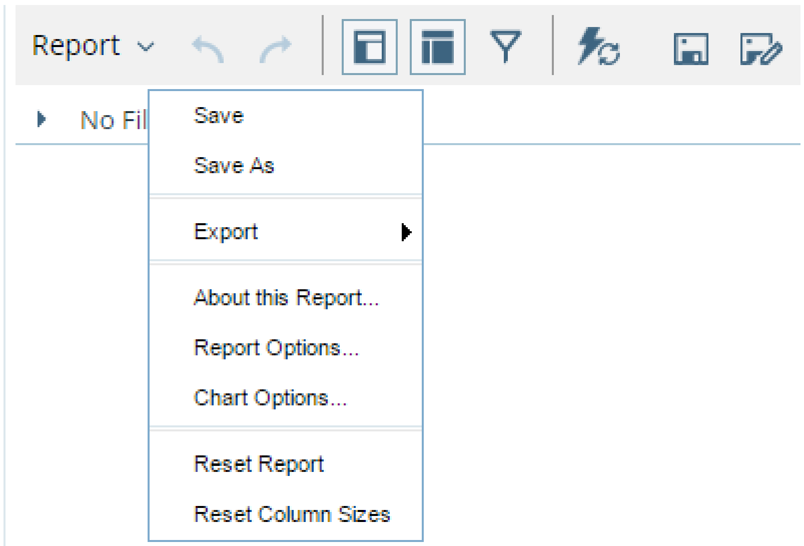


Chart options are defined below:

Table 5-9 • General

Option	Description
Background	**Fill type** defines the background color of the chart and the specific fill colors used. A **Gradient** will result in a gradual color transition in the fill color. Choose the color you want from the available color pickers (**Fill Color**, **End Color**) You can select not to have a fill color (**None**), or select a single background color (**Solid**).
Labels	Allows you to select a **font type**, **size**, **formatting**, and **color** of the labels in your chart.

Table 5-9 • General

Option	Description
Axis	Allows you to adjust the axis range. When set to **Auto Range**, the chart will scale based on the data. If you have a time series chart, you may want to set the range manually so that figures, (not close to the 0 axis), display correctly; (see image below). Select a **Scale** option to manage instances where numeric values in a chart are so long that they affect the display.

Table 5-10 • Legend

Option	Description
Show Legend	Allows you to enable to disable the legend display
Position	Allows you to select the placement (Top, Right, Bottom, Left) of the legend on the chart
Background Color	Allows you to select a background color for the legend
Font	Allows you to set the font type, size, format, and color associated with your legend

Table 5-11 • Other

Option	Description
Line Charts	Allows you to set the **Bullet Style** for points on a line chart and assign **Line Width**
Multi-Charts	Allows you to define the number of charts that display when using the **Multi-Charts** feature
Domain Limit	Allows you to limit the number of plot values that display in a chart.

6

Dashboards

About Dashboards

Creating a dashboard in BDNA Analyze Dashboard Designer consists of selecting a layout template, theme, and the content you want to display. In addition to displaying content generated from reports, Dashboard Designer can also include:

- **Data Tables**: tabular data.
- **URLs**: Web sites that you want to display in a dashboard panel.

Creating a New Dashboard

You must be logged into the BDNA Analyze User Console. Follow the instructions below to create a new dashboard:

1. In the BDNA Analyze User Console, click the Reports drop-down and select Dashboard. The New Dashboard page appears.
2. In the edit pane (lower portion of the page), click **Properties**, and enter a title for your dashboard page in the **Page Title** text box.

   The name appears on the top of the dashboard.
3. Click **Templates** to select a dashboard layout.

   A blank dashboard with the layout you selected appears.
4. Click **Theme** to select a theme for your dashboard.

   The theme you selected is applied to your dashboard.

   You now have the basic framework for a BDNA Analyze dashboard.

Working with the Chart Designer

The Chart Designer allows you to create bar, pie, line, dial, and area charts that can be added to a dashboard. Below are the general steps associated with creating a chart:

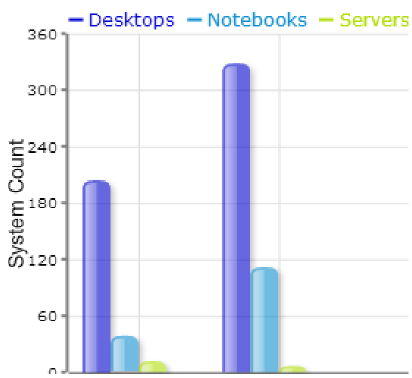
1. Select a data source.
2. Build a query.
3. Set the data definitions: values, series, category.
4. Select a chart type and theme.
5. Enter labels for the chart title, and x,y axes.
6. If applicable, adjust scaling and label rotation.
7. Place your chart in the dashboard.
8. Save your dashboard.

   If you are new to charting, here are some minimal guidelines that may help you determine what type of chart is best suited for the data you want to present in your dashboard:

Bar Charts

If you want to compare items during a specific time period, consider using a bar chart. Key words to think about when creating a bar chart are *compare* or *rank*. For example if you want to compare items sold to show which one made the most profit, you might create a bar chart that ranks the products from the lowest to highest profit. The bar's length determines its ranking; the label identifies the item. Bar chart data can be presented horizontally or vertically depending on your requirements.

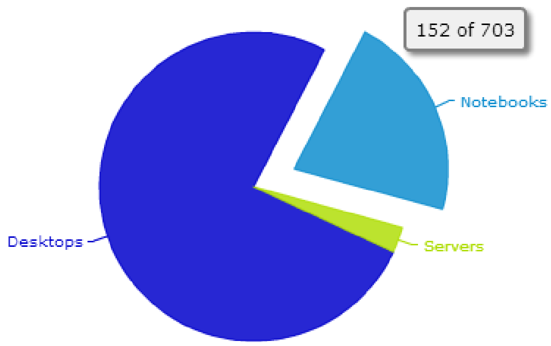
Figure 6-68: Bar Chart Example



Pie Charts

If you are comparing parts of a whole, consider using a pie chart. Key words associated with charts include, *portion*, *share*, and *percentage*. If for example, you want to demonstrate the proportion of the company's budget spent on health insurance, use a pie chart. To make the chart easier to read limit the number of slices to five. Pie charts can also be *exploded*, which means certain slices are pulled away from the remainder of the chart for emphasis.

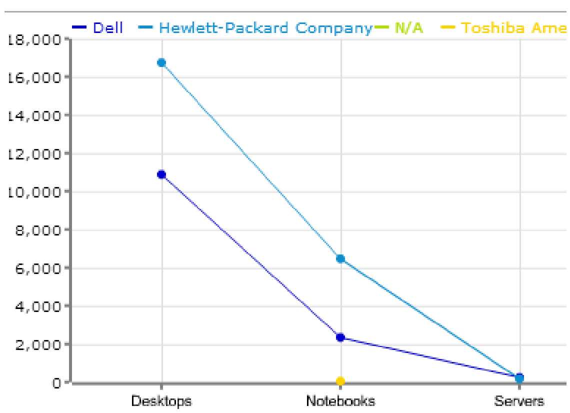
Figure 6-69: Pie Chart Example



Line Charts

Line charts are useful for showing changes over time. Key words associated with data that is best suited for a line chart are *trend*, *growth*, and *decline*. If, for example, you want to show how product sales have changed over five years, use a line chart. The slope of the line helps users quickly identify the direction of the trend.

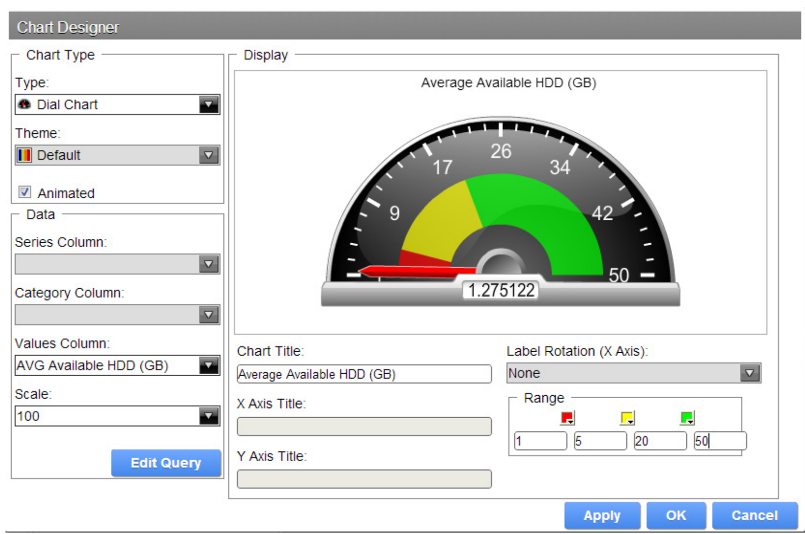
Figure 6-70: Line Chart Example



Dial Charts

Dial charts are often associated with Key Performance Indicators (KPIs). Dial charts are circular and contain a scale, a needle, and one or more a dial sectors. The dial sector is used to identify a specified area on a dial chart using a particular color. For example, you could have a dial plotting inventory with a minimum dial value of 10000 and a maximum dial value of 50000. There could be a red dial sector for the region between 2000 and 4000 indicating that if the needle is in this area, there is a danger of a supply inventory shortage.

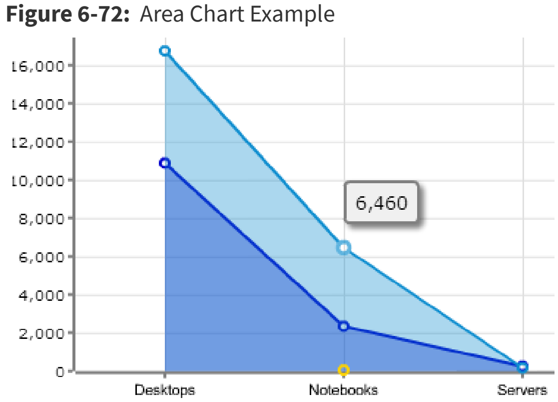
Figure 6-71: Dial Chart Example



Area Charts

Area charts can be used to show a comparison of the same thing during different points in time. Area charts are not designed to provide exact data but they do give users visual clues of the relative sizes of the items they are representing.

Figure 6-72: Area Chart Example



Adding Data to a Chart

Before you can start creating a chart you must select a data source that contains the data you want to use. You must then define the data that will be displayed in the chart.

Note • *If you are unsure what chart type is best for displaying your data, see "<Z_Hyperlink>Working with the Chart Designer" for more information.*

Task ***Follow the instructions below to add data to your chart:***

1. In the Dashboard, choose a dashboard panel and click (Insert) and select Chart.

   The **Select a Data Source** dialog box appears.

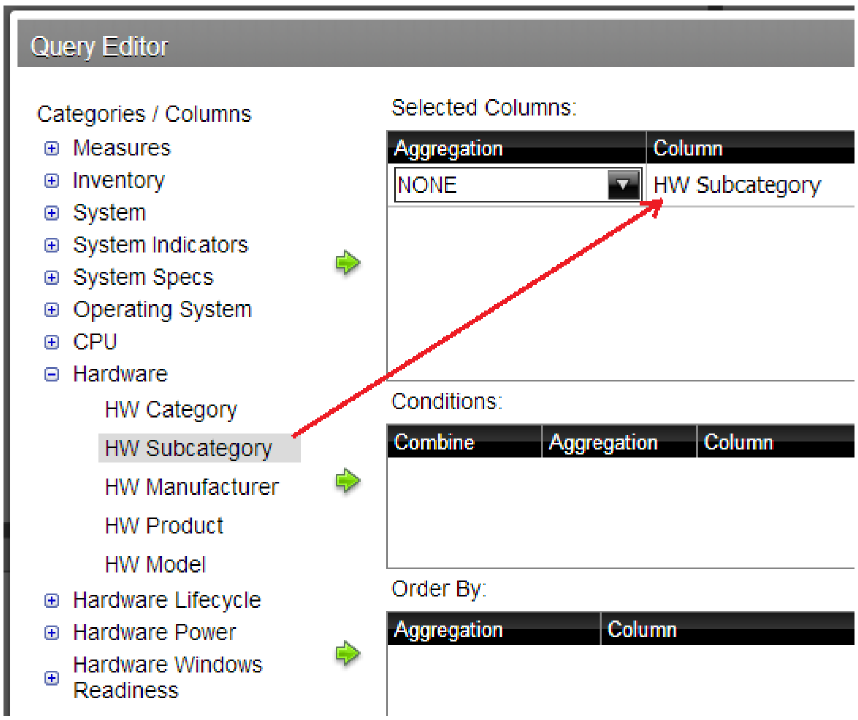
2. Select the data source from the list of available choices. The data source contains the content you want to display in your chart.

   The **Query Editor** appears.

3. The Query Editor allows you to retrieve dynamic data from a database for display in a chart. Defining your query is the first step in ensuring that the correct data is selected. In the Query Editor, click (+) next to a category name to display its associated table columns.

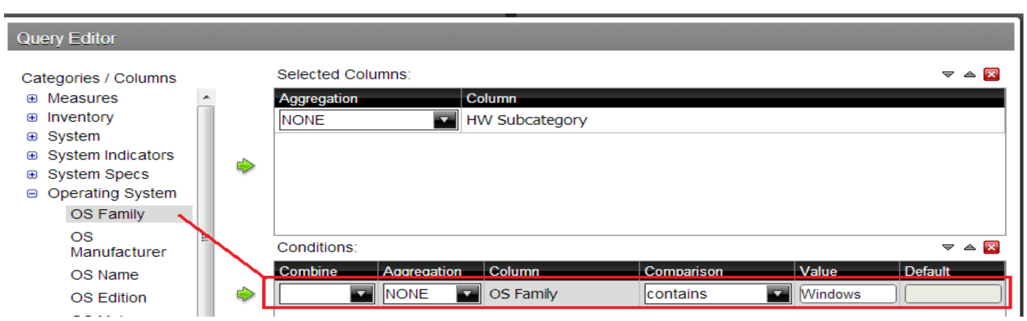
4. Click the small arrow to place the column name under **Selected Columns**. In the example below, the **HW Subcategory** column has been selected and moved under Selected Columns. Notice that the column names appear under Selected Columns. Continue adding columns as needed.

Figure 6-73: Query Editor



5. Now add the **Conditions**; these are your constraints that filter what you are selecting. You can add multiple conditions. In the example below, the search is limited to "Windows" Operating System family.

Figure 6-74: Conditions



Under **Combine**, you can select your constraint (and, or, and not, or not) from the drop-down list. Under **Comparisons** you can click the drop-down list to display options for comparisons, =, <, >, and so on. You can also select an aggregation type from the drop-down list for table columns that contain numeric data. The table below contains a definition for each aggregate type:

Table 6-12 • Aggregate Types

Aggregate Type	Description
SUM	Sums a column's values
COUNT	Counts a column's values
AVG	Averages a column's values
MIN	Selects the minimum column value
MAX	Selects the maximum column value

***Note •** Click **Preview** at any time to view the data associated with your query.*

6. Add the columns that you want to **Order By**. The ordering of the selected data is accomplished by one or more columns in a table. For example, you can sort the data by system count in descending order.

