

NetBrain[®] ServiceNow App 3.0



Quick Start Guide

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1. Overview

NetBrain's ServiceNow Application tightly joins the two systems together enriching the value of your ServiceNow deployment. Following initial setup and configuration and integration of the ServiceNow platform with your NetBrain system, the NetBrain Administrator can perform all ongoing tasks and automation enhancements without the need to involve ServiceNow Administrators.

Following the successful integration of the two systems, ServiceNow will have the capability to automatically trigger the NetBrain Problem Diagnosis Automation System (PDAS) to begin problem diagnosis the instant any service ticket is generated, not hours or days after the problem has been reported, facilitating the resolution of intermittent or transient issues.

Once triggered, the NetBrain PDAS will spring into action using conditional filtering of the incoming service ticket record data to identify all applicable automation and automatically execute. NetBrain PDAS will pull real-time information from device and interface configuration, routing tables, NAT polices, ACLs, VRFs, MAC Address tables, and even layer 2 devices into consideration when constructing the automated response to the problem. Then, the



NetBrain PDAS will generate a real-time visual map of the impacted network devices and application paths with any applied automation to help decode your network.

The result? The NetBrain diagnostic results are populated and available in the ServiceNow ticket record itself coupled with a complete NetBrain map made available in the NetBrain Incident Portal for collaborative troubleshooting across all teams in your organization to solve the issue faster.

This NetBrain ServiceNow App QuickStart guide will help achieve the basic end-to-end integration of the ServiceNow platform with the NetBrain Problem Diagnosis Automation System in your environment. The topics that will be covered include:

- Satisfying integration pre-requisites
- Establishing and validating connectivity between the NetBrain and ServiceNow systems
- Defining how and when automation should be triggered in the ServiceNow system.
- Creating the required Intent-Based Triggered Automation to test the integration
- Completing an end-to-end test of the integrated systems

2. Configuring the NetBrain Platform

Prior to attempting integration with the ServiceNow system, the NetBrain Administrator has the responsibility to perform a few exploratory configuration details to prepare the NetBrain environment for integration. In addition to creating the required user account for the ServiceNow API connection, the NetBrain Administrator may need to work with the ServiceNow Administrator and/or the Network Operations team(s) to understand how to route incident traffic within the NetBrain platform.

2.1. Creating the ServiceNow API User Account

When creating the required ServiceNow API User Account, NetBrain provides two authentication methods that can be used depending on the security policies of the ServiceNow team and the organization:

2.1.1 Server-Side Token Authentication

1. Log in to NetBrain Administrator User Interface with an account that has *System Admin* privileges.

https://<NetBrain IP Address or Hostname>/admin.html

- 2. In the NetBrain System Management page, click Ξ icon in upper left corner, then **User Accounts**.
- 3. In the User Accounts screen, click Add, then enter the following values:

Field/Setting	Value
Authentication Source	Token
Email	API@netbraintech.com
First Name	API
Last Name	API
Username	API
Allowed IP Address	<enter address="" ip="" servicenow="" the=""></enter>
Authorization Configuration for Reset API	<click <b="">Re-Generate Auth Token to create a Token></click>
User Rights	 Select Standard User - System Management, then: Check all tenants in Tenant Access column Check all domains in Domain Access column and click Assign Privileges in Domain Privileges column to select Power User role.

4. Click **Submit** to create the ServiceNow API account.

Note: It is safe to ignore any warning dialog message presented indicating a failure to send a notification email.

5. With the NetBrain ServiceNow API user account created, log out of the NetBrain Administrator User Interface.

2.1.1 Standard Password Authentication

1. Log in to NetBrain Administrator User Interface with an account that has *System Admin* privileges.

https://<NetBrain IP Address or Hostname>/admin.html

- 2. In the NetBrain System Management page, click \equiv icon in upper left corner, then **User Accounts**.
- 3. In the **User Accounts** screen, click **Add**, then enter the following values:

Field/Setting	Value
Authentication Source	NetBrain
Email	API@netbraintech.com
First Name	API
Last Name	API
Username	API
Password	<enter password=""></enter>
Confirm Password	<re-enter password=""></re-enter>
Allows User to Change Their Own Password	Uncheck this check box
User Rights	 Select Standard User - System Management, then: Check all tenants in Tenant Access column Check all domains in Domain Access column and click Assign Privileges in Domain Privileges column to select Power User role.

6. Click **Submit** to create the ServiceNow API account.

Note: It is safe to ignore any warning dialog message presented indicating a failure to send a notification email.

