

DOCUMENTATION

BDNA Extractor Instructions

Instructions to Configure Tanium 7 Extractor April 27, 2017

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The document details the steps needed to configure extraction from Tanium 7 server with Tanium Connect 4.

Instructions to configure Tanium 7 Extractor:

This is a three-step process:

- 1. Create BDNA Saved Questions in Tanium Console
- 2. Create JSON File connectors for BDNA Saved Questions
- 3. Generate Normalize input zip file

Create BDNA Saved questions in Tanium Console

Create the following Saved Questions using the Tanium Console. This step is required to be performed once at the time of initial setup.

Saved Questions List

Saved Question Name	Saved Question Text	Sensors Used
BDNA_System	GET Computer ID and AD Domain and	Computer ID, AD Domain,
	Username and Computer Name and Domain	Username, Computer
	Name FROM all machines	Name, Domain Name
BDNA_AddRemove	Get Computer ID and Installed Applications	Computer ID, Installed
	from all machines	Applications
BDNA_Bios	GET Computer ID and BIOS Vendor and	Computer ID, BIOS
	Computer Serial Number FROM all machines	Vendor, Computer Serial
		Number
BDNA_CDROM	GET Computer ID and CD-ROM Drive FROM all	Computer ID, CD-ROM
	machines	Drive
BDNA_ComputerSystem	GET Computer ID and Manufacturer and	Computer ID,
	Model and Number of Processors and	Manufacturer, Model,
	x64/x86? FROM all machines	Number of Processors,
		x64/x86
BDNA_DesktopMonitor	GET Computer ID and Monitor Details FROM	Computer ID, Monitor
	all machines	Details
BDNA_Disk	GET Computer ID and Disk Drive Details and	Computer ID, Disk Drive
	Disk Type of C: FROM all machines	Details, Disk Type of C:
BDNA_NetworkAdapter	GET Computer ID and Network Adapter	Computer ID, Network
	Details FROM all machines	Adapter Details

BDNA

Saved Question Name	Saved Question Text	Sensors Used
BDNA_NetworkAdapterConfigur	GET Computer ID and Network IP Gateway and DHCP Enabled? and DHCP Server and IP Address and Subnet Mask and MAC Address FROM all machines	Computer ID, Network IP Gateway, DHCP Enabled?, DHCP Server, IP Address, Subnet Mask, MAC Address
BDNA_OperatingSystem	GET Computer ID and Boot Device and Operating System Install Date and Operating System and Operating System Language and System Directory and Operating System Boot Directory and Operating System Build Number and Country Code and Service Pack FROM all machines	Computer ID, Boot Device, Operating System Install Date, Operating System, Operating System Language, System Directory, Operating System Boot Directory, Operating System Build Number, Country Code, Service Pack
BDNA_PCMemory	GET Computer ID and Total Memory FROM all machines	Computer ID, Total Memory
BDNA_Processor	GET Computer ID and CPU Family and CPU Manufacturer and CPU Speed Mhz and CPU FROM all machines	Computer ID, CPU Family, CPU Manufacturer, CPU Speed Mhz, CPU
BDNA_RecentlyUsedApps_Host	GET Computer ID and Last Application Launch Date FROM all machines	Computer ID, Last Application Launch Date
BDNA_VideoController	GET Computer ID and Video Graphics Card RAM and Video/Graphics Card and Video Driver Version FROM all machines	Computer ID, Video Graphics Card RAM, Video/Graphics Card, Video Driver Version
BDNA_Passthrough	GET Computer ID and IP Routes and BIOS Release Date and Monitor Resolution and Number of Processor Cores and RAM and RAM Max Capacity and Total Swap and Sound Card and Virtual Platform and Disk Type of C: and DNS Server and Primary WINS Server and Network Adapter Type and System UUID FROM all machines	Computer ID, IP Routes, BIOS Release Date, Monitor Resolution, Number of Processor Cores, RAM, RAM Max Capacity, Total Swap, Sound Card, Virtual Platform, Disk Type of C:, DNS Server, Primary WINS Server, Network Adapter Type, System UUID

Saved Question Creation Procedure

Step 1) Navigate to Interact tab of Tanium Console

	Logged In: administrator + Buik: 7.0.314.6277 [UI: 1.0.0.588 [Heg
O Interact	
Ask a Question	Question Builder
Enter a question here. You can use plain English.	Q, Search

Step 2) Refer to above table and copy "**Saved Question Text**" and Paste it into "**Ask a Question**" window.