7. Click **OK** in the Query Editor when you are done.

The Chart Designer appears.

8. Under **Data**, click the drop-down arrow to display and select the table columns.

Figure 6-75: Column Options

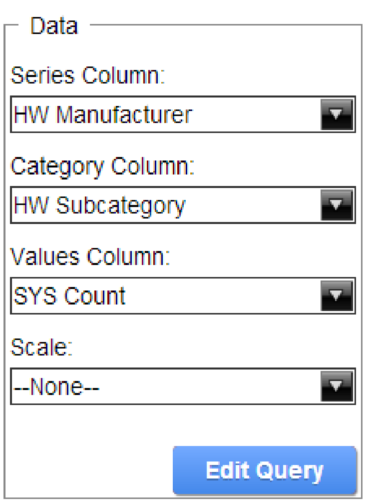
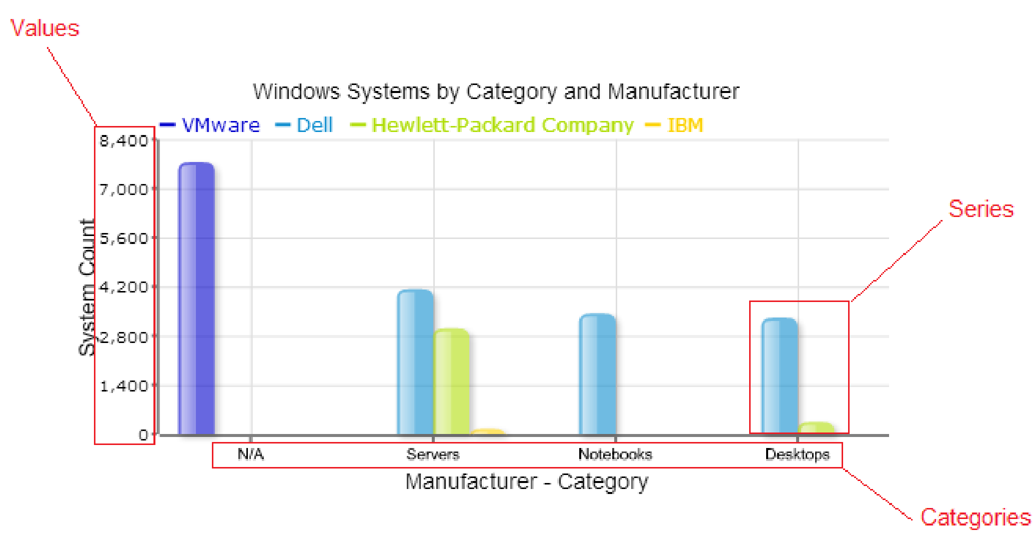


Table 6-13 • Data Definitions

Data Definition	Description
Series Column	Series show up as the individual columns on a bar chart and as individual lines in a line chart. Area charts display each series as a point.
Category Column	Categories are displayed as bars or groups of bars on the x-axis (horizontal axis). In line charts, categories are usually associated with time periods. In area charts, the x-axis displays the category labels. ***Note •*** *If you don't want to display categories, select None.*
Values Column	The value is always numeric. The value determines the height of columns in a bar chart and the height of lines in a line chart. In area charts, the y-axis values determine the heights of the points.

Figure 6-76: Values Screen



A preview of the chart appears in a box in the upper-right corner of the Chart Designer as you select your options.

9. Under **Chart Type**, click on a chart type to select it.

Note • *By default, pie and dial charts display in "animated" Flash mode. You can turn animation off by disabling the **Animated** check box in the Chart Designer. Animated charts bring focus to important aspects of your data. For example, animation allows you to bring out a data point if it reaches a critical value, such as high or low sales numbers.*

If you selected a pie or dial chart, see Working with Pie Charts or *Working with Dial Charts*, respectively.

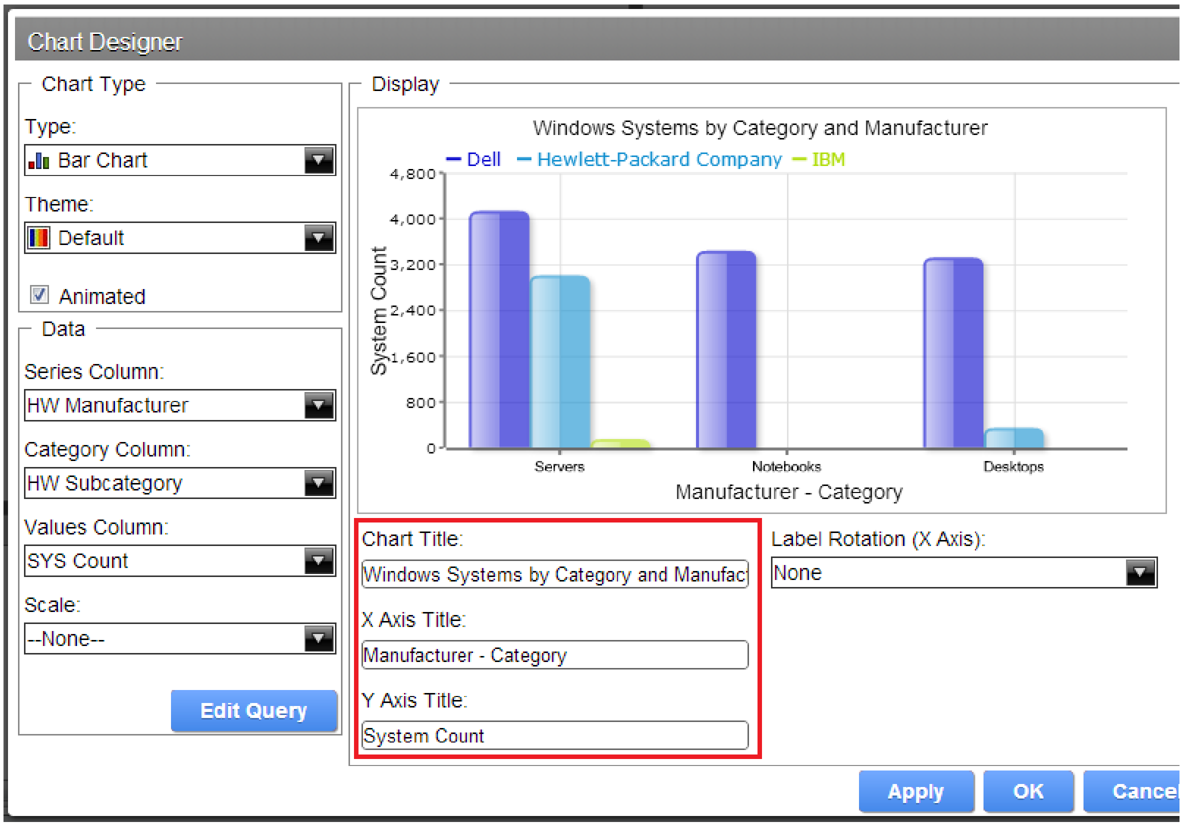
10. Under **Theme**, select a theme from the list.

The theme is applied to your chart.

11. Enter the labels for the **Chart Title**, **X Axis Title** (horizontal axis), and **Y Axis Title** (vertical axis).

    Entries are displayed in the chart preview.

    Figure 6-77: Chart Designer



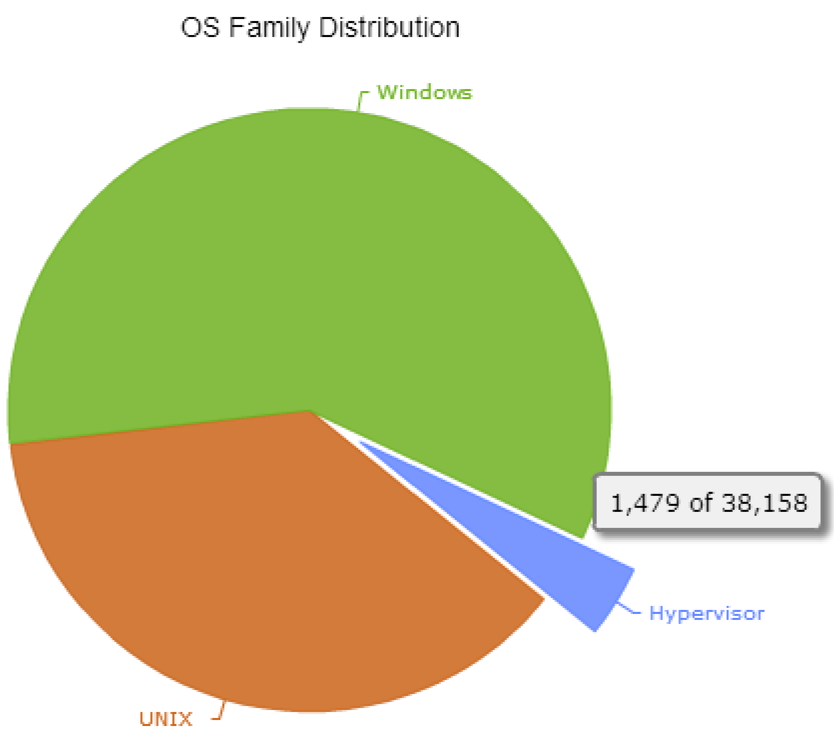
12. Click **Apply** to see the chart preview.

13. Click **OK** display your chart in the dashboard panel.

Working with Pie Charts

A pie chart gives dashboard consumers an immediate visual clue of the relative sizes of the shares of a whole. Categories are represented by individual slices. The size of the slice in a pie chart is determined by the value.

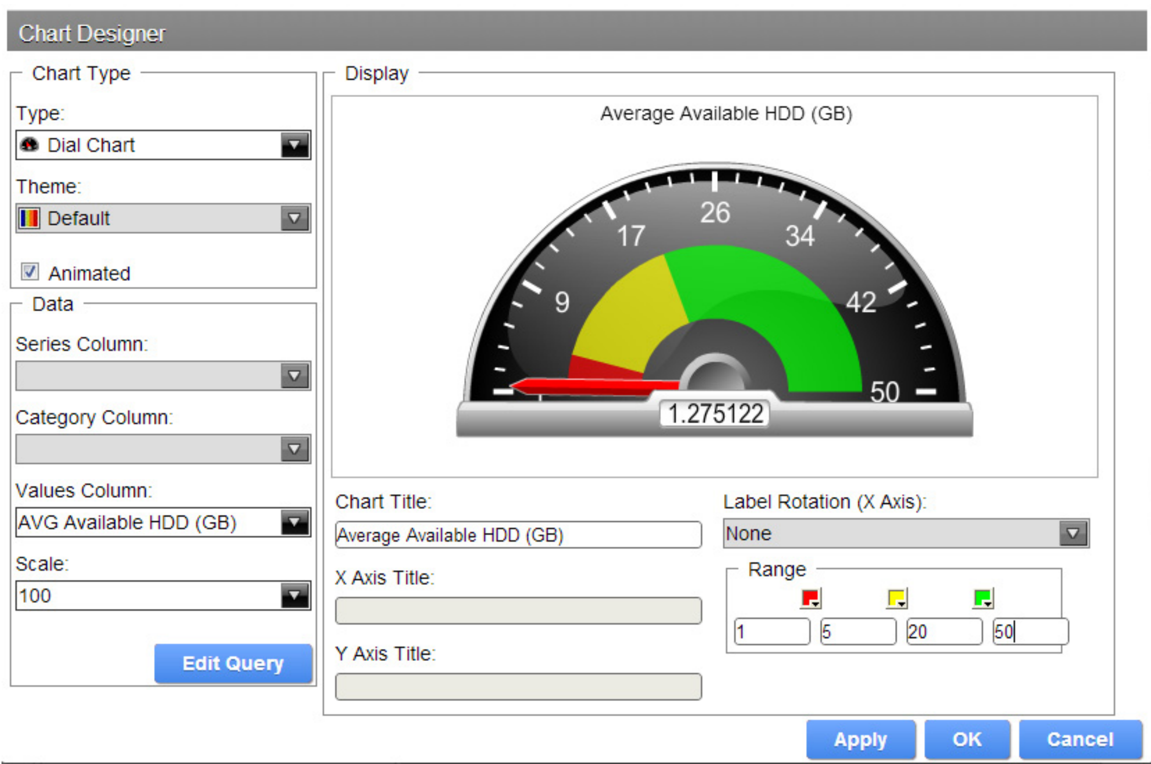
Figure 6-78: Working with Pie Charts



Working with Dial Charts

For dial charts to display correctly, you must enter values for your range and the chart title. In the example below, the dial chart preview is displaying ranges associated with sales. Notice that each dial sector is represented by a color, red, yellow, or green. The needle is positioned in the 220796.48 range, indicating that total orders, while not stellar, are not near the danger zone indicated by the red sector in the dial.

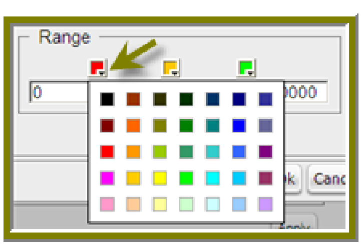
Figure 6-79: Working with Dial Charts



Changing Dial Sector Colors

You can change the color of a dial sector by clicking the small down arrow in the color boxes associated with Range. Select a color from the palette so that you can preview it on your dial chart. Click **Apply** to preview your dial chart. Click **OK** to place your dial chart into the dashboard.