7. With the NetBrain ServiceNow API user account created, log out of the NetBrain Administrator User Interface.

2.2. Identifying NetBrain Tenant and Domain Configuration

2.2.1 Singleton-Style NetBrain Tenant and Domain

If the NetBrain system has deployed with a single Tenant and Domain, this is referred to as a "singleton" deployment. The NetBrain ServiceNow Application requires two key pieces of information from the NetBrain system, the configured Tenant ID and the Domain ID that will be integrated with ServiceNow. The NetBrain Tenant ID and Domain ID values are both stored as GUIDs within the NetBrain database and are most easily extracted by opening a map within the NetBrain End User Interface.

1. Log in to NetBrain End User Interface with an account that has System Admin privileges.

https://<NetBrain IP Address or Hostname>

- 2. From the main user interface desktop, in the NetBrain Taskbar, click the ± icon, then select **New Map.**
- 3. Once again click the 🛨 icon, then select **New Map**. NetBrain will open an additional tab within your web browser.
- 4. In the newly opened tab, the URL will have to be manually parsed to extract the Tenant and Domain IDs.
- 5. Identify the Tenant ID from the NetBrain map URL by copying all characters between "t=" and the first "&" symbol.
- 6. Identify the Domain ID from the NetBrain map URL by copying all characters between "d=" and the "&" symbol.

Example:

🎈 Desktop	NetBrain IE	🚴 Map2 - NetBrain IE 🛛 🗙 🕂		
$\leftarrow \rightarrow \mathbb{C}$ S netbrain.com/map.html?t=175d732a-ac79-8bc9-58b7-9d193fe179cc3d=d5098dc0-5f5c-44f6-9c9d-dac1529c38cd8dd=5747ac5d-3d61-b25f-459d-aac9a55cb7ef				

Image – NetBrain Map URL

- Tenant ID: 175d732a-ac79-8bc9-58b7-9d193fe179cc
- Domain ID: d5098dc0-5f5c-44f6-9c9d-dac1529c38cd

2.2.1 Multi-Tenant and/or Multi-Domains

Some NetBrain Systems require that account and device data be logically segregated within the NetBrain to adhere to local security or compliance policies. This is achieved in the NetBrain platform using concepts known as Tenant and Domain.

The ServiceNow platform does not implement a similar concept, but instead savvy ServiceNow administrators make use of key values and groups to determine assignments of incidents, problems, and change requests for routing to the correct teams and individuals within the organization.

With a NetBrain System deployed with multiple tenants and/or multiple domains, the NetBrain Administrator will need to work with the ServiceNow Administrator to identify key values called "Scope Values" that will allow the NetBrain ServiceNow App to properly route automation requests to the correct Tenant and Domain. Let's look at a very simple example where two incidents are created in the same ServiceNow system and how they would be routed differently in the NetBrain System using Scope Values.

This "Scope Value" is typically what would be found in one of the following fields in a ServiceNow Incident:

- Assignment Group
- o Service
- Category
- Subcategory

In this example, we have a NetBrain customer that is managing two different companies within a single NetBrain System: ABC Bank and Pet Foods, Inc. Each of these environments are required to maintain logical separation of account information and data, so they have been separated by both Tenant and Domain in NetBrain.

NetBrain Tenant	NetBrain Domain
ABC Bank	Boston Campus
Pet Foods, Inc.	U.S. Network

In the ServiceNow system, however, the ticket information is free to intermingle. The ServiceNow Admin has confirmed that the organization uses values found in the ServiceNow field of "Assignment Group" to differentiate which of the account's Network Operations team will work on the reported incidents.

ServiceNow Ticket ID	ServiceNow Assignment Group
INC00001	ABC
INC00002	PF, Inc.

With this information in hand, the NetBrain Administrator can easily configure the NetBrain system to properly handle the integration with ServiceNow and the resulting triggered automation requests using with the configuration of the Scope Values

NetBrain Scope Value	NetBrain Tenant	NetBrain Domain
Assignment Group (ABC)	ABC Bank	Boston Campus
Assignment Group (PF, Inc.)	Pet Foods, Inc.	U.S. Network

For the purposes of this QuickStart Guide, NetBrain will assume that the ServiceNow Administrator will be able to provide this additional information. If there are additional questions regarding the use of scope values in ServiceNow and how to identify them in your environment, please contact NetBrain Technical Support.

1. Log in to the NetBrain Administrator Interface with an account that has *System Admin* privileges.

- 2. In the NetBrain System Management interface, click the \equiv icon in upper left corner, then **Integrated IT Systems**.
- 3. In the Integrated IT Systems interface, click on **Multi-Tenant Support**.