0	Interact	
	Ask a Question	Question Builder
	GET Computer ID and AD Domain and Username and Computer Name and Domain Name FROM all machines	Q Search

Step 3) Click on "**Search**" button and it will show some suggestions. Pick the first one or the one which matches exactly with the "**Saved Question Text**". Sequence and count of sensors should also remain same in "**Saved Question Text**" pasted in "**Ask a Question**" window and suggested query chosen.

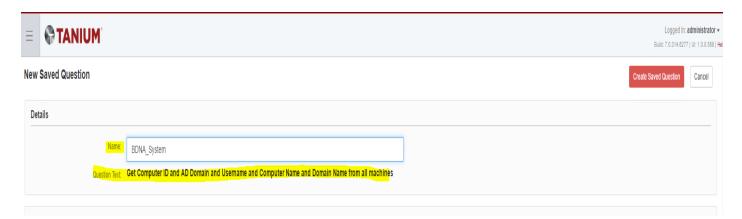
Ask a Question Question Builder Get Computer ID and AD Domain and Username and Computer Name and Domain Name FROM all machines Question Builder Please select one of the following queries: Get Computer ID and AD Domain and Username and Computer Name and Domain Name from all machines Get Computer ID and AD Domain and Username and Computer Name and Domain Name from all machines Get Computer ID and AD Domain and Username and Computer Name and Domain Name from all machines Cart find what you are looking for?

Step 4) Based on **Step 3**, click on the most appropriate suggestion. It will run the Saved Question and show the output. Click on "**Save this question**" hyperlink at the bottom of "**Question**" window

≡	TANI	Л						Bui	Logged In: admir Id: 7.0.314.6277 UI: 1	
0	Interact	Home								
	Question:	Get Computer ID and AD Domain and Username and Computer Name and Domain Nam	e from all machines			Q Search				
		Save this question Copy to Question Builder							View:	lı 9
Items: 4 (4 tot	tal)					Filter b	Computer Group	Contains	Filter by Text	ି ଦ୍
Live U	Jpdates: On 🏢 1	00%					Clea	r Sort Text Wraj	o: 🗆 🛛 Merge	
(Computer ID ↑	AD Domain	Username	=	Computer Name		Domain Name			=
2	562718036	N/A on Linux	No User		vm350rh.(none)		(none)			*
3	265254765	WORKGROUP	No User		vm098w		WORKGROUP			
3	788427316	WORKGROUP	No User		vm254w		WORKGROUP			
9	66227570	WORKGROUP	No User		vm351w		WORKGROUP			

Step 5) Refer to the above table and copy **"Saved Question Name**" for corresponding **"Saved Question Text**". Paste it in **"Name**" window.

Step 6) Verify that Question Text matches with the "**Saved Question Text**" from above table. Sequence and count of sensors should remain same in "**Saved Question Text**" in table above and "**Question Text**" below "Name" window



Step 7) Click on "Preview" to see some data and then click on "Create Saved Question"

	ANIUM				Logged In: administra Build: 7.0.314.6277 UI: 1.0.0.
				Name Valu	ue + Add
				Not Specified	
Associat These actio	ted Actions ons will be available for use on results of this question.				
Add Package 🗸	•				
Preview					
					View: 🏢 🕻
	t Computer ID and AD Domain and Username an	nd Computer Name and Domain Name from all machines			
ems: (5 total)				Filter by	Computer Group V Contains V Filter by Text 💿 🕻
	On 11 100%				Clear Sort Text Wrap: 🔲 Merge 🛛 🕹
					Clear Sort Text Wrap: 💷 Merge 🛛 🚣 .
		AD Domain	llsername	Computer Name	
Computer					Domain Name
	r ID ↑	AD Domain Environment In AD Domain AD Domain N/A on Linux Not joined to domain	No User root	Computer Name Events Name Its	
Computer 256271803 302138740	r ID↑	N/A on Linux	No User	vm350rh.(none)	Domain Name
Computer	r10 1 = = = = = = = = = = = = = = = = = =	N/A on Linux Not joined to domain	No User root _mbsetupuser	vm350rh.(none) H643.	Domain Name 🔤 (none) No Domain

Step 8) Repeat Steps 1-7 for all "Saved Questions" mentioned in table above.