Figure 6-80: Dial Selector Color Options

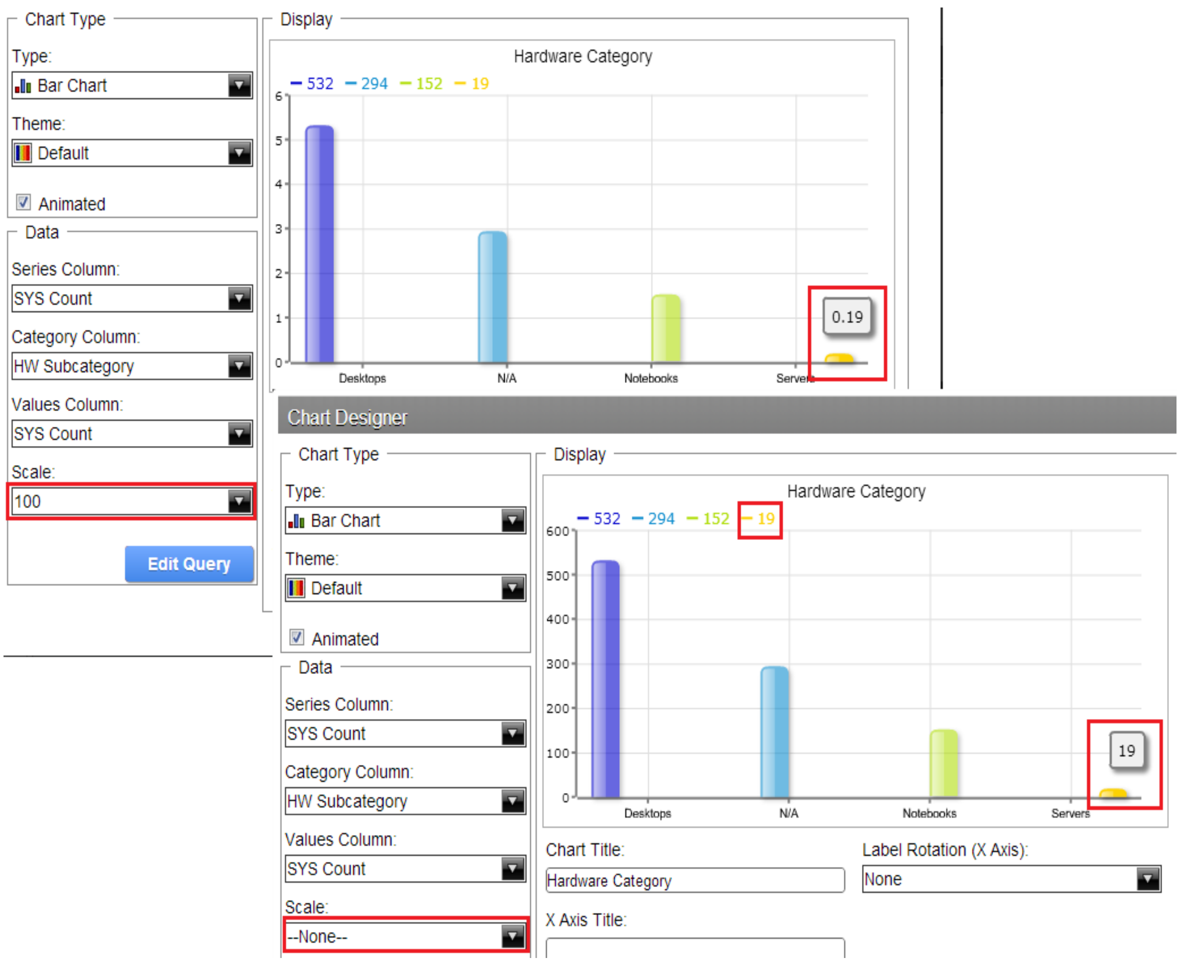


Task ***Correcting Scaling Issues***

Use the scaling feature in instances where numeric values in a chart are so long that they affect the display.

1. Preview your chart in the Chart Designer.
2. Under **Scale**, click to display the drop-down list of scaling options. In the example below, the scaling option used is "1000." Notice the change in the display of numeric values when scaling is applied. Users of the chart can see actual values when they hover over the bars in the chart.

Figure 6-81: Scaling Issue Corrections



3. Click **OK** to display the chart in the dashboard.

Note • *The scaling feature is available for all chart types except pie.*

Task ***Rotating Chart Axis Labels***

If your chart axis labels become unreadable because they are too long, **Label Rotation** may correct the problem.

1. In the Chart Designer, display your chart.
2. Under **Label Rotation**, select **Diagonal** or **Vertical** and click **Apply**.

   The labels display with the rotation you set.
3. Click **OK** to display the chart in the dashboard panel.

Task ***Editing a Chart***

Follow the instructions below to edit a chart.

1. In the Dashboard Designer, select the panel that is displaying the chart you want to edit.
2. In the upper right corner of the panel click (Edit)

   The Chart Designer appears.
3. Click **Edit Query**.

   The Query Editor opens.
4. Edit the query as needed and click **OK**.

   The Chart Designer appears.
5. Select the appropriate data definitions to build the chart.
6. If applicable, change the chart type and theme and click **Apply** to see a preview of the edited chart.
7. Click **OK** to display the chart in the dashboard.

Task ***Adding a Data Table to a Dashboard***

The Data Table feature allows you to display a tabular representation of a database query in a dashboard. It also allows you and consumers of the dashboard to manipulate the display of the data in the data table, while in the dashboard. For example, users can resize, sort, and change the order of columns. Follow the instructions below to add a data table to your dashboard.

1. Select a panel in the Dashboard Designer.
2. Click (Insert) and select **Data Table**.

   The **Select a Data Source** dialog box appears.
3. Select a data source from the list of available data sources and click **OK**.

   The Query Editor opens.
4. Begin building your query. Click (+) next to the category name to display its associated table columns. When the column names appear, click to select the column that contains the data you want displayed in your data table.

5. Click the small yellow arrow to place the column name under **Selected Columns**.

6. Now add the **Conditions**; these are your constraints that filter what you are selecting. You can add multiple conditions.

   Under **Combine**, you can select your constraint (and, or, and not, or not) from the drop-down list. Under **Comparisons** you can click the drop-down list to display options for comparisons, =, <, >, and so on; (for example, where the customer number is *equal* to 144 *or* 145). You can also select an aggregation type from the drop-down list for table columns that contain numeric data. The table below contains a definition for each aggregate type:

Table 6-14 • Aggregate Types

Aggregate Type	Description
SUM	Sums a column's values
COUNT	Counts a column's values
AVG	Averages a column's values
MIN	Selects the minimum column value
MAX	Selects the maximum column value

Note • *Click **Preview** at any time to view the data associated with your query.*

7. Add the columns that you want to **Order By**. The ordering of the selected data is accomplished by one or more columns in a table. For example, you can sort the data by customer name and address.

8. Click **OK** in the Query Editor when you are done.

   The Data Table appears in the dashboard panel.

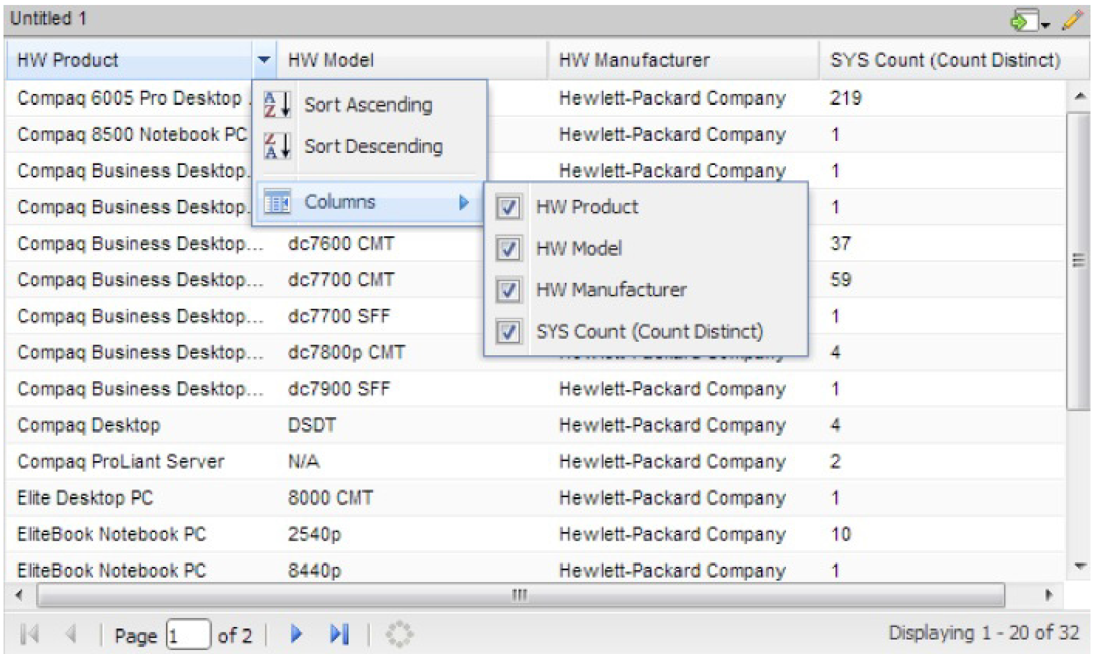
Updating the Data Table Display

You can edit the data table display directly in the dashboard panel.

Sorting Column Data

To change the sort order data under a column, click the drop-down arrow in the header and choose **Sort Ascending** or **Sort Descending**. You can also hide one or more columns by disabling the appropriate check boxes next to the column names.

Figure 6-82: Data Table Display



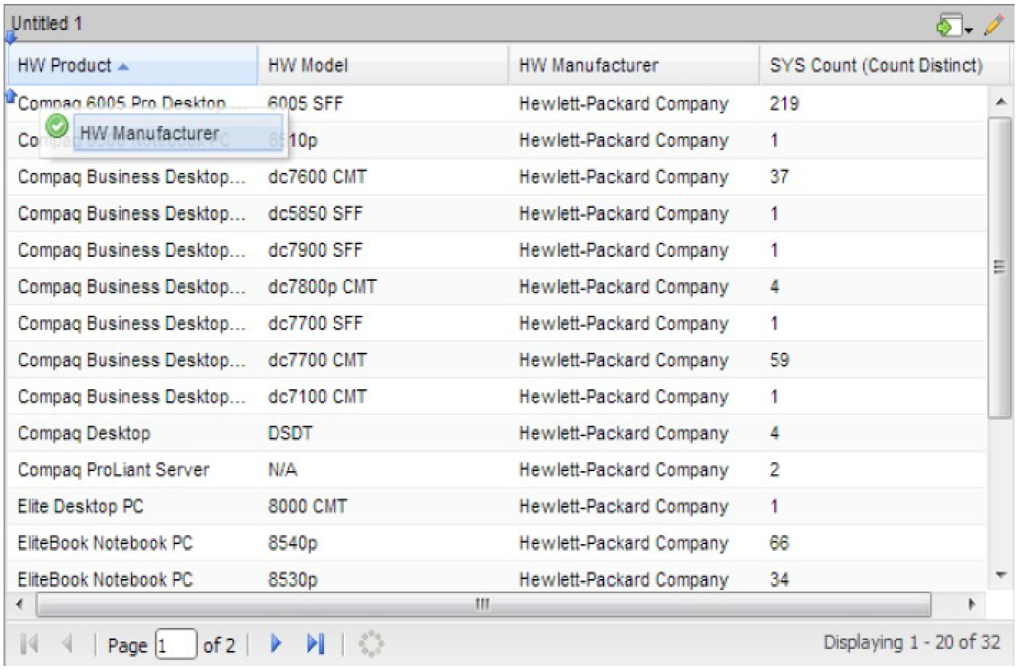
Adjusting Column Width

You can adjust the width of a column by clicking the right border of the column header and dragging it to the right or left. Release the mouse button when you are done.

Moving Columns

To move the placement of a column, click and drag the column it to the appropriate location in the Data Table as shown in the example below:

Figure 6-83: Column Movements



Untitled 1

HW Manufacturer

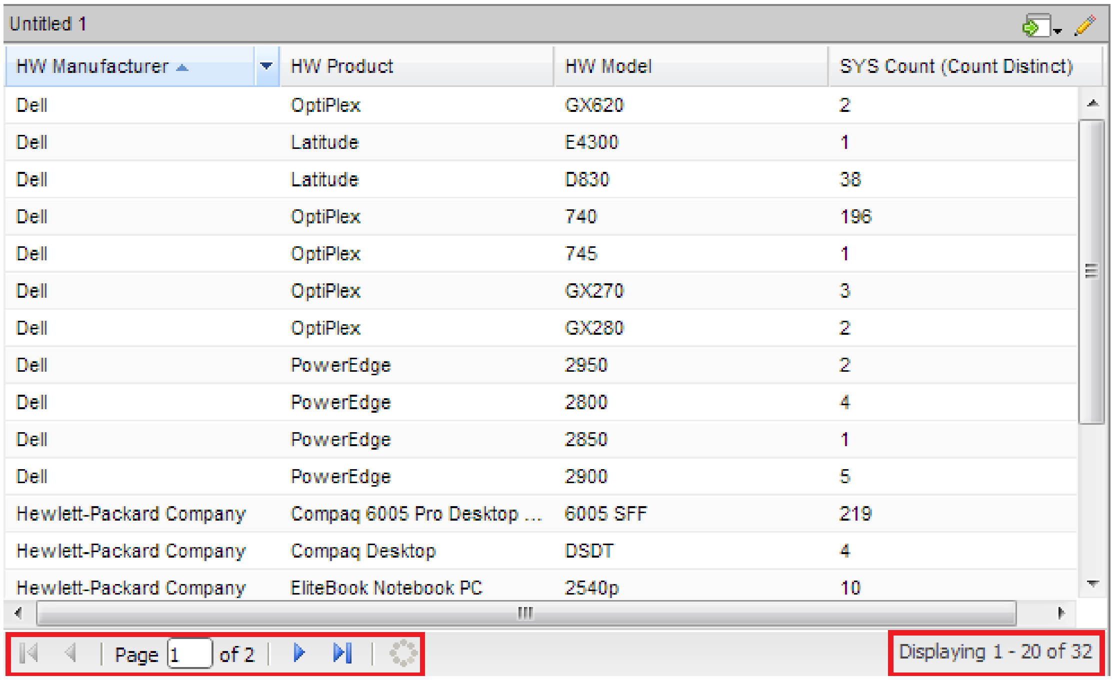
HW Product	HW Model	HW Manufacturer	SYS Count (Count Distinct)
Compaq 6005 Pro Desktop	6005 SFF	Hewlett-Packard Company	219
Co[illegible]	[illegible]10p	Hewlett-Packard Company	1
Compaq Business Desktop...	dc7600 CMT	Hewlett-Packard Company	37
Compaq Business Desktop...	dc5850 SFF	Hewlett-Packard Company	1
Compaq Business Desktop...	dc7900 SFF	Hewlett-Packard Company	1
Compaq Business Desktop...	dc7800p CMT	Hewlett-Packard Company	4
Compaq Business Desktop...	dc7700 SFF	Hewlett-Packard Company	1
Compaq Business Desktop...	dc7700 CMT	Hewlett-Packard Company	59
Compaq Business Desktop...	dc7100 CMT	Hewlett-Packard Company	1
Compaq Desktop	DSDT	Hewlett-Packard Company	4
Compaq ProLiant Server	N/A	Hewlett-Packard Company	2
Elite Desktop PC	8000 CMT	Hewlett-Packard Company	1
EliteBook Notebook PC	8540p	Hewlett-Packard Company	66
EliteBook Notebook PC	8530p	Hewlett-Packard Company	34

Page 1 of 2 | Displaying 1 - 20 of 32

Paginating

The pagination feature allows you to page through a large number of records.

Figure 6-84: Pagination



HW Manufacturer	HW Product	HW Model	SYS Count (Count Distinct)
Dell	OptiPlex	GX620	2
Dell	Latitude	E4300	1
Dell	Latitude	D830	38
Dell	OptiPlex	740	196
Dell	OptiPlex	745	1
Dell	OptiPlex	GX270	3
Dell	OptiPlex	GX280	2
Dell	PowerEdge	2950	2
Dell	PowerEdge	2800	4
Dell	PowerEdge	2850	1
Dell	PowerEdge	2900	5
Hewlett-Packard Company	Compaq 6005 Pro Desktop ...	6005 SFF	219
Hewlett-Packard Company	Compaq Desktop	DSDT	4
Hewlett-Packard Company	EliteBook Notebook PC	2540p	10

Task ***Adding an Analyzer Report to a Dashboard***

Follow the instructions below to display an Analyzer report in a dashboard.