Ξ System Management			L Jeff.Notaro@net	Log Out	NetBrain
Home Page X License X Tenants X User Accounts X 3	Proxy Manager $ imes $ Front Server Controllers $ imes $ Email Settings $ imes$	Advanced Settings $~ imes~$	Integrated IT Systems	×	
Integrated IT Systems Multi-tenant Support The system uses a special data field, Scope, to decide which domain will receive Items: + Add New Mapping	e the API call.	🕞 Import 🛛 📮 Export	Search	٩	😋 Refresh
Scope	Tenant	Domain			

Image – NetBrain System Management (Integrated IT Systems)

- 4. In the Multi-Tenant Support interface, click +Add New Mapping.
- 5. In the New Mapping dialog, complete as follows, then click **OK**.

Field / Setting	Value
Scope Value	The actual value found in the ServiceNow data field that is used to determine incident routing within the ServiceNow system.
	In the example above, the scope value for ABC Bank would be the value of the Assignment Group - <i>"</i> ABC"
Tenant	<select correct="" drop-down="" from="" name="" netbrain="" tenant="" the=""></select>
Domain	<select correct="" domain="" drop-down="" from="" name="" netbrain="" the=""></select>

6. Repeat steps 4 and 5 until all Scope Value mappings are complete.

2.3. Collecting the NetBrain Configuration Details

With the ServiceNow API Account created, the NetBrain Tenant and Domain information collected, and the ServiceNow Data Values defined, NetBrain recommends quickly noting down these values as they will be required to complete configuration by the ServiceNow Administrator in the next section.

NetBrain Integrated Edition URLNetBrain API Username	[]]
For Token-based Authentication		
NetBrain API Token	[]
For Standard Password Authentication		
NetBrain API password]]

NetBrain deployed with Singleton Tenant and Domain

- NetBrain Tenant ID
- NetBrain Domain ID

] [

3. Configuring the NetBrain ServiceNow App

Following successful configuration of the NetBrain Platform by the NetBrain Administrator to prepare for the integration, the ServiceNow Administrator will need to complete a series of configuration steps following installation of the NetBrain ServiceNow App from the ServiceNow storefront.

3.1. Establishing the ServiceNow to NetBrain Connection

The connection between the ServiceNow system and NetBrain is facilitated through the creation of a NetBrain Connector in the NetBrain ServiceNow App. Using the customized user account that was created in the NetBrain system, the NetBrain Connector will establish and maintain a connection between the two systems.

- 1. Log in to the ServiceNow system with an account that can access and administer the NetBrain ServiceNow App.
- 2. In the ServiceNow search bar, search for **NetBrain**.
- 3. Within the NetBrain ServiceNow App, click **NetBrain Integration Configuration > NetBrain Connectors**.

Servicence. Service Management				NetBrain	✓	tor + Q টে	0 🌣
VetBrain	NetBrain Conn	ectors New Search Nam	e 🔻 Search				
E ★ O	₩ ₩ All						
NetBrain		E Name			≡ Healthy		
Documentation		Sedicit	Search	Search	Search	Search	
Contact Support			No rec	cords to display			
▼ Application Data							
Trigger Task Log							Ċ
▼ NetBrain Integration Configuration							
NetBrain Connectors							
▼ NetBrain Incident Configuration							
Shared Data Field							
Automatically Login to NetBrain							
▼ NetBrain Triggered Diagnosis (V2)							
NetBrain Automation Template							
Trigger Rule							
▼ NetBrain Triggered Diagnosis (V3)							
Trigger Rule							
▼ Logging							
Configuration							
0							

Image – NetBrain Connectors

- 4. In the NetBrain Connectors pane, click New.
- 5. In the NetBrain Connector New Record screen, enter the following values:

Field / Setting	Value
Active	Leave the default setting (Checked).
Name	Provide a well-known identifier for the NetBrain system.
	Example - "NetBrain Production"
Endpoint	Click the Padlock icon to make the field available to edit, then enter the URL to the NetBrain Integrated Edition End User Interface that is recorded in "NetBrain Environment Information Pre-Requisites".
	Example - https:// <netbrain address="" hostname="" ip="" or=""></netbrain>
	Note: The NetBrain ServiceNow Connector supports both http and https
MID Server	If applicable, click the magnifying glass to display the list of available MID Servers. Search for an appropriate MID Server to associate with the NetBrain Connector, then click its name.
Authentication Type	If the created NetBrain API user account has been built with Token Authentication, select By Token .
	If the created NetBrain API user account has been built with standard Username/Password Authentication, select By Password .
NetBrain API Username	Enter the NetBrain API Username that is recorded in "NetBrain Environment Information Pre-Requisites".
Token	If Authentication Type is By Token , enter the NetBrain API Token that is recorded in "NetBrain Environment Information Pre-Requisites".
Password	If Authentication Type is By Password , enter the NetBrain API Password that is recorded in "NetBrain Environment Information Pre-Requisites".
NetBrain Deployment	If the NetBrain system has been deployed with only one tenant and one domain or will only have a single Domain integrated with ServiceNow, select Single Tenant.
	If the NetBrain system has multiple tenants and domains, select Multi-Tenant.
Tenant ID	If you select Single Tenant, enter the Tenant ID that is recorded in "NetBrain Environment Information Pre-Requisites".
Domain ID	If you select Single Tenant, enter the Domain ID that is recorded in "NetBrain Environment Information Pre-Requisites".
Scope	If you select Multi-Tenant, enter the field name that using to identify the tenant of network device.