Step 9) Once all "**Saved Questions**" have been created, click on "**Saved Questions**" under Authoring tab (from left side panel). Search for "**BDNA**" under Saved Questions. This should display all Saved Questions created. Total count of BDNA Saved Questions should be 15.

TANIUM												Logged In: administrator + Build: 7.0.314.8277 UI: 1.0.0.588 Heip
Authoring Sensors	Packages Saved Questions											보 Import from XML 프 Export to XML
ems: of 110 Edit Load 🛱	8 2							BDNA		8	Selected Saved Que	estion
									Clear Sort Text Wrap:	© ≛ C	Question Name:	BDNA_AddRemove
Name †	Owner	E Public	■ Reissue	=	Tags	Ξ	Last Modification	≡	Modified By	=		
BDNA_AddRemove	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator	*	Question Text:	Get Computer ID and Installed App Name from all machines
BDNA_Bios	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator		Visibility:	Restrict this guestion to only owner and administrators
BDNA_CDROM	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator		Visibility:	 Restrict tins question to only owner and administrators
BDNA_ComputerSystem	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator			
BDNA_DesktopMonitor	administrator	No	Never				11/4/2016, 9:07:10 PM		administrator			
BDNA_Disk	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator		Saved Question Text	
BDNA_NetworkAdapter	administrator	No	Never				11/4/2016, 9:07:10 PM		administrator		GET	
BDNA_NetworkAdapterConfigur	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator		Computer ID	
BDNA_OperatingSystem	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator		and	
BDNA_Passthrough	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator		Installed App Name FROM all machines	
BDNA_PCMemory	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator		The second se	
BDNA_Processor	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator			
BDNA_RecentlyUsedApps_Host	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator			
BDNA_System	administrator	Yes	Never				11/4/2016, 9:07:10 PM		administrator			
BDNA_VideoController	administrator	Yes	Never				11/4/2016. 9:07:10 PM		administrator			

Create JSON File connectors for BDNA Saved Questions

Create the following file connectors using the Connect plugin from the Tanium Console. This step is required to be performed once at the time of initial setup.

Below tables cover settings for Tanium Connect 4.x.

Connector Settings				
General Information:				
Name: Add Remove JSON File Connector				
Description: JSON File Connector for BDNA_AddRemove				
Source and Destination:				
Source: Saved Question				
Saved Question Name: BDNA_AddRemove				
Destination: File				
Destination Name: AddRemove.json				
File Name: AddRemove.json				
Format:				
JSON				

General Information:
Name: System JSON File Connector
Description: JSON File Connector for BDNA_System
Source and Destination:
Source: Saved Question
Saved Question Name: BDNA_System
Destination: File
Destination Name: System.json
File Name: System.json
Format:
JSON

General Information:

Name: Computer System JSON File Connector Description: JSON File Connector for BDNA_Computer System

Source and Destination:

Source: Saved Question

Saved Question Name: BDNA_ComputerSystem

Destination: File **Destination Name**: Computer System.json **File Name**: ComputerSystem.json

Format:

JSON

General Information:
Name: LogicalDisk JSON File Connector
Description: JSON File Connector for BDNA_Disk
Source and Destination:
Source: Saved Question
Saved Question Name: BDNA_Disk
Destination: File
Destination Name: LogicalDisk.json
File Name: LogicalDisk.json
Format:
JSON

General Information:
Name: PCMemory JSON File Connector
Description: JSON File Connector for BDNA_PCMemory
Source and Destination:
Source: Saved Question
Saved Question Name: BDNA_PCMemory
Destination: File
Destination Name: PCMemory.json
File Name: PCMemory.json
Format:
JSON

BDNA

General Information:

Name: Network Adapter JSON File Connector Description: JSON File Connector for BDNA_Network Adapter

Source and Destination:

Source: Saved Question Saved Question Name: BDNA_NetworkAdapter

Destination: File Destination Name: NetworkAdapter.json File Name: NetworkAdapter.json

Format: JSON

General Information:Name: Network Adapter Configure JSON File ConnectorDescription: JSON File Connector for BDNA_Network AdapterConfigureSource and Destination:Source: Saved QuestionSaved Question Name: BDNA_NetworkAdapterConfigureDestination: FileDestination Name: NetworkAdapterConfigure.jsonFile Name: NetworkAdapterConfigure.jsonFormat:JSON