1. Select a panel in the Dashboard Designer.
2. Click (Insert) and select File.

   A browser window opens.
3. Locate the appropriate Analyzer report and click **Select**.

   The Analyzer Report appears inside the dashboard panel.

Implementing Filters

Filters display a subset of data based on the dashboard user's point of view. For example, a European user may only want to see EMEA region asset data, whereas the dashboard's default region is the NA region.

***Note** • To ensure that a filter links to the correct content in a dashboard, the content to which you are linking (data table or chart) must contain at least one parameter.*

Task ***Below are general instructions for adding filters to your dashboard:***

1. In the dashboard page, select **Edit** (the pencil icon), which will make the **Objects** pane appear.
2. Under **General Settings**, select **Prompts**.

   The Prompts pane appears on the right. No filters are listed if this is the first time you are assigning filters.
3. To display a filter toolbar to users of the dashboard, enable **Show Prompt Toolbar**.

   The prompt toolbar appears at the top of the dashboard.
4. Click the Add button to start adding filters.

   The **Prompt** dialog box appears.
5. In the **Prompt** dialog box, type a display name for the control label. For example, “Hardware Category.”
6. Enable **Display Name as Control Label** if you want users to see the display name in the filter toolbar.
7. Select your control type. Control types define how your filter values are selected; for example, in a drop down list, radio button, checkbox, and so on.

The table below contains a description of each control type.

Table 6-15 • Control Types

Control Type	Description
Drop Down	Users select a filter value from a drop-down list.
List	Users select a filter value from a scrolling list. This filter control supports multiple selections.
Radio button	Users click a radio button to select a filter value.
Checkbox	Users enable a checkbox to select a filter value. This filter control supports multiple selections.
Button	User click a button to select a filter value. This filter control supports multiple selections.
Text Field	Users enter a text string or number into a text field manually.
Date Picker	Users examine filter values based on calendar date.

Your dashboard now has a filter.

If you plan to provide hard-coded names and values for your dashboard users, or produce a dynamic filter list, continue on to the next few sections.

Creating a Static List of Options

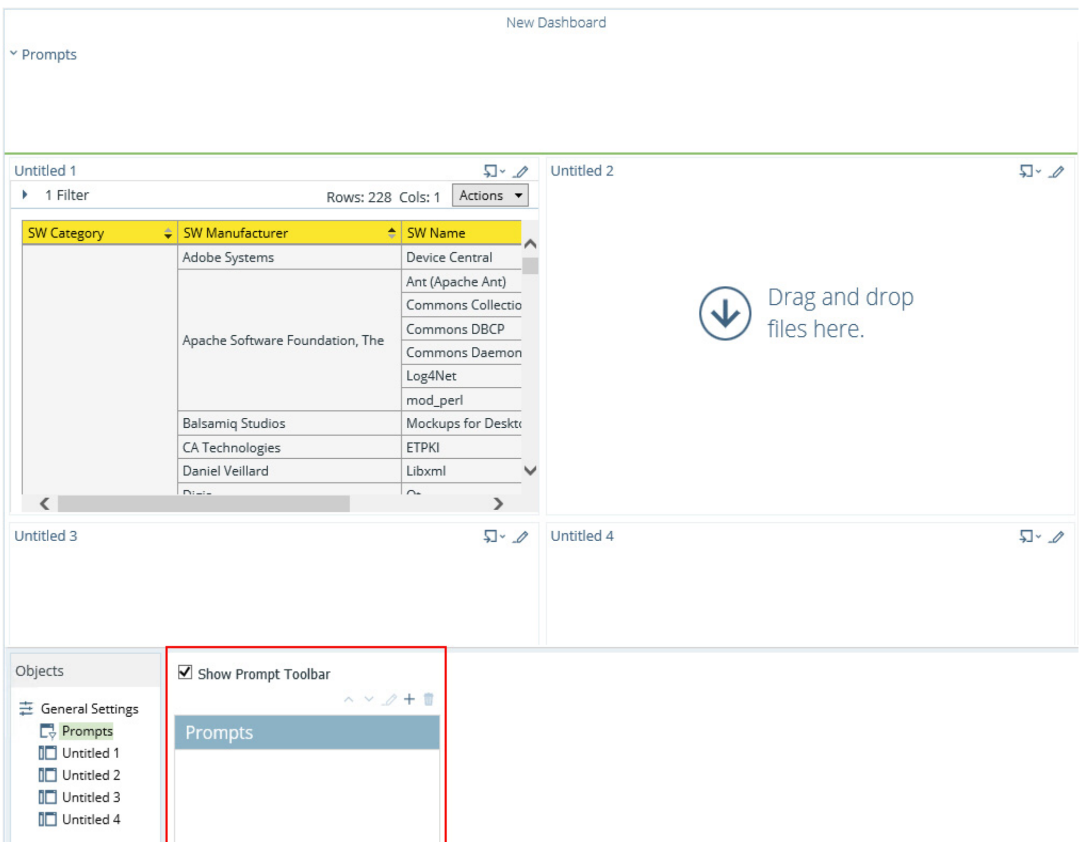
You must have a data table or chart that contains at least one parameter for your filter control to function correctly. When you create a static list, you define a static list of options to present to the dashboard user. Each option consists of a display name that appears in a drop-down list and a value that is used to restrict the data query in the filter toolbar as shown in the example below:

Task ***Follow the instructions below to create a static list:***

1. In the dashboard page, under **General Settings**, select **Prompts**.

   The Prompt Pane appears on the right. No filters are listed if this is the first time you are assigning filters.

   Figure 6-85: Prompt pane



2. To display a filter toolbar to users of the dashboard, enable **Show Prompt Toolbar**.

   A placeholder for the filter toolbar appears at the top of the dashboard.

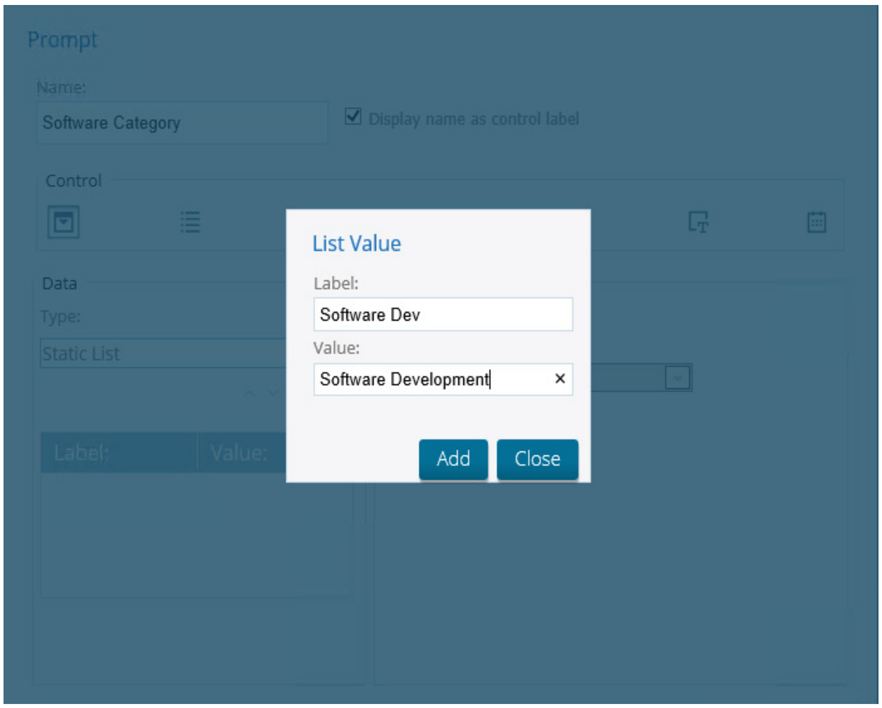
3. Click (Add) to add a filter.

   The **Prompt** dialog box appears.

4. Click on an icon to select your **Prompt** type. In the example above, the (Drop Down) control was used.
5. Ensure that **Static List** is selected under **Type**. Static List is the default selection.
6. Click (Add).

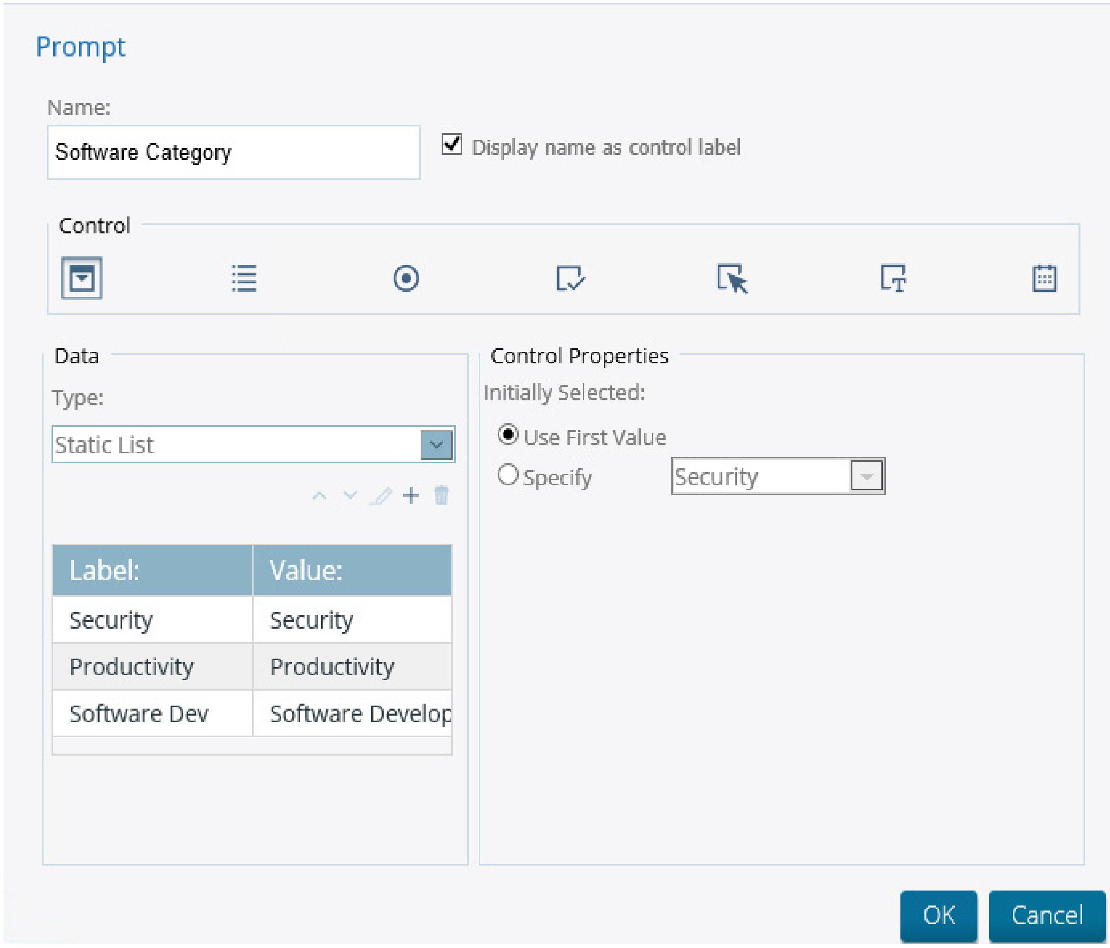
   The **List Value** dialog box appears.
7. In the **List Value** dialog box, enter the label and a value for the first option in the list. The label is the option that is visible to dashboard users; the value is passed as the parameter's source value.

   Figure 6-86: List Value Dialog

8. When you are done adding labels and values, click **Close** to exit the List Value dialog box.

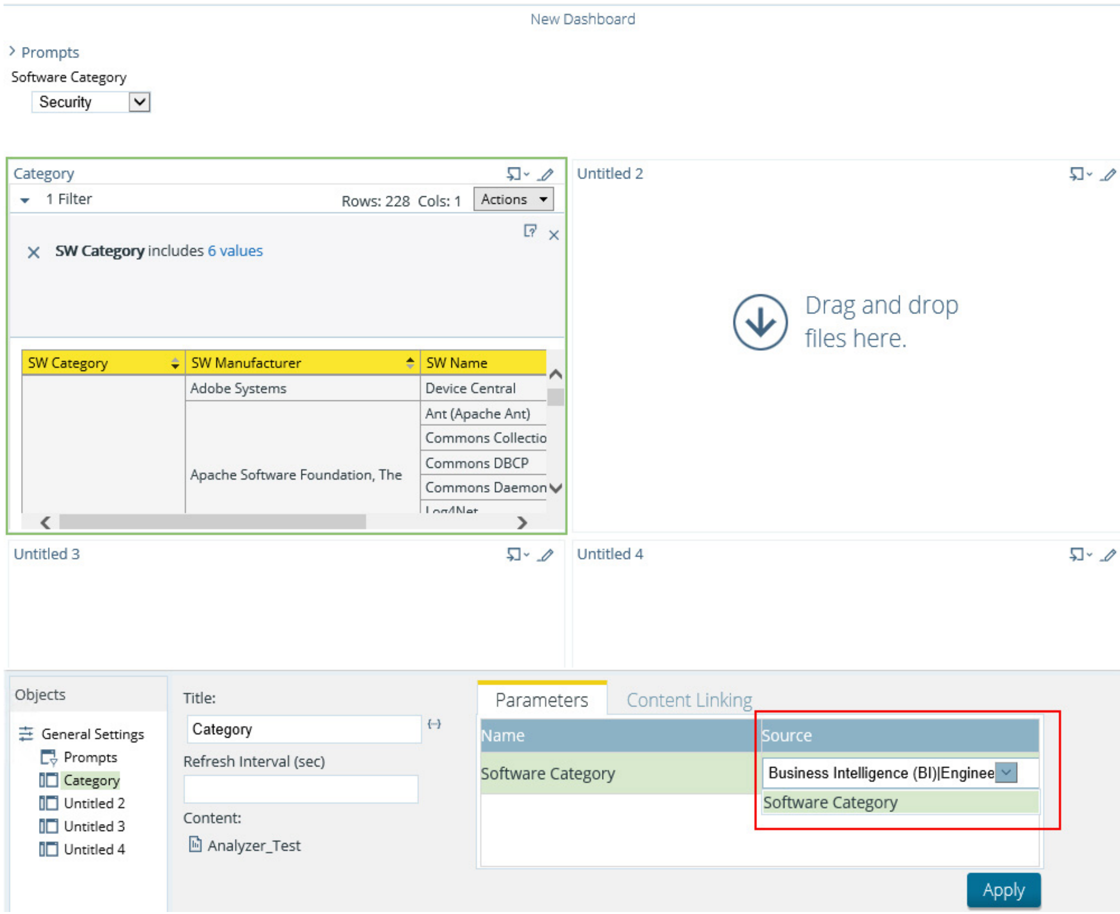
Figure 6-87: Added Labels and Values



9. Optionally, in the Prompt dialog box you can change the control properties (filter option) that will appear first in the filter control selecting another label from the list under **Use First Value**.