6. Click **Test** to validate the connectivity and user authentication to the NetBrain.

Note: If the test operation fails, confirm NetBrain system information and authentication credentials and retest. Additional verifications should also include validating that all necessary firewall rules and/or ACLs (and MID Server, if applicable) have been updated to allow communication between the NetBrain and ServiceNow systems. Otherwise, contact NetBrain Technical Support for additional assistance.

- 7. Click **Submit** to create the NetBrain Connector.
- 8. In the NetBrain Connectors Connection Table, confirm the newly created NetBrain Connector reports status of **Active** and **Healthy**.

	NetBrain Connectors New	Search Name v Search		4	•	1 to 1 of 1	
	⇒ All						
ঞ্য	Q	≡ Endpoint	■ Active	≡ Healthy			
	(i) <u>netbrain</u>	https:// .netbraintech.com	• true	• true		2022-03-02 05:48:49	
	Actions on selected rows	~			44 4	1 to 1 of 1	• ••
							Ċ

Image – ServiceNow (NetBrain Connectors)

3.2. Creating the ServiceNow Triggered Automation Rule

Within the NetBrain ServiceNow App, the ServiceNow Administrator has the capability to limit the amount of and types of Incident, Problem, or Change tickets that will generate an API call for triggered automation to the NetBrain platform, also known as a "Trigger Rule". The NetBrain Trigger Rule is created using conditional, no-code logic applied to the available fields within the ServiceNow tickets themselves.

In most circumstances, NetBrain recommends leveraging a field such as "Assignment Group" as an initial Trigger Rule conditional filter. Typically, this field will already be in use by the organization to filter incident delivery between the different operational teams.

In the example below, we have created a simple Trigger Rule that will generate API calls to the NetBrain System requesting automation execution when the Assignment Group in an Incident contains the word "NetOps Team". If this criterion does not evaluate as true, an automation request is not issued to NetBrain and no data is exchanged between the systems.

< Trigger Rule New record		Ø	ŧ	ooo Submit
★ Name	NetOps Assignment Group			
* Table	Incident [incident]	▼		
Condition	Add Filter Condition Add "OR" Clause			
	Assignment group contains NetOps Team Q AND OR S And	×		
Active	Automatically login to NetBrain Portal Enabled			
Submit				

Image – NetBrain Trigger Rule

For the purposes of this Quick Start Guide, we will be creating a simple Trigger Rule that will help us validate the integration, but also demonstrate the potential to leverage alternate fields for conditional rules.

- 1. Log in to the ServiceNow system with an account that can access and administer the NetBrain ServiceNow App.
- 2. In the ServiceNow search bar, search for **NetBrain**.
- 3. Within the NetBrain ServiceNow App, click **NetBrain Triggered Diagnosis (V3) > Trigger Rule**.

servicenow. Service Manage	ment								8	NetBrain	✓ ●	•	Q 🗗	? 43
VetBrain	8	=	Trigger F	Rules	New Search	Condit	ion	v	Search					
)		P	All										
NetBrain	^	\$	Q		■ Name		■ Active	 Condition	•	Automa	ically login to NetBrain Portal En	abled	Table	
Documentation					Search		Search			Search			Search	
Contact Support								No recon	ds to displa	y				
Application Data	1.													
Trigger Task Log														٩
VetBrain Integration Configuration														
NetBrain Connectors														
VetBrain Incident Configuration														
Shared Data Field														
Automatically Login to NetBrain														
▼ NetBrain Triggered Diagnosis (V2)														
NetBrain Automation Template														
Trigger Rule														
▼ NetBrain Triggered Diagnosis (V3)														
Trigger Rule														
▼ Logging														
Configuration	*													
•														

Image – *NetBrain ServiceNow App (Trigger Rule)*

- 4. In the right pane, click **New**.
- 5. In the **Trigger Rule New Record** screen, configure the following evaluation criteria:

Field / Setting	Value
Name	NetBrain Trigger Test
Table	Incident [incident]

Condition

< Trigger Ru New reco	le d	Ø	ŧ	000	Submit
★ Nam	NetBrain Trigger Test				
* Tabl	Incident [incident]	▼			
Conditio	Add Filter Condition Add "OR" Clause				
	Short description				
Activ	Automatically login to NetBrain Portal Enabled				
Submit					

Image – NetBrain Trigger Rule New Record

- 6. Click **Submit** to create Trigger Rule.
- 7. Confirm that the newly trigger rule "Incident Ticket" has a status of "Active/True" in the list of available triggered rules.