General Information:				
Name: Operating System JSON File Connector				
Description: JSON File Connector for BDNA_Operating System				
Source and Destination:				
Source: Saved Question				
Saved Question Name: BDNA_OperatingSystem				
Destination: File				
Destination Name: OperatingSystem.json				
File Name: OperatingSystem.json				
Format:				
JSON				

General Information:

Name: Processor JSON File Connector Description: JSON File Connector for BDNA_Processor

Source and Destination:

Source: Saved Question Saved Question Name: BDNA_Processor

Destination: File Destination Name: Processor.json File Name: Processor.json Format:

JSON

General Information: Name: BIOS JSON File Connector Description: JSON File Connector for BDNA_Bios Source and Destination:

Source: Saved Question Saved Question Name: BDNA_Bios

Destination: File Destination Name: BIOS.json File Name: BIOS.json Format: JSON

General Information:					
Name: CD ROM JSON File Connector					
Description: JSON File Connector for BDNA_CDROM					
Source and Destination:					
Source: Saved Question					
Saved Question Name: BDNA_CDROM					
Destination: File					
Destination Name: CDROM.json					
File Name: CDROM.json					
Format:					
JSON					

General Information:

Name: Desktop Monitor JSON File Connector Description: JSON File Connector for BDNA_Desktop Monitor

Source and Destination:

Source: Saved Question Saved Question Name: BDNA_DesktopMonitor

Destination: File Destination Name: DesktopMonitor.json File Name: DesktopMonitor.json

Format: JSON

General Information:Name: Recently Used Apps Host JSON File ConnectorDescription: JSON File Connector for Recently Used Apps HostSource and Destination:Source: Saved QuestionSaved Question Name: BDNA_ RecentlyUsedApps_HostDestination: FileDestination Name: RecentlyUsedAppsHost.jsonFile Name: RecentlyUsedAppsHost.jsonFormat:JSON

General Information:				
Name: Video Controller JSON File Connector				
Description: JSON File Connector For Video Controller				
Source and Destination:				
Source: Saved Question				
Saved Question Name: BDNA_VideoController				
Destination: File				
Destination Name: VideoController.json				
File Name: VideoController.json				
Format:				
JSON				

General Information:			
Name: Pass Through JSON File Connector			
Description: JSON File Connector For Pass Through			
Source and Destination:			
Source: Saved Question			
Saved Question Name: BDNA_PassThrough			
Destination: File			
Destination Name: PassThrough.json			
File Name: PassThrough.json			
Format:			
JSON			

File Connectors Creation Procedure

Instructions to create Connectors for **Tanium Connect 4.x**:

Setting 1)

These settings need to be repeated for each Saved Question. Please refer to appropriate table above to get settings for corresponding saved question. For example, screenshots below show settings done for BDNA_AddRemove saved question.

Connection: General Information:

- Select "Enable" checkbox
- Enter Connector Name and Description as shown in snapshot below

Connection			
General Information			
Name Add Remove Connector Description JSON File Connector for BDNA_AddRemove	Log Level:	Connection runs on the defined schedule or through Events. 30 - Information	

Setting 2)

Source and Destination:

- Select Source as "Saved Question". Advanced Settings will show up.
- Select Saved Question Name from drop down menu. Connector Name and the corresponding Saved Question and File Name are shown in <u>table</u> above. Please refer to that table while creating connections.
- Select Computer Group as "All Computers"
- Under Advanced Settings, select "Flatten", "Hide Errors" and "Recent" checkbox.
- Select Answer Complete Percent as "100"
- All other values should be same as default ones.
- Select Destination as "File"
- Enter Destination Name by referring to <u>table</u> above. It is not a drop-down menu. User has to type a file name in that box.
- Enter File Name where saved question data needs to be dumped. File Names should be same as shown in table above. Please refer to that <u>table</u> while creating connections. File Names should not have any spaces.
- All files are created in the \Tanium Module Server\services\connect-files\output folder.
- Under Advanced Settings, keep Filename Timestamp Format as empty i.e. " "
- Select "**Replace File**" checkbox.