10. In the dashboard, select your chart or data table. Click the **Parameters** tab and choose another **Source** for the parameter from the list. That source should be the name of your filter control; in this example, **Software Category**.

Figure 6-88: Changing the Source Value

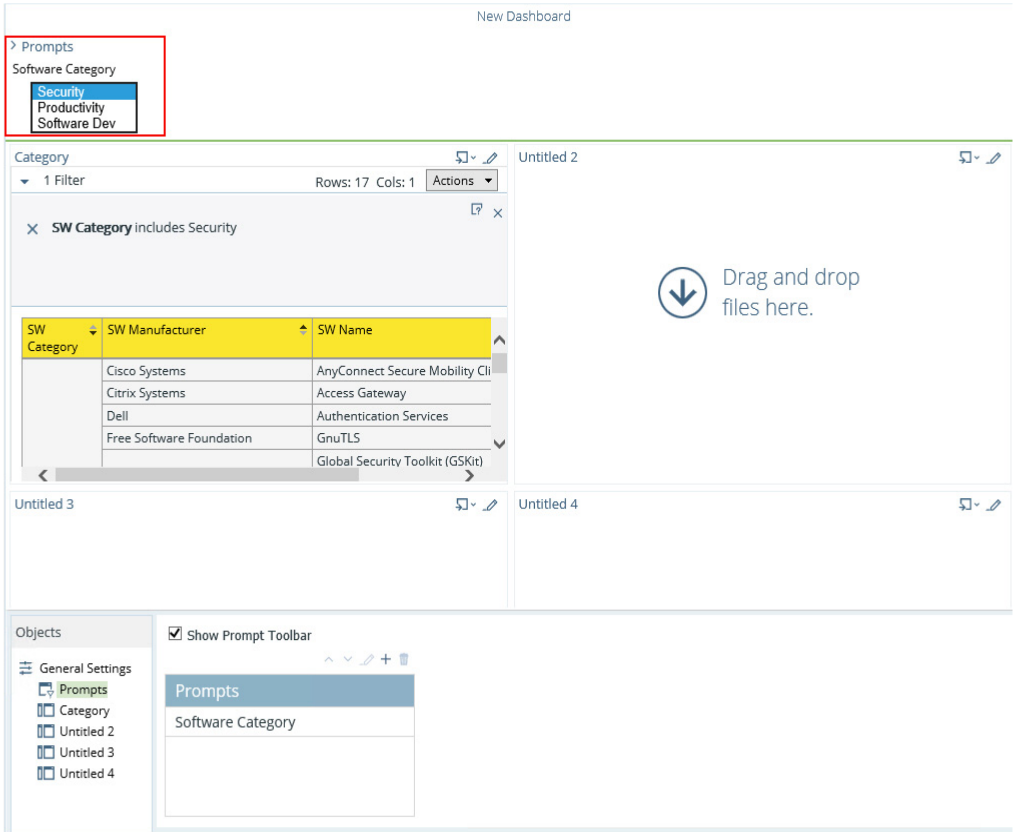


11. The original default value (Source) for the **{Software Category}** parameter was **Business Intelligence** but for the filter to display correctly, the **Source** was changed to **Software Category** in the dashboard so that the filter control could drive the content in the data table.

12. Click **Apply** to add the filter controls to the dashboard.

The filter options are displayed to the dashboard user when viewing the data table. Select one of the filter options to apply the filter to the report.

Figure 6-89: Filter prompts added to dashboard

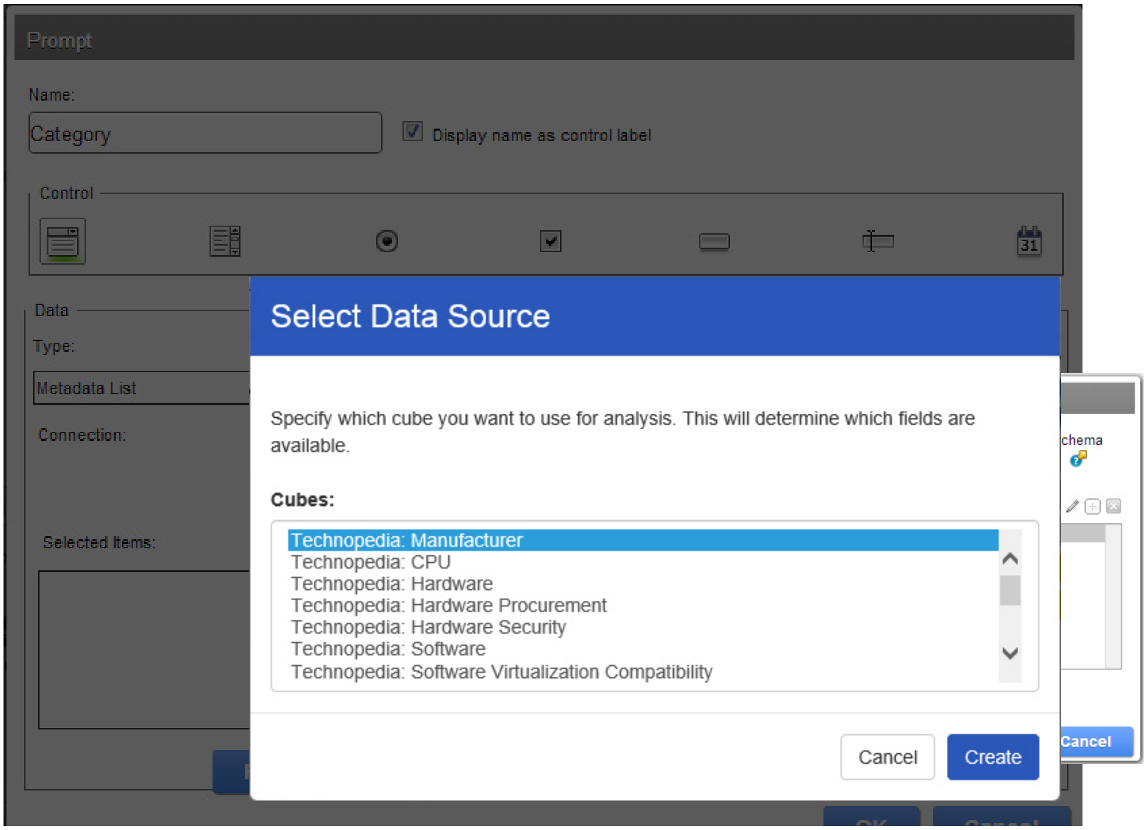


13. Save your dashboard with the new filter prompts you created.

Task ***Creating a Metadata List***

You must have a data table or chart that contains at least one parameter for your filter control to function correctly. When you create a Metadata List, you are defining a query to retrieve a list of display names and corresponding values from a metadata data source.

Figure 6-90: Creating a Metadata List



1. In the dashboard page, under **General Settings**, select **Prompts**.

   The Prompt Pane appears on the right. No filters are listed if this is the first time you are assigning filters.

2. To display a filter toolbar to users of the dashboard, enable **Show Prompt Toolbar**.

   A placeholder for the filter toolbar appears at the top of the dashboard.

3. Click (Add) to add a filter.

   The **Prompt** dialog box appears.

4. In the **Prompt** dialog box, enter a **Name** for your filter.

5. Under **Data Type**, select **Metadata List**.

6. Click **Select** to choose the data source that contains the content you need to set options from the drop-down list and click **OK**.

   The **Query Editor** opens.

7. In the **Query Editor**, build a query to select either a single column (that represents both a name and a value), or two columns representing the display names and corresponding values.

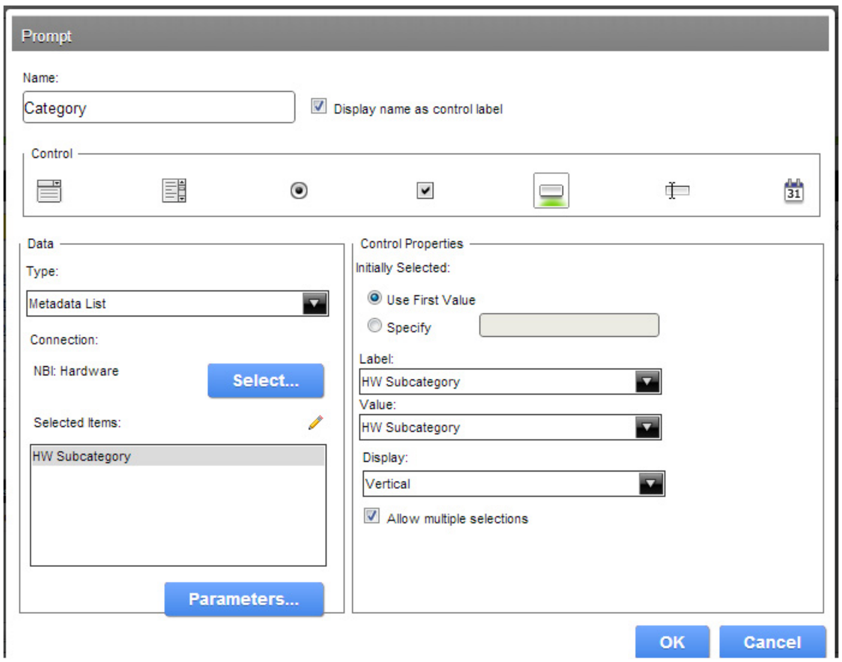
***Note** • If a single column query is defined, the values of that column will be used for both the display names and the values.*

8. Click **OK** to exit the Query Editor.

   Your options appear under **Selected Items** in the Filter Properties dialog box.

9. Under **Control Properties**, enter a **Default Label/Value** for the *initially selected* option in your filter control.

   Figure 6-91: Entering a Default Label/Value



10. Select a **Label** to display in the filter control; this is the user-friendly name that users will see in the dashboard.

11. Select the **Value**; this is the value in the database that is associated with the Label you selected in the previous step.

12. If applicable, select your **Display** type from the list.

***Note** • Some filter controls allow you to choose the position of your filter options. If you have a long list of options, for example, a list of cities, options may not appear correctly in the user console unless you change the Display type to **Horizontal**.*

13. Click **OK**.

    The list of values appear in the prompt toolbar in the dashboard.

Task ***Linking Dashboard Filters to Analyzer Parameters***

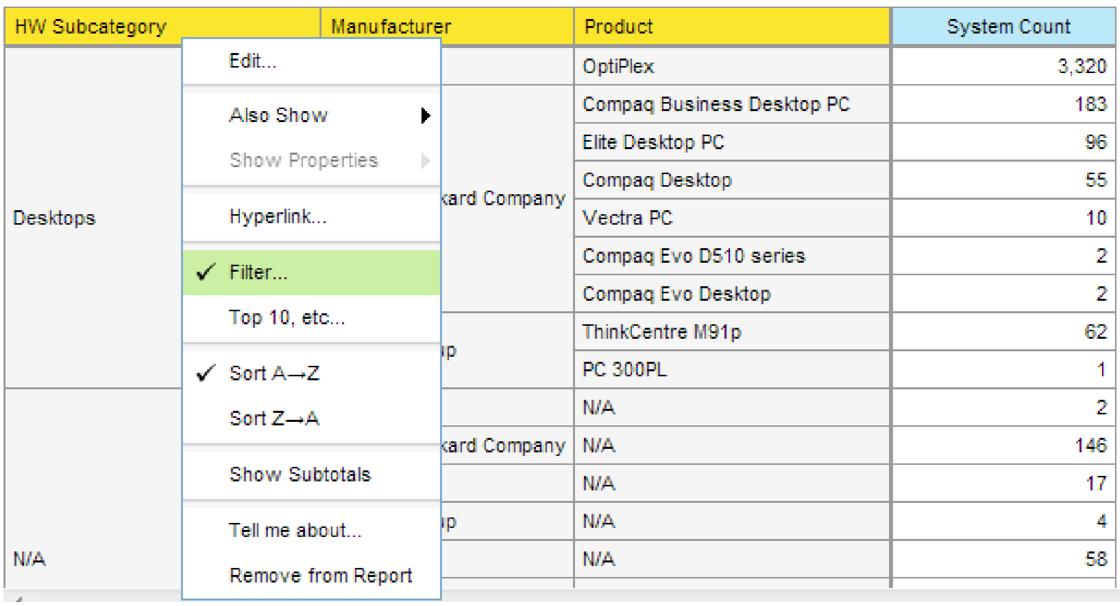
This process only applies to dashboards that include parameterized Analyzer reports. You must have an Analyzer report with a parameter in it in order to proceed.

The instructions below explain how to parameterize an Analyzer report.

1. In the Analyzer report, select a field in your report to which you want to link; then, right-click and choose **Filter**.

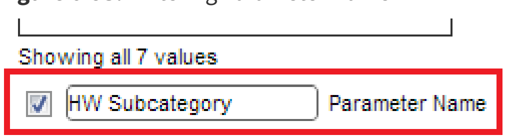
   In the example below, data will be filtered by **HW Subcategory**.

   Figure 6-92: Selecting a Filter



2. In the **Filter** dialog box, enter a name for the parameter in the **Parameter Name** text box and click the check box to enable it.

   Figure 6-93: Entering Parameter Name



3. Select the values you want associated with the parameter. Use the arrows to add values to the box on the right.

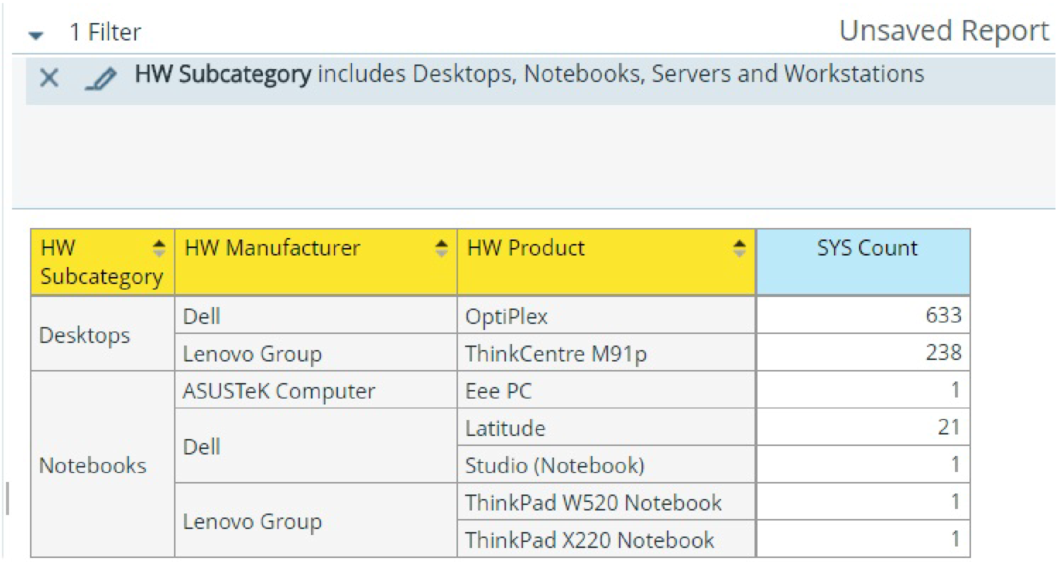
   Figure 6-94: Selecting Values to Associate with the Parameter

4. Click **OK** to exit the Filter dialog box.

5. Save your Analyzer report.

   In the upper left corner of the report, you can see that a filter is in use. Click (Edit) to edit your filter; click (Delete) to delete the filter.