=	Trigger Ru	les New Search	Name	▼ Search		to 1 of 1 🕨 🕨
	P Al	l				
ফ্র্য	Q	■ Name ▲	Active		\equiv Automatically login to NetBrain Portal Enabled	≡ Table
		Search	Search	Search	Search	Search
	(j)	<u>NetBrain Trigger Test</u>	true	short_descriptionLIKENetBrainTriggerTest^EQ	true	Incident [incident]
	Actions	on selected rows	~			to 1 of 1 🕨 🕨

Image – Available NetBrain Trigger Rules

3.3. Synchronizing Shared Data Fields

Not all fields within the Incident, Problem, and Change ticket types are created equal or may even exist in your customized instance of ServiceNow. The NetBrain ServiceNow App affords the ServiceNow Administrator the capability to configure the fields that are made available to the NetBrain platform when triggered.

NetBrain has reviewed thousands of ServiceNow generated tickets and have supplied a curated group of default data fields for each ticket type that have been found to commonly exist across all ServiceNow instances:

- Assigned to.Name
- Assignment Group.Name
- Configuration item.Name
- o Description

- o Impact
- o Priority
- o Short description
- o State
- o Urgency

In this step, we will perform a synchronization step between the NetBrain ServiceNow App and the NetBrain System to confirm the fields that will be made available when a triggered automation request is generated by a ServiceNow ticket.

- 1. Log in to the ServiceNow system with an account that can access and administer the NetBrain ServiceNow App.
- 2. In the ServiceNow search bar, search for **NetBrain**.
- 3. Within the NetBrain ServiceNow App, click NetBrain Incident Configuration > Shared Data Field

Servicence Management			E Ne	tBrain 👻 🌒 System Administrator 👻 📿 다 ? 🔅
VetBrain	Shared Data Fields New Search	Name 🔻 Search		◄< < 1 to 3 of 3 ► ►►
⊡ ★ ©	😳 🏹 All			
NetBrain	Q ≡ Name ▲		≡ Updated by	= Data
Documentation	(j) <u>change request</u>	Change Request	admin	assignment_group.name,assigned_to.name,c
Contact Support	(j) incident	Incident	admin	cmdb_ci.name,short_description,descripti
▼ Application Data	(j) problem	Problem	admin	assigned_to.name,assignment_group.name,c
Trigger Task Log	Actions on selected rows	~		◄< 1 to 3 of 3 ► ►►
▼ NetBrain Integration Configuration				¢
NetBrain Connectors				
▼ NetBrain Incident Configuration				
Shared Data Field				
Automatically Login to NetBrain				
▼ NetBrain Triggered Diagnosis (V2)				
NetBrain Automation Template				
Trigger Rule				
▼ NetBrain Triggered Diagnosis (V3)				
Trigger Rule				
▼ Logging				
Configuration				
0				

Image - NetBrain ServiceNow App (Shared Data Field)

- 4. In the list of available Shared Data Field templates, click **Incident**.
- 5. In the Shared Data Field screen, review the Selected Fields(s) column and validate that each field is available in your ServiceNow system.

★ Table Name	Incident		Q (1)
F	ilter: Default Data Available Fields Active Active Actual end Actual end Actual start Additional comments Approval history Approval history Approval history Approval set Assigned to Assignment group Business resolve time Caller Category Caused by Change	Selected Field(s) Assigned to.Name Assignment group.Name Configuration item.Name Description Impact Priority Short description State Urgency	

Image - Shared Data Field

6. In the list of Available Fields, scroll down and click **Number**, then click > to move it into the list of Selected Field(s).

Note: NetBrain recommends adding the Data Field **Number** in the list of Selected Field(s) for all ticket types (Incident, Problem, Change). This will ensure any triggered NetBrain automation will be able to display the ServiceNow Incident Number and provide a direct link to the ServiceNow Incident URL.

- 7. Click **Send Data Fields to NetBrain** to complete the synchronization of Incident field availability between NetBrain and the ServiceNow platform.
- 8. Confirm that the ServiceNow system reports **Sync to NetBrain API was successful** on operation completion.