Source and Destination					
Source: Where is the data coming from	m?		D	estination: Where is the data going	2
TANIUM		Ð		TANIUM [®]	
Saved Question	*			File	×
Saved Question Name:	BONA_SYSTEM			Destination Name:	System json
Computer Group:	All Computers			File Name:	Enter the name of a new destination or choose an existing destination. System:json
 Advanced Settings 					All files are created in the \Tanium Module Serveriservices\connect-files\output folder. You can create or link sub-folders and use a relative path in the file name.
	Use Cached Data			 Advanced Settings 	изе а тенаюте ранлят иле не папле.
	Do not ask endpoints the Saved Question, Pull Saved Question results from the cache on the Tanium Server.			File Name Time Stamp Format:	
	Flatten When enabled, results that contain multiple values per row for a column are broken out into individual rows. When enabled, results that contain multiple values per row for a column are broken out into individual rows.				Select or enter a date and time format to append to the file name.
	Hide Errors Answers with errors are not sent to the connection destination.				When selected, the file is replaced each time the connection runs. When not selected, the results are added to the existing file.
					Compress File Compress resulting file.
	Include answers from machines that are not currently turned on.				Allow No Results
Answer Complete Percent:	100				Create file with no results.
Timeout	Percentage of machines that must answer the Saved Question before processing of answers occurs.				
	Minutes to wait for clients to reply before returning processed results.				
Batch Size:	1000				
	Rows returned from the server at a time.				

Format:

- Select Format as "JSON"
- Select **Enriched JSON** checkbox
- Select row delimiter as "\r\n"
- Uncheck "Wrap Data with Source" option

Schedule:

• Select Schedule of running Saved Question by consulting Tanium TAM. This value needs to be set in such a way that maximum assets get discovered during the run. Tanium Trends could be referred before setting this value.

Finally, click on "**Create Connector**" to create connection for a Saved Question.

SON			-
		Wrap Data with Source Generates data where the source name surrounds data.	
		Chriched Json	
	Row Delimiter:	Generates rich JSON output.	
Columns lect and name col	umns to send.	Character to use to separate lines.	
edule View schedu	e chart		
<mark>edule</mark> View schedu Summary:	e chart At 04:47 PM (Schedule currently enabled	d)	
Summary:	At 04:47 PM	d.)	
enerate Cron Edit	At 04:47 PM (Schedule currently enabled Cron Expression	d.) .per day, every day	

To test JSON file Connector, open that connector and click on "Run Now"

Generate the Normalize input zip file

After the connectors are created, JSON files for all BDNA Saved Questions will be saved at the location chosen in above step. You can now use the BDNA Standalone Extractor to extract Tanium data from these JSON files.

Using the BDNA Standalone Extractor

From a workstation with file access to the JSON file location, run the BDNA Normalize Standalone Extractor.

NOTE: Standalone Extractor Version 5.3 or higher is required.

- 1. Click the Browse button in the Configuration File section to and select the json.Tanium.config file.
- 2. Click the Browse button in the Input JSON File section and select the folder where Tanium JSON files are located.
- 3. Click on Test button to test connectivity.
- 4. Click Browse button in the Output Path section to select the path to save the Normalize input zip file.
- 5. Click on Execute button to start the extraction.
- 6. After extraction completes, the saved Normalize input zip file can be loaded into BDNA Normalize by creating a new Normalize Process from the BDNA Data Platform Admin Console

Instructions to configure Tanium 7 Extractor

BDNA

Create Process	? 😒					
Process Type > IT Discovery Tool						
Select IT Discovery Tool						
Select a discovery tool you want to normalize.						
BDNA Discover	LANDesk					
BMC ADDM	C Lansweeper					
BMC BladeLogic Client Automation	ManageSoft Enterprise Compliance Manager (ECM)					
BMC BladeLogic Server Automation	Microsoft Assessment and Planning Toolkit (MAP) 7					
CA IT Client Manager (ITCM)	Microsoft Assessment and Planning Toolkit (MAP) 8					
CiscoWorks LAN Management Solution (LMS)	O Microsoft SMS 2003					
O Dell KACE	Microsoft System Center Configuration Manager 2007					
HP Client Automation	Microsoft System Center Configuration Manager 2012					
HP DDMi	Novell ZENworks					
HP DDMa	○ OCS					
HP Server Automation	 SolarWinds Orion 					
HP Universal Discovery	Scalable					
HP Universal Discovery (XSF)	O VMware vCenter Protect					
IBM License Metric Tool	ServiceNow Discovery					
IBM TCM	Other: Database Connection					
IBM Tivoli Application Dependency Discovery Manager	Other: Normalize Zip File					
	Prev Next					