   Figure 6-95: Filter in Use



HW Subcategory	HW Manufacturer	HW Product	SYS Count
Desktops	Dell	OptiPlex	633
	Lenovo Group	ThinkCentre M91p	238
Notebooks	ASUSTeK Computer	Eee PC	1
	Dell	Latitude	21
		Studio (Notebook)	1
	Lenovo Group	ThinkPad W520 Notebook	1
		ThinkPad X220 Notebook	1

6. Create a dashboard and drag the Analyzer report into a panel.

   The name of the parameter appears in the lower portion of the dashboard under **Parameters**.

7. Add a prompt to the dashboard based on the parameter you created in your Analyzer report.

   The prompt appears in the dashboard.

Saving Your Dashboard

Task ***Follow the instructions below to save your dashboard:***

1. In the dashboard, click (Save) to open the **Save** dialog box.
2. In the **Name** text box, enter a file name for your dashboard.
3. Click **Save**.

Editing Your Dashboard

Task ***Follow the instructions below to edit an existing dashboard:***

1. Open the dashboard from the Reports Management list. The dashboard opens.
2. Make your changes as needed.
3. In the toolbar, click Save or Save As to save it as another name.
4. In the **Name** text box, enter a file name for your dashboard.

Adding Content to a Dashboard Using Drag-and-Drop

Task ***Follow the instructions below to add an existing chart, table, or file to your dashboard panels using the drag-and-drop feature.***

1. Create a new dashboard. See Creating a New Dashboard for specific instructions.
2. In the left pane, under **Files**, locate to the report file you want added to your dashboard.
3. Click and drag the report into a blank panel on your dashboard. You will see the “title” of the content as you move it around the dashboard. Notice that the title background is red; it turns green when you find a panel where the content can be dropped.

   Repeat steps 2 and 3 until your dashboard contains all the content you want to display. To swap content from one panel to another, click the title bar of the panel that contains the content you want moved and drag it over the panel you want swapped. You will see the swap icon as you are moving the content.

   If you are working with an existing dashboard, you can perform steps 2 and 3 steps; however, a warning message appears when you try to place content in a panel that already contains content. The new content will override the existing content.
4. Save your dashboard.

Adjusting Whitespace in Dashboard Panels

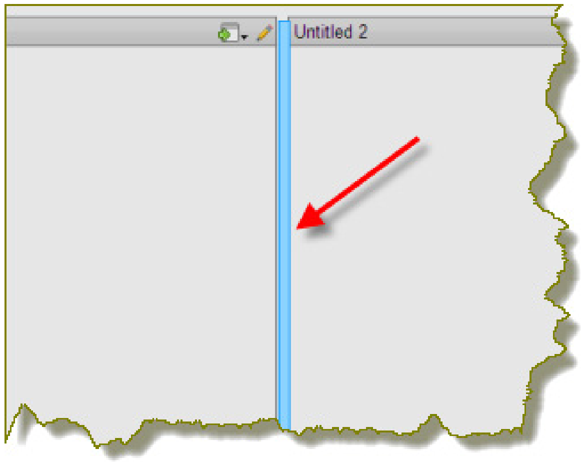
Task ***Sometimes you must adjust the whitespace in dashboard panels, (or the filter panel), so that content appears correctly. Follow the instructions below to adjust whitespace.***

1. Open an existing dashboard.
2. In the lower pane, click **General Settings** and then click the **Properties** tab.
3. Click **Resize Panels**.

   The whitespace between the dashboard panels turns blue.

4. Adjust the panel size by clicking and holding the left mouse button down as you move the blue lines (whitespace) around. Release the mouse button when you are satisfied with the positioning of the panel.

Figure 6-96: Resizing a Panel



5. Click **Close** in the lower right corner of the dashboard to exit resize layout mode.
6. Examine the dashboard contents to make sure they are placed correctly. You can return to the resize layout mode if you need to make additional changes.
7. Save your dashboard.

Setting the Refresh Interval

The content in your dashboard may need to be refreshed periodically if users are examining real-time data. You can set refresh intervals for the dashboard.

To set the refresh interval, click General settings in the Objects panel, then select the properties tab. Under **Refresh Interval (sec)** enter the interval time in seconds and click **Apply**.

7

Interactive Reports

About Interactive Reports

BDNA Analyze Interactive Reporting provides you with an interface that allows you to add elements to your report layout.

This chapter explains how to use Interactive Reporting features, including:

- Font selection
- Column resizing
- Column sorting
- Ability to rename column headers
- Copy and paste functionality
- Unlimited undo and redo functionality
- Ability to output reports as HTML, PDF, CSV, or Excel files
- Ability to display reports in a dashboard

The data source for an Interactive Report is based on a metadata model. BDNA Analyze Metadata removes the need for you to know query languages, such as SQL. Queries are generated based on the metadata selection. The metadata model allows you to create an Interactive Report without knowing the complexities of the database structure. Some examples of metadata include the names of tables and columns. Also included are the relationships between columns and tables, security, and access rules.

Selecting a Data Source

The first step to creating an Interactive Report is selecting a data source.

Task ***Follow the instructions below to select a data source:***

1. In the User Console Reports Menu, go to **the Create Interactive Report**. The **Select Data Source** dialog box appears.
2. Select the Data Source for your report:
    - Normalize: All
    - Normalize: IT
    - Normalize: MD
    - Normalize: Assets
    - Normalize: IT Assets
    - Normalize: MD Assets
    - Normalize: Procurement
    - Normalize: IT Security
    - Normalize: IT Procurement
    - Normalize: MD Procurement
    - Normalize: Mapping
    - Technopedia: Manufacturer
    - Technopedia: Software
    - Technopedia: Software Procurement
    - Technopedia: Software Security
    - Technopedia: Software Virtualization Compatibility
    - Technopedia: Software Windows Readiness
    - Technopedia: Hardware
    - Technopedia: Hardware Procurement
    - Technopedia: Hardware Security
    - Technopedia: CPU
    - Technopedia: Medical Devices

Note • *The available list depends upon what Content Packs and features are enabled for your particular license.*

3. Click **OK**.

    The Interactive Reporting interface appears.

Creating a New Interactive Report

When you first open Interactive Report, the categories and fields associated with the data source you selected are displayed in the left pane under **Data**. You can immediately begin to build the report by clicking and dragging fields onto the report canvas. Interactive Reports provides you with live rendering of your report which means that you can see the report layout as you build it. Formatting changes can be made on the fly.

Follow the instructions below to begin creating a new report.

1. To add your first column, click and drag a field onto the report canvas.

   The field becomes a column in your report. Repeat this step until you have all the columns of your report in place.

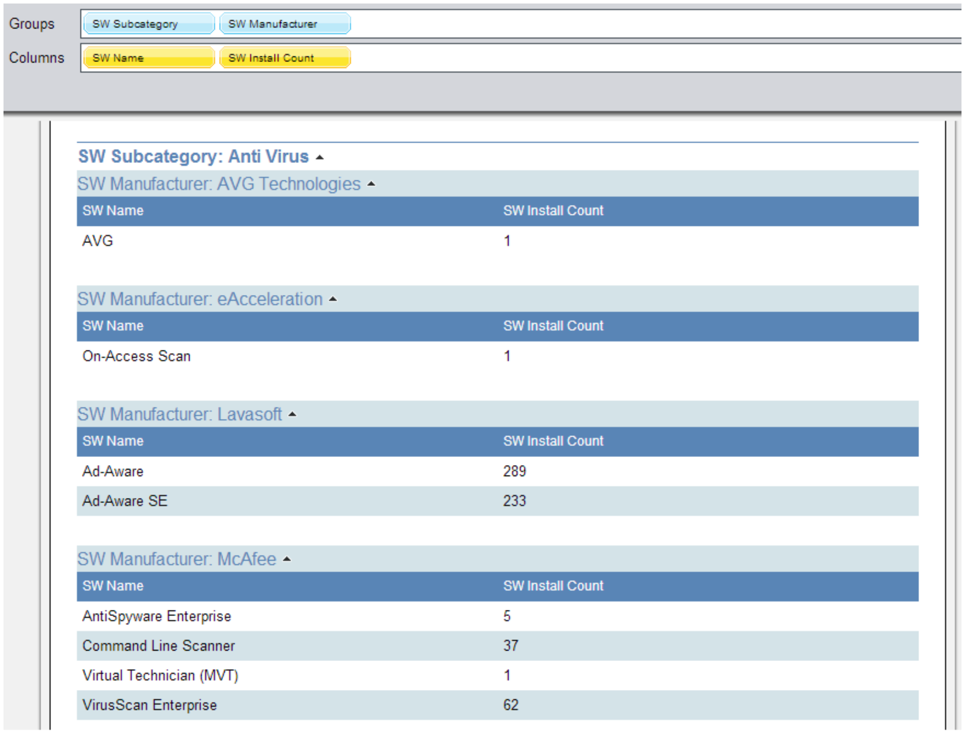
   If you want to make sure subsequent columns appear in correct order, look at the vertical green line that appears to the right or left of the first column. If you drag the selected field to the left and the green line appears, the new column will appear to the left of the original column. If you drag the selected field to the right and the green line appears, the new column will appear to the right of the original column.

   Note • *Do not worry if your column does not get placed correctly on the report canvas. To correct a placement, drag the report header to the appropriate location. Click the undo/redo buttons in your toolbar if you make a mistake.*

2. If applicable, add one or more groups to your report. The grouping feature in Interactive Report allows you to group the data in your report by one or more fields. For example, you could group your software data by Category, by Manufacturer, or both. If the field you want to group by is already a column in your report, click the column header and drag it up above the other headers in your report. Release the mouse button when the horizontal green line appears. You can also drag a field from the right pane and place it above the report headers to create your group.

Sometimes you need to group the data in your report by more than one field to get the data in the order you want it to display. An example of adding more than one group is shown below. The report data grouped by **SW Category** first and then by **SW Manufacturer**. To nest a group, drag the field or column header beneath the original group.

Figure 7-97: Interactive Report Grouping



Notice the small arrows next to the group name. In this example, the arrows point up indicating that both groups are sorted in **Ascending** order. To change the sort order to **Descending**, click the arrow next to the group name or make the change, under **Group Sorting** in the right pane.

You can save your report at this point or continue customizing it.

Adding Filters to an Interactive Report

Filters are used to restrict or limit the data that is presented in a report. An example is a filter that limits sales figures on a report to the First Quarter of the year.

You can add filters by clicking on the **Filters** button, which will display the **Filters** pane. Drag the filters you wish to use into the **Filters** pane.

Adding a Filter (Select from a list)

Task ***Follow the instructions below to add a filter in which values are selected from a list:***

1. In the toolbar, click (Filters).

   A **Filters panel** appears above the report.

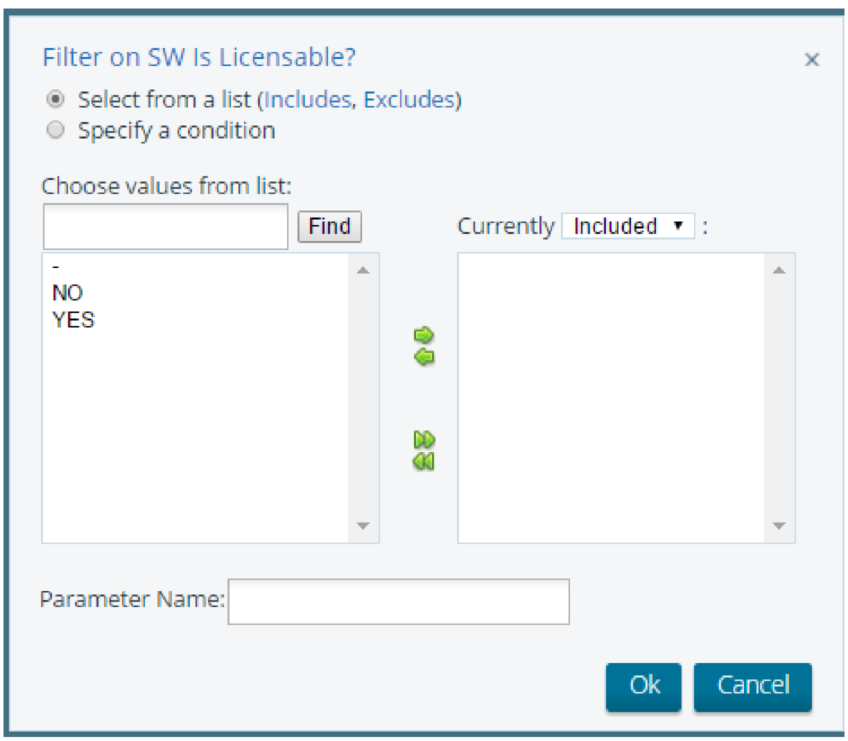
2. Click and drag a field from the right pane into the Filters area.

   The **Filters** dialog box opens.

3. Drag the **SW Is Licensable?** field into the **Filters** pane. A **Filter on Is Licensable?** dialogue box will appear. Click **Select from list**.

   You can immediately designate all the values in the list to be included in or excluded from the filter by clicking **Includes** or **Excludes**.

   Figure 7-98: Filtering on “SW Is Licensable?”.



   A list of values appear in the left pane of the dialog box.

4. Select one or more values from the list box on the left; click (Add Selected) to move the value to the list box on the right.

   Note • *If necessary, you can designate the values in the right pane to be included or excluded by selecting Included or Excluded from the list next to Currently.*

If the list of filter values is long, you may not see the value(s) you want to include or exclude from the filter. In the **Choose value from list** text box, enter the initial letters of the value you are searching for and click **Find**. Your entries are case-sensitive.

You can remove values from the list by clicking (Remove Selected). To add or remove all filter values click , (Add All), (Remove all), respectively.

5. Click **OK** to save your filter.

   The report display updates when the filter is added. The filter appears in the Filter box and an icon displays next to the field name under the **Data** tab. Also, the number of filters added to the report appears next to the filter icon in the toolbar.

   You can edit the filter by clicking (Edit). You can delete the filter by clicking (Delete).

Adding a Filter

Task ***Follow the instructions below to add a filter that contains Numeric type values:***

1. Right-click on a field in the list and select Filter.
2. The **Filters** dialog box opens. Click **Specify a condition**.
3. Next to the field name, select a constraint from the list. For text values, you can specify a condition that Exactly Matches, Contains, Ends with, Begins with, Doesn't Contain, Is null, and/or Is not null.