Shared Data F incident	Field	Ø	ŧ	000	Send Data Fields to NetBrain	Update De	lete	↑	\checkmark
(i) Sync to NetBrain API	was successful							×	(
★ Table Name	Incident					Q (j)			

Image – Shared Data Field (Incident) Synchronization Success

Note: If the ServiceNow system completes the operation with a Warning or Error, contact NetBrain Technical support before proceeding.

9. Repeat steps 4-8 for the **Problem** and **Change** ticket types.

3.4. Verifying ServiceNow Ticket Metadata Synchronization to NetBrain

As part of the Connector creation process in the ServiceNow system, the NetBrain ServiceNow App will use the configured account information to establish the API connection with the downstream NetBrain system. On successful connection, the NetBrain system will identify the requesting application and synchronize the shared data fields configuration in the NetBrain ServiceNow App with the NetBrain system.

- 7. Log in to the NetBrain Administrator Interface with an account that has *System Admin* privileges. *https://<NetBrain IP Address or Hostname>/admin.html*
- 8. In the NetBrain System Management interface, click the \equiv icon in upper left corner, then **Integrated IT Systems**.
- 9. In the Integrated IT Systems interface, verify that the ServiceNow system successfully connected and been identified as an integrated ITSM System with the NetBrain Platform.

😑 🛛 System Mana	gement				1	Log Out	Ø NeBr
Home Page × License Integrated IT Systems ×	X Tenants X User Account	is X Proxy Manager X F	Front Server Controllers X Err	nail Settings $ imes$	Advanced Settings		
Integrated IT Systems Define basic settings, API cal Items: + Add Integ	Multi-tenant Support I categories, and data field of IT system rated IT System		In G	nport 🕞 Export	Search	۹	😋 Refresh
Source +		URL Address		Description			
ServiceNow		https://dev59490.service-now.com/		Build data structure	which can be used for	triggered diagno	sis for S 🗸

Image – NetBrain System Management (Integrated IT Systems)

Field / Setting	Value
Source	ServiceNow
URL Address	https:// <servicenow address="" ip="" system=""></servicenow>

Note: If the ServiceNow source value is not present or the URL Address listed is not accurate, but the NetBrain Connector was successfully created in the ServiceNow system in the prior section, contact NetBrain Technical support.

- 10. Right-Click the ServiceNow row entry, then click **Edit**.
- 11. In the *Edit Integrated IT System* dialog, review the listed Data Fields and verify that the available data fields listed under incident, problem, and change mirror those configured in the ServiceNow system.

Edit Integrated IT	System				×					
Source:	ServiceNow									
URL Address:	ddress: https://dev59490.service-now.com/									
Description:	Sulid data structure which can be used for triggered diagnosis for ServiceNow									
Data Field:	+ Add Category	Name:	incident							
	 Configuration_itemN. Short_description 	Condition:	+ Add Condition							
	 Description State Impact 									
	 Urgency Priority 									
	 Assignment_groupNa Assigned_toName Call_Back_URL 		Boolean Expression:							
				Cancel	OK					

Image – Edit Integrated IT System

12. Click **Cancel** to dismiss the dialog and Log Out of the NetBrain Administrator Interface.

4. Testing the ServiceNow Triggered Diagnosis Workflow

The NetBrain Triggered Automation Framework (TAF) defines interactions between the NetBrain System and the ServiceNow ITSM solution along with the data exchanged between platforms from each incident, based upon the defined conditional criteria, to provide the operator with the needed topology views, network standards tests and automation results to help resolve the problem.

To validate that the NetBrain TAF is fully operational before exploring additional triggered diagnosis automation, this Quick Start guide will ensure the foundational element of the NetBrain TAF, known as an Incident Type, can be created and properly triggered by the ServiceNow system.

4.1. Create a NetBrain Incident Type

The NetBrain Incident Type is used to conditionally match and filter the data provided by the NetBrain ServiceNow App to the NetBrain System. Proper construction of the NetBrain Incident Type ensures that the NetBrain system does not trigger unwanted automation from being executed and reported to the ServiceNow Incident ticket.

Similar to the conditional filtering required by the ServiceNow App, the NetBrain Administrator will create the Incident Type(s) using conditional filtering with the synchronized data fields from the NetBrain ServiceNow app.

1. Log in to NetBrain End User Interface with an account that has *System Admin, Tenant Admin, or Domain Admin* privileges.

https://<NetBrain IP Address or Hostname>

2. From the main user interface desktop, click the \equiv icon in upper left corner, then **Triggered Diagnosis Center**.

Note: You can also use the "Search Apps..." bar at the top of the expanded hamburger menu to quickly navigate and locate the Triggered Diagnosis Center or any other application within the NetBrain End User interface.