Applying an Aggregate Function

Task ***You can assign an aggregate function to columns that contain numeric and non-numeric values in your report. Aggregate functions return a single value, (for example, Average, Maximum, Minimum) calculated from the values in a column. For example, the sum of a column results from adding all the values in the column.***

1. Click the down arrow next to a report column that contains numeric values.
2. Select **Aggregation** from the menu, then select your aggregation type.

Table 7-16 • Aggregation Types and Descriptions

Function Name	Description
None	No aggregate function assigned
Average	Calculates the average value in a given column

Table 7-16 • Aggregation Types and Descriptions

Function Name	Description
Count	Counts the items in a column ***Note •*** *Count does not require a numeric value*
Count Distinct	Counts the distinct occurrences of a certain value in a column ***Note •*** *Count Distinct does not require a numeric value*
Max	Identifies the highest or largest value in a column
Min	Identifies the lowest or smallest value in a column
Sum	Calculates a running total sum of the specified column

The values in the column update.

3. Save the report.

   For information regarding how to correctly get grand total numbers for ENT counts, please see the Knowledge Base article here:

   https://bdna.service-now.com/support/kb_view.do?sysparm_article=KB0011604.

Applying a Summary Function

Task ***You can assign a summary function to columns that contain numeric values in your report. A summary function is a summarization technique that performs calculations on values in columns, groups, or in the entire report.***

1. Click the down arrow next to a report column that contains numeric values.
2. Select **Summary** from the menu, then select your summary type.

Table 7-17 • Summary Types and Descriptions

Function Name	Description
None	No summary function assigned
Average	Calculates the average value in a given column

Table 7-17 • Summary Types and Descriptions

Function Name	Description
Count	Counts the items in a group or report ***Note •*** *Count does not require a numeric value*
Count Distinct	Counts the distinct occurrences of a certain value in a group or report ***Note •*** *Count Distinct does not require a numeric value*
Max	Identifies the highest or largest value in a column
Min	Identifies the lowest or smallest value in a column
Sum	Calculates a total sum of the group or report (group level, and running total in the report footer)

The numeric values in the column update.

3. Save the report.

Enabling Row Limit and Query Timeout

You can limit the number of rows that are displayed in your report. You can also limit the number of seconds a query runs before a timeout occurs. Imposing row limits and timeouts on queries is important to avoid out of memory errors or processes that consume too many resources on the database server. (Default value for row limit is 1,000. Default value for Query Timeout is none.)

Both options are available in the **Query Setup** dialog box. In the **Data** tab, click the small icon on the upper right corner to open the Query Setup dialog box. Make your changes as needed and close the dialog box when you are done.

Refining Your Report

Now that you have defined the data for your report, you are ready to begin refining some of the formatting elements in your report.

Note • *See the Interactive Reporting Quick Reference section for an overview of formatting actions.*

Editing Report Headers and Footers

To create the page headers, double click on the words, **Top Left**, (or **Top Right**), in the upper left or right corner of the report.

A pop-up dialog box appears. You can:

- Delete the default wording, (Top Left/Right), in the text box and type a new header and press <**ENTER**>.
- Click **Date** and press <**ENTER**> to insert a date and time stamp in the page header. You can customize the date and page count displays by adding your own text, such as, **Today: $(report.date)** instead of using the default, **$(report.date)**.
- Click **#/Pages** and press <**ENTER**> to insert the number of pages in the report as in 1/1 (page one of one). Repeat this process for the **Bottom Right** and **Bottom Left** page footers.

Editing the Report Title

To edit the report title, double-click **Untitled** and type a title for your report in the available text box; press <ENTER>.

Reordering and Adjusting Columns

To reorder your column, select the column you want to move and drag it to your desired location. Alternatively, select the column you want to move, click the down-arrow and select **Move** (Right or Left) from the menu.

To adjust your column width, select the column, then click on the vertical line that divides your column headers. A small arrow appears. Move the arrow left or right to adjust your column width.

Formatting Your Report

Formatting options such as font color, size, and type, page justification, background color options, text alignment and more, are available under the **Formatting** tab in the right pane. These options are standard and self-explanatory. The sections that follow provide information about a subset of formatting options.

Changing the Report Template

To change a report template, click the **General** tab then use the right and left arrows to page through the available templates. Click **Select** to see all templates. Answer **Yes** or **No** when you are asked if you want to keep any custom formatting you have applied to the report. The report display updates with the new template.

Changing Page Format and Orientation

By default Interactive Report presents you with a page in Letter format (8.5" x 11"), a format used in the United States. In addition, the report page displays in portrait mode. You may need to change both the format and the page orientation.

To change page format, click the **General** tab, then click **Page Setup**. In the Page Setup dialog box, choose the correct page format for your report from the list. Page margin measurements are shown in the lower portion of the dialog box. You can adjust the measurements as needed. Click **OK** to save your changes.

To change page orientation, click the **General** tab, then click **Page Setup**. In the Page Setup dialog box, click on the appropriate icon. Click **OK** to save your changes.

Changing a Column Header Name

To change a column header name, double click on the column header to display the input text box. Type the new header name into the text box and press <**Enter**>.

Applying Copy/Paste Formatting

Use the **copy/paste** options in the under the **Formatting** tab to copy the formatting of one column to one or more columns in your report. Select the column that contains the formatting you want to copy then click (Copy Formatting). Select the column you want to apply formatting to and click (Paste Formatting).

Changing the Format of Numeric Values

If your column contains numeric values, you may need to change the formatting associated with those values. Select the column that contains the numeric values that require a formatting change. Click the **Formatting** tab in the right pane. Under **Numeric Format**, select the correct numeric format for the values in your column.

Note • *In some instances, you will notice that formatting has already been applied to your numeric values. For example, monetary symbols are already included in sales figures. This formatting is inherited from the metadata associated with the data source and can be overridden, if necessary.*

Interactive Reporting Quick Reference

This Quick Reference section provides you with an at-a-glance overview of common Interactive Reporting actions.

Table 7-18 • General

Action	Description
To hide tips on startup...	Disable **Show tips on startup** in the lower right corner of the report canvas. Alternatively, disable **Show tips on startup** in **Preferences** under the **General** tab.
To show tips on startup...	Enable **Show tips on startup** in the lower right corner of the report canvas. Alternatively, enable **Show tips on startup** in **Preferences** under the **General** tab.
To hide tips altogether...	Click **Hide Tips** in the lower right corner of the report canvas.

Table 7-18 • General (cont.)

Action	Description
To disable menu buttons...	Disable **Enable menu buttons** in **Preferences** under the **General** tab.
To enable menu buttons (down arrow next to a report column)...	Click **Enable menu buttons** in **Preferences** under the **General** tab.
To enable **Select Distinct**...	This is checked by default.
To export a report...	Click (Export) and select your export file type: PDF, Excel, CSV or HTML; exported files can be saved locally on your computer.

Table 7-19 • Fields and Columns

Action	Description
To place a field on the report canvas...	Click and drag a field from the right pane to the report canvas. Alternatively, double-click a field name to place it onto the report canvas. ***Note** • For quick placement, click (Layout) in the toolbar and drag the fields into the Columns area. Alternatively, right-click a field name and select, Column.*
To place multiple fields on the report canvas...	Press the <**CTRL**> key and select multiple fields in the right pane, then drag the fields onto the report canvas. The fields will become columns in the report in the order in which they were selected.
To move columns left or right...	Click the report header and move the column to the desired location. Alternatively, right-click on the column header and select **Move -> Right** (or Left). Columns can also be moved as needed by clicking (Layout) in the toolbar and dragging the columns to the desired position.
To adjust column width...	Click the column header to select it. Move your cursor to the right or left until a small horizontal line appears. Drag the line to the desired width.
To assign column width (percentage)	Enter a value in the **Column Width** text box under the **Formatting** tab.
To change the column name...	Double-click the column name and type the new name in the available text box.

Table 7-19 • Fields and Columns

Action	Description
To remove a column...	Click and drag the column header to the right and place the column into the trash can.

Table 7-20 • Grouping

Action	Description
To add a group to a report...	Click and drag a group field from the right pane up above the column headers in the report. Release the mouse button when the green horizontal line appears. If the group field you want is a column in the report, drag the column name up above the column headers in the report. Release the mouse button when the green horizontal line appears. ***Note •*** *For quick placement, click (Layout) and drag the fields into the Groups area. Alternatively, right click on the field name you want as your group and select, Group.*
To add more than one group to a report...	Click another group field from the right pane and drag it above or below the previously placed group.
To change the sort order of a group...	Click the small arrow to the right of the group name to change the sort order. Alternatively, assign the sort order under **Group Sorting** in the right pane.

Table 7-21 • Filtering

Action	Description
To add a filter...	Click (Filters) in the toolbar, then drag a field into the Filter area. Alternatively, right click on the field name you want to filter on, (under the Data tab), and select, Filter. Alternatively, select a column name, click to open the context menu and select, **Filter**.

Table 7-21 • Filtering

Action	Description
To edit a filter...	Click ✎ next to the filter name to open the Filter dialog box. Make your changes and click **OK**. Alternatively, select a column name, click to open the context menu and select, **Filter**.
To delete a filter...	Click **Filters** in the toolbar, then click ✖ (Delete) next to the filter name.
To select a filter value from a list...	Click **Select from list** in the **Filter** dialog box.
To find a filter value in a list...	Type the first few characters of the value and click **Find**. Entries are case-sensitive.
To include or exclude a filter value from a list...	Click **Includes** or **Excludes** link next to **Select from list**. Alternatively, make a selection next to **Currently** on the Filter dialog box.
To specify a specific filter value...	Click **Match a specific value** then select a constraint from the list.

Table 7-22 • Formatting

Action	Description
To undo or redo previous actions...	Click ↶ (Undo) or ↷ (Redo) in the toolbar.
To change the font type in a column header...	Select the column header. Under the **Formatting** tab, select font type from the available list.
To change font type in the column details...	Select the column details. Under the **Formatting** tab, select font type from the available list.
To change font color in a column header...	Select column header. Under the **Formatting** tab, click (icon here) to select font color from the available list.
To change the font color in column details	Select column details. Under the **Formatting** tab, click (icon here) to select font color from the available list.
To change the column header background color...	Select the column header. Under the **Formatting** tab, click (Background Color). Select a color from the color picker or create your own custom color.
To change the column details background color...	Select column details. Under the **Formatting** tab, click (Background Color). Select a color from the color picker or create your own custom color.

Table 7-22 • Formatting

Action	Description
To apply text justification...	Select the report element column header or column details. Under the **Formatting** tab, click the appropriate text alignment option. Column headers can be formatted separately from column details.

A

Analyze Predefined Report and Dashboard Reference

This Appendix contains tables of all BDNA Analyze predefined reports and dashboards.

Analyzer Reports

Figure A-99: Hardware

Report	Columns	Filters
Hardware Virtualization per OS	SYS Is Virtual? OS Name SYS Count	SYS Is Virtual? (excludes N/A) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 5 (OS Name by SYS Count)
Hardware by Category and CPU Count	HW Subcategory CPUs Range AVG Number of CPUs SYS Count	CPUs Range (excludes N/A) Is Deduped? (includes Yes)
Hardware by Category and CPU Range	Category SYS CPU Range (MHz) SYS Count	SYS Is Deduped? (includes Yes) SYS CPU Range (MHz) (excludes N/A) HW Category (includes Computers)

Figure A-99: Hardware (cont.)

Report	Columns	Filters
Hardware by Category and HDD Range	HW Subcategory SYS HDD Range (GB) SYS Count	SYS Is Deduped? (includes Yes) HW Category (includes Computers) SYS HDD Range (GB) (excludes N/A) INV is Latest? (includes Yes)
Hardware by Category and RAM Range	Category SYS RAM Range (MB) System Count	SYS RAM Range (MB) (excludes N/A) SYS Is Deduped? (includes Yes) HW Category (includes Computers) INV is Latest? (includes Yes)
Hardware Entitlement	HW Subcategory Ent Description ENT Count ENT Total Price SYS Count HW Unidentified Potential Savings	Ent Class (includes HARDWARE and N/A) Ent Description (excludes N/A) HW Manufacture (includes Apple)
My Environment - Hardware Deployed	HW Category HW Subcategory SYS Count	HW Category (excludes N/A and Not Available)
My Environment - Hardware Manufacturers	HW Manufacturer HW Distinct Product Count SYS Count	HW Category (excludes N/A and Not Available)
My Environment - Hardware Models	HW Category HW Subcategory HW Distinct Model Count	HW Category (excludes N/A and Not Available)
My Environment - MD Hardware Deployed	HW Category HW Subcategory SYS Count	HW Category (excludes N/A and Not Available)

Figure A-99: Hardware (cont.)

Report	Columns	Filters
My Environment - MD Hardware Manufacturers	HW Manufacturer HW Distinct Product Count SYS Count	HW Category (excludes N/A and Not Available)
My Environment - MD Hardware Models	HW Category HW Subcategory HW Distinct Model Count	HW Category (excludes N/A and Not Available)
Physical vs. Virtual	SYS Is Virtual? SYS Count	SYS Is Virtual? (excludes N/A) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes)
Servers by CPU Count	Manufacturer SYS CPUs Range System Count	SYS CPUs Range (excludes N/A) HW Subcategory (includes servers) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 5 CPUs Range by System Count
Top Hardware Manufacturer per Category	Manufacturer Subcategory System Count	SYS Is Deduped? (includes Yes) Subcategory INV is Latest? (includes Yes) Top 5 Manufacturers by System Count
Top Hardware Manufacturers	Manufacturer System Count	SYS Is Deduped? (includes Yes) HW Subcategory INV is Latest? (includes Yes) Top 5 Manufacturers by System Count
Top Server Manufacturers	Manufacturer System Count	HW Subcategory (includes Servers) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 5 Manufacturers by System Count

Figure A-99: Hardware (cont.)

Report	Columns	Filters
Top Server Models	Manufacturer Product Model System Count	HW Subcategory (includes Servers) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 5 Models by System Count
Win Desktop CPU Compatibility	Category Is CPU Compatible? System Count	SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) OS Req OS Type (includes Desktop) Category (includes Desktops, Notebooks, and Workstations) SYS is CPU Compatible? (excludes N/A)
Win Desktop HDD Compatibility	SYS Is HDD Compatible? Category System Count	SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) OS Req OS Type (includes Desktop) Category (includes Desktops, Notebooks, and Workstations) SYS is HDD Compatible? (excludes N/A)
Win Desktop Hardware Readiness Reason	SYS OS Readiness SYS is CPU Compatible? SYS is RAM Compatible? SYS is HDD Compatible? System Count	SYS Is Deduped? (includes Yes) OS Req OS Type (includes Desktop) INV is Latest? (includes Yes)
Win Desktop Hardware Readiness by Product	Manufacturer Product SYS OS Readiness System Count	SYS Is Deduped? (includes Yes) OS Req OS Type (includes Desktop) INV is Latest? (includes Yes)
Win Desktop RAM Compatibility	SYS Is RAM Compatible? Category System Count	SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) OS Req OS Type (includes Desktop) Category (includes Desktops, Notebooks, and Workstations) SYS is RAM Compatible? (excludes N/A)

Figure A-99: Hardware (cont.)

Report	Columns	Filters
Win Server CPU Compatibility	Category Is CPU Compatible? System Count	SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) OS Req OS Type (includes Servers) HW Subcategory (includes Servers)
Win Server HDD Compatibility	SYS Is HDD Compatible? System Count	SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) OS Req OS Type (includes Servers) HW Subcategory (includes Servers)
Win Server Hardware Readiness	SYS OS Readiness OS Req OS Name SYS Count	SYS Is Deduped? (includes Yes) OS Req OS Type (includes Servers) INV is Latest? (includes Yes) SYS OS Readiness (excludes N/A)
Win Server Hardware Readiness Reason	SYS OS Readiness SYS is CPU Compatible? SYS is RAM Compatible? SYS is HDD Compatible? System Count	SYS Is Deduped? (includes Yes) OS Req OS Type (includes Servers) INV is Latest? (includes Yes)
Win Server RAM Compatibility	SYS is RAM Compatible? System Count	SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) OS Req OS Type (includes Servers) HW Subcategory (includes Servers)

Figure A-100: Operating Systems

Report	Columns	Filters
OS Distribution by Family	OS Family SYS Count	OS Family (excludes N/A) SYS is Deduped? (includes Yes) INV is Latest? (includes Yes)

Figure A-100: Operating Systems

Report	Columns	Filters
OS Distribution by Manufacturer and Name	OS Manufacturer OS Name System Count	OS Manufacturer (excludes N/A) OS Family (excludes N/A) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes)

Figure A-101: Software

Report	Columns	Filters
Antivirus Rationalization	Manufacturer Install Count	SW Subcategory (includes Anti Virus) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 5 Manufacturers by Install Count
Application Server Rationalization	Manufacturer Install Count	Is Deduped? (includes Yes) INV is Latest? (includes Yes) SW Subcategory (contains Application Servers) Top 5 Manufacturer by Install Count
Browser Rationalization	Manufacturer Install Count	SW Subcategory (includes Web Browsers) Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 5 Manufacturer by Install Count
Desktop Software Windows 32-Bit Readiness	SW Win Readiness Version SW Win Readiness 32-Bit Install Count	SW Is Deduped? (includes Yes) SW Is Licensable? (includes No and Yes) INV is Latest? (includes Yes) SW Win Readiness Type (includes Desktop)
Desktop Software Windows 32-Bit Status	SW Win Status 32-Bit Install Count	SW Is Deduped? (includes Yes) SW Is Licensable? (includes No and Yes) INV is Latest? (includes Yes) SW Win Readiness Type (includes Desktop)

Figure A-101: Software (cont.)

Report	Columns	Filters
Desktop Software Windows 64-Bit Readiness	SW Win Readiness Version SW Win Readiness 64-Bit Install Count	SW Is Deduped? (includes Yes) SW Is Licensable? (includes No and Yes) INV is Latest? (includes Yes) SW Win Readiness Type (includes Desktop)
Desktop Software Windows 64-Bit Status	SW Win Status 64-Bit Install Count	SW Is Deduped? (includes Yes) SW Is Licensable? (includes No and Yes) INV is Latest? (includes Yes) SW Win Readiness Type (includes Desktop)
Enterprise Database Rationalization	Manufacturer Install Count	SW Category (includes Databases SYS Is Deduped? (includes Yes) SW Subcategory (includes Enterprise) INV is Latest? (includes Yes) Top 5 Manufacturer by Install Count
My Environment - MD Software Installs	MDS2 SW Category MDS2 SW Subcategory SW Install Count	MDS2 SW Category (excludes N/A and Not Available)
My Environment - MD Software Manufacturers	MDS2 SW Manufacturer SW Distinct Product Count SW Install Count	MDS2 SW Category (excludes N/A and Not Available)
My Environment - MD Software Releases	MDS2 SW Category MDS2 SW Subcategory SW Distinct Release Count	MDS2 SW Category (excludes N/A and Not Available)
My Environment - Software Installs	SW Category SW Subcategory SW Install Count	SW Category (excludes N/A and Not Available)

Figure A-101: Software (cont.)

Report	Columns	Filters
My Environment - Software Manufacturers	SW Manufacturer SW Distinct Product Count SW Install Count	SW Category (excludes N/A and Not Available)
My Environment - Software Releases	SW Category SW Subcategory SW Distinct Release Count	SW Subcategory (excludes N/A and Not Available)
Operating System by Family	OS Manufacturer OS Name OS Major Version SYS Count	SYS is Deduped? (includes Yes) OS Family (excludes N/A)
OS Distribution by Family	OS Family SYS Count	OS Family (excludes N/A) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes)
OS Distribution by Manufacturer and Name	OS Manufacturer OS Name SYS Count	OS Manufacturer (excludes N/A) OS Family (excludes N/A) SYS Is Deduped? INC is Latest?
Server Software Windows 32-Bit Readiness	SW Win Readiness Version SW Win Readiness 32-Bit Install Count	SW Is Deduped? (includes Yes) SW Is Licensable? (includes No and Yes) INV is Latest? (includes Yes) SW Win Readiness Type (includes Server and N/A)
Server Software Windows 32-Bit Readiness by Manufacturer	Manufacturer SW Win Readiness Version SW Win Readiness 32-Bit Install Count	SW Is Deduped? (includes Yes) SW Is Licensable? (includes No and Yes) INV is Latest? (includes Yes) SW Win Readiness Type (includes Server and N/A)

Figure A-101: Software (cont.)

Report	Columns	Filters
Server Software Windows 32-Bit Status	SW Win Status 32-Bit Install Count	SW Is Deduped? (includes Yes) SW Is Licensable? (includes No and Yes) INV is Latest? (includes Yes) SW Win Readiness Type (includes Server and N/A)
Server Software Windows 64-Bit Readiness	SW Win Readiness Version SW Win Readiness 64-Bit Install Count	SW Is Deduped? (includes Yes) SW Is Licensable? (includes No and Yes) INV is Latest? (includes Yes) SW Win Readiness Type (includes Server and N/A)
Server Software Windows 64-Bit Status	SW Win Status 64-Bit Install Count	SW Is Deduped? (includes Yes) SW Is Licensable? (includes No and Yes) INV is Latest? (includes Yes) SW Win Readiness Type (includes Server and N/A)
Software Entitlement	SW Family Ent Description ENT Count ENT Total Price SW Install Count SW Compliance SW Unused Count Min Potential Savings Max Potential Savings	Ent Class (includes N/A and SOFTWARE) SW Manufacturer Ent Description
Software EOL within 6 months	EOL Year EOL Month Manufacturer Software Name Major Version Install Count	EOL Month includes current EOL Month and next 6 EOL Month SW is Licensable? (includes Yes) SYS is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 2 Software Name by Install Count

Figure A-101: Software (cont.)

Report	Columns	Filters
Software by Manufacturer	Manufacturer Install Count	SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes)
Top Licensable Server Software	Manufacturer Install Count	HW Subcategory (includes Servers) SW Is Licensable? (includes Yes) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 10 Manufacturer by Install Count
Top Licensable Server Software with CPU Counts	Manufacturer SYS CPUs Range Install Count	SW Is Licensable? (includes Yes) HW Subcategory (includes Servers) SYS CPUs Range (excludes N/A) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 10 Manufacturer by Install Count
Top Licensable Software for Workstations and Laptops	Manufacturer Install Count	HW Subcategory (includes Desktops, Notebooks and Workstations) SW Is Licensable? (includes Yes) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 10 Manufacturer by Install Count
Top Software Manufacturers	Manufacturer Install Count	SW Is Licensable? (includes N/A, No and Yes) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 5 Manufacturer by Install Count
Top Software Products	Software Name Manufacturer Install Count	SW Is Licensable? (includes N/A, No and Yes) SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 5 Manufacturer by Install Count
Top Software with Licensable Indicator	Manufacturer SW Is Licensable? Install Count	SYS Is Deduped? (includes Yes) INV is Latest? (includes Yes) Top 10 Manufacturer by Install Count

Figure A-101: Software (cont.)

Report	Columns	Filters
Unmatched Files	Category Reasons File ID File Name File Description File Version File Size File Manufacturer	Category (includes Unknown)
Unmatched Package	Category Reasons PKG ID PKG Display Name PKG Publisher PKG Version Number of Instances	Category (includes Unknown)

Dashboards

Figure A-102: Dashboards

Dashboard	Contains the Reports
Application Rationalization	Antivirus Web Browsers Application Servers Enterprise Database
Hardware Entitlement Dashboard	Entitlement Summary for 3M Entitlement Detail for 3M Inventory Detail for 3M

Figure A-102: Dashboards (cont.)

Dashboard	Contains the Reports
Hardware Summary	Top Hardware Manufacturers Top Hardware Manufacturer per Category Physical vs. Virtual Virtualization per OS
Operating System Summary	OS Distribution by Family OS Distribution by Manufacturer and Name Virtualization per OS
Server Consolidation	Top Server Manufacturers Top Server Models Servers by CPU Count
Server Software with CPU Counts	Top Licensable Server Software with CPU Counts
Software Asset Management	Top Software with Licensable Indicator Top Licensable Server Software with CPU Counts Top Licensable Server Software Top Licensable Software for Workstations and Laptops
Software Compliance Dashboard	Entitlement Summary for Adobe Systems Entitlement Detail for Adobe Systems Install Detail for Adobe Systems
Software Summary	Top Server Manufacturers Top Software Products Software EOL within 6 months
Windows Desktop Hardware Readiness	Readiness CPU Compatibility RAM Compatibility HDD Compatibility
Windows Desktop Migration Software Readiness	Hardware Readiness Software 32bit Readiness Software 64bit Readiness

Figure A-102: Dashboards (cont.)

Dashboard	Contains the Reports
Windows Migration Desktop Readiness	32Bit Readiness 32Bit Status 64Bit Readiness 64Bit Status
Windows Server Hardware Readiness	Readiness CPU Compatibility RAM Compatibility HDD Compatibility
Windows Server Migration Software Readiness	32Bit Readiness 32Bit Status 64Bit Readiness 64Bit Status

IT Procurement Reports and Dashboards

Figure A-103: Entitlement Reports and Dashboards

Report	Columns	Filters
Hardware Entitlement	HW Subcategory Ent Description ENT Count ENT Total Price SYS Count HW Unidentified Potential Savings	Ent Class (includes HARDWARE and N/A) Ent Description (excludes N/A) HW Manufacture (includes Apple)

Figure A-103: Entitlement Reports and Dashboards

Report	Columns	Filters
Purchase Order Normalization	Ent Description Ent Type Ent Metric Ent Pack Count ENTCount ENT Avg Unit Price ENT Total Price Ent Start Date Ent End Date PO Manufacturer PO Manufacturer Part Number PO Product Description PO Unit of Measure PO Quantity PO Unit Price PO Start Date PO Reseller PO SKU Number PO Other Information	N/A
Software Entitlement	SW Family Ent Description ENT Count ENT Total Price SW Install Count SW Compliance SW Unused Count Min Potential Savings Max Potential Savings	Ent Class (includes N/A and SOFTWARE) SW Manufacturer Ent Description

Figure A-104: Entitlement Dashboards

Dashboard	Contains the Reports
Hardware Entitlement Dashboard	Entitlement Summary Entitlement Detail Inventory Detail

***Note** • The Entitlements Dashboard requires the Procurement Content Pack.*

IT Assets Reports and Dashboards

Figure A-105: Analyze Null Fields by Product

	Content Database	Publish	User Console (UI)	Analyze (UI)
String	Null	Null	( )	-
Number	Null	Null	( )	-1
Date	Null	Null	( )	1969-12-31

***Note** • The date field will appear as '1969-12-31' in the event that there is no applicable date available. No date entry can be listed as blank, hence the outdated date substitution.*

Technopedia Reports

Figure A-106: Technopedia

Report	Columns	Filters
Technopedia CPU	CPU Model CPU Cores per CPU CPU Speed	CPU Manufacturer Exactly matches value of Prompt CPU Manufacturer CPU Cores per CPU Greater Than or Equals value of Prompt Cores greater than or equal
Technopedia Hardware	Product Model Profile Max Width (in) Max Depth (in) EPEAT Rating Is Energy Star? Power Rating	HW Category Exactly matches value of Prompt Category HW Subcategory Exactly matches value of Prompt Subcategory HW Manufacturer Exactly matches value of Prompt Manufacturer HW Product Exactly matches value of Prompt Product
Technopedia Hardware Entitlement	Manufacturer Product Model Vendor Product Name	HW Category Exactly matches value of Prompt Category HW Ent License Type Doesn't contain N/A
Technopedia Hardware Lifecycle	Subcategory Product Model GA Date EOL Date	HW Category Exactly matches value of Prompt Category HW Manufacturer Exactly matches value of Prompt Manufacturer HW GA Year Greater Than or Equals value of Prompt GA Year after HW EOL Year Less Than or Equals value of Prompt EOL Year on or before

Figure A-106: Technopedia (cont.)

Report	Columns	Filters
Technopedia - Manufacturers	MFR Tier MFR Name MFR Website MFR Is Publicly traded? MFRSymbol MFR Revenue (million US$) MFR Employees MFR Owner Release Count	MFR Tier (excludes 10 and 3) MFR Name (excludes N/A and Not available)
Technopedia OS System Requirements	Bit Mode Speed (MHz) RAM (MB) Limit RAM (MB) HDD (GB) Graphics Card Optical Drive Monitor Length Monitor Width	OS Req Type Exactly matches value of Prompt Req Type
Technopedia Operating System	OS Name OS Version OS Edition OS Service Pack Is Licensable?	SW Subcategory Exactly matches value of Prompt OS Family
Technopedia Software	Name Component Edition Major Version Minor Version Service Pack Licensable	SW Manufacturer Exactly matches value of Prompt Manufacturer SW Family matches value of Prompt Family

Figure A-106: Technopedia (cont.)

Report	Columns	Filters
Technopedia Software Entitlement	Vendor Product Name Name Edition Major Version Environments License Types License Metrics Unit Pack Unit Count Max License Term	SW Manufacturer Exactly matches value of Prompt Manufacturer
Technopedia Software Lifecycle	Category Name Component Edition Major Version Minor Version GA Date EOL Date Support Level	SW Manufacturer Exactly matches value of Prompt Manufacturer SW GA Year Greater Than or Equals value of Prompt GA Year after SW EOL Year Less Than or Equals value of Prompt EOL Year on or before
Technopedia Software Windows Readiness	Major Version SW Minor Version Edition Component Readiness 32-Bit Status 32-Bit Compatible Version 32-Bit Readiness 64-Bit Status 64-Bit Compatible Version 64-Bit	SW Manufacturer Exactly matches value of Prompt Manufacturer SW Name Exactly matches value of Prompt Name