- 3. In the **Triggered Diagnosis Center** screen, select **Incident Type** tab.
- 4. In the Incident Type screen, click + Add Incident Type.



Image – Incident Type

5. In the **New Incident Type** dialog, enter the following values:

ew Incident Typ	pe						
ncident Type:				Description:			
Source:	ServiceNow		\vee	Category:	incident		~
Condition:	Define condition(s) or A Select Criteria	n what API call will be classifie	d to this incident typ	2.			
	Boolean Expression:						
Settings to	to Merge API Calls into I	ncident			Set New Incident S	ubject	
Merge i	into Incident by Signature:	+ Add New Value					
Me	erge into Incident by Time:	Creation Time: less then	1 day(s) 1 hour(s)	~			
Settings fo	or Incident Message						
🗹 Def	fine Incident Message: + Ac commended Interactive Auto	d Incident Message omation: Guidebook	~			Select	

Image – New Incident Type

Field / Setting	Value
Incident Type	ServiceNow Integration Test
Description	For Integration Test Only – Do Not Use
Source	ServiceNow
Category	Incident
Condition	Short description CONTAINS NetBrainTriggerTest

6. Under Settings for Incident Message click **+Add Incident Message**.

- 7. In the Add Incident Message dialog, type "ServiceNow Incident Number:", click the 🗟 icon, then click **Insert Hyperlink**.
- 8. In the Insert Hyperlink dialog, click the 🗟 icon next to **Label:**, then click **Insert Data Field**.
- 9. In the Select Data Field dialog, click **Number**, then click **OK**.
- 10. In the Insert Hyperlink dialog, click the 🗟 icon next to **URL:**, then click **Insert Data Field**.
- 11. In the Select Data Field dialog, click **Call_Back_URL**, then click **OK**.
- 12. In the Insert Hyperlink dialog, click **OK**.
- 13. Confirm that the defined incident matches the image below, then click **Save**.

sage		×
ServiceNow Incident Number: {Number}		5
	Cancel	Save
	ServiceNow Incident Number: (Number)	sage ServiceNow Incident Number: {Number}

Image – Add Incident Message

- 14. Under Settings for Incident Message click +Add Incident Message.
- 15. In the Add Incident Message dialog, type "ServiceNow Incident State:", click the 🗟 icon, then click **Select Data Field**.
- 16. In the Select Data Field dialog, click **State**, then click **OK**.
- 17. Confirm that the defined incident matches the image below, then click **Save**.

Add Incident Mes	sage		×
Message:	ServiceNow Incident State: {State}		6
		Cancel	Save

Image – Add Incident Message

- 18. Under Settings for Incident Message click **+Add Incident Message**.
- 19. In the Add Incident Message dialog, type "ServiceNow Incident Short Description:", click the 🗟 icon, then click **Select Data Field**.
- 20. In the Select Data Field dialog, click **Short_description**, then click **OK**.
- 21. Confirm that the defined incident matches the image below, then click **Save**.



Image – Add Incident Message

This message will be displayed in the resulting NetBrain Map / Incident Portal that will be generated in response to the ServiceNow App trigger request. This will also help create a valuable link between the resulting map in the NetBrain platform and the ServiceNow incident ticket with direct linkage between the two systems.

Settings for Incident Message					
Define Incident Message: + Add Incident Message					
	ServiceNow Incident Number: {Number}				
	ServiceNow Incident State: {State}				
	ServiceNow Incident Short Description: {Short_descripti				

Image – Settings for Incident Message

22. Click **OK** to complete Incident Type configuration.

Note: NetBrain recommends defining the Incident Message with the ServiceNow Incident Number for all Incident Types that are created to ensure a direct link between the ServiceNow Incident and the triggered NetBrain Automation and maps that will be generated.

4.2. Create the Test Incident in ServiceNow

With the NetBrain Incident Type created and the triggered automation workflow complete, we now need to verify our work by creating a test ServiceNow incident record.

- 1. Log in to the ServiceNow system with an account that can access and administer the NetBrain ServiceNow App and create Incidents.
- 2. Create a new Incident with the following criteria to satisfy the configured NetBrain Trigger Rule while ensuring that all other required fields are properly populated:

Field / Setting	Value
Short Description	NetBrainTriggerTest

- 3. Click **Submit** to complete the ServiceNow incident creation.
- 4. Confirm that the new incident record has been inserted at the top of the incident table and take note the incident number.

Note: The NetBrain ServiceNow App triggered automation request will execute following successful submittal of the Incident. Please wait 30-60 seconds before proceeding to ensure end-to-end execution of the automation workflow and ServiceNow to process the response.

- 5. Refresh the list of available incidents, and click on the Incident number that was created for testing.
- 6. In the incident record, scroll down until the results tabs are visible, then click the **NetBrain Automation** tab.
- 7. Confirm that the NetBrain Automation tab contains the following successful results:

< Incident INC0010284	/ V	₩ •••	Follow 👻	Update	Resolve	Delete	$\wedge \downarrow$
	Related Search Results >						
Notes Related Records Resolution Information	letBrain Automation						
Auto-Diagnosis Select Diagnosis Network Map Send Changed Fields to NetBrain The provide the provided of the provide					lp		
2022-03-03 20:50:33 This ticket was associated with NetBrain Incident 10018B 2022-03-03 20:50:33 NetBrain diagnosis was triggered by rule "NetBrain Trigger Test"							
Update Resolve Delete							

Image – ServiceNow Incident (NetBrain Automation Tab)

Number	Description
1	NetBrain auto generates its own internal Incident Number to correlate all the executed automation and generated map data. The resource that is reviewing the automation response from NetBrain can open the resulting material in NetBrain using either the standard login process or the NetBrain Incident Portal that does not require authentication:
	 Click Open in NetBrain to open NetBrain End User Interface, you can log in to view the details of associated NetBrain incident. Click Open in NetBrain Portal to open NetBrain Incident Portal to view the details of associated NetBrain incident.

- Execution timestamps of key activities in the NetBrain Triggered Automation workflow
- 8. If the ServiceNow user clicks through to the NetBrain System using the Open in NetBrain Portal option, they can confirm that important information from the ServiceNow system has been written into the generated NetBrain Incident indicating successful end-to-end integration.



Image – NetBrain Incident Portal

2

5. Appendix A – Customized ServiceNow NetBrain App User Roles

Following installation of the NetBrain ServiceNow App, the ServiceNow Administrator can optionally provision roles to any additional users that will require access to the different functional areas of the NetBrain ServiceNow Application.

NetBrain recommends that any user within the organization that would be responsible for troubleshooting the integration between the ServiceNow platform and NetBrain system be granted Admin rights to the NetBrain ServiceNow App so that NetBrain Technical Support can provide proper assistance and support.

5.1 Built-In Role Mappings

NetBrain has made available two built-in ServiceNow App Role Mappings that can be applied to users in your organization with reasonable limitations.

Pre-Built ServiceNow Role	NetBrain ServiceNow Application Access
Admin	Documentation
x_nbt_netbrain.admin	Contact Support
	Application Data - Trigger Task Log
	NetBrain Integration Configuration - NetBrain Connectors
	NetBrain Incident Configuration - Shared Data Field
	NetBrain Incident Configuration - Auto Access to Portal
	NetBrain Triggered Diagnosis (V2) – NetBrain Automation Template
	NetBrain Triggered Diagnosis (V2) – Trigger Rule
	NetBrain Triggered Diagnosis (V3) – Trigger Rule
	Logging - Configuration
User	Application Data - Trigger Task Log
x_nbt_netbrain.user	NetBrain Incident Configuration
	Logging - Configuration

Note: To perform modifications to the **NetBrain Incident Configuration – Shared Data Field** interface, an additional role of **admin** or **itil** must also be applied to the ServiceNow user. The built-in **x_nbt_netbrain.admin** role will provide view-only access to the interface.

5.2 Customized Role Mappings

ServiceNow Administrators may also wish to create customized Role groups without limiting themselves to the built-in Admin and User options. To create customized roles or further limit access to areas of the app, NetBrain has provided role options for each functional area of the NetBrain ServiceNow App.

ServiceNow Role	NetBrain ServiceNow Application Access
x_nbt_netbrain.user	Documentation and Contact Support
x_nbt_netbrain.trigger_task_log	Application Data - Trigger Task Log
x_nbt_netbrain.connector_user	NetBrain Integration Configuration - NetBrain Connectors
x_nbt_netbrain.specific_data_definition_user and admin or itil	NetBrain Incident Configuration - Shared Data Field
x_nbt_netbrain.admin_setting supports to view and modification	NetBrain Incident Configuration - Auto Access to Portal
x_nbt_netbrain.general_settings supports to view only	
x_nbt_netbrain.field_map_admin	NetBrain Triggered Diagnosis (V2) – NetBrain Automation Template
x_nbt_netbrain.map_rule_user	NetBrain Triggered Diagnosis (V2) – Trigger Rule
x_nbt_netbrain.trigger_rule_v3_user	NetBrain Triggered Diagnosis (V3) – Trigger Rule
x_nbt_netbrain.admin_setting supports to view and modification	Logging - Configuration
x_nbt_netbrain.general_settings supports to view only	