NetBrain Integration Deployment Guide

Single Pane of Glass – PRTG Monitor Sensor Data

# Contents

Use Case

Description

NetBrain has created an integration compatible with NetBrain Integrated Edition release 8.0 (and newer) that enables a NetBrain administrator to overlay each PRTG device sensors data on user created maps, at the meantime, NetBrain provides Hyperlink on each Sensor ID to open the corresponding PRTG sensor page.

With this integration, NetBrain can overlay the following information of each sensor:

Sensor Name	Sensor ID	Status	Last Value
Ping	3494	Up	2 msec

NetBrain Map with PRTG Data Overlay

Below is an example representation of the PRTG all sensors data overlay on each device in NetBrain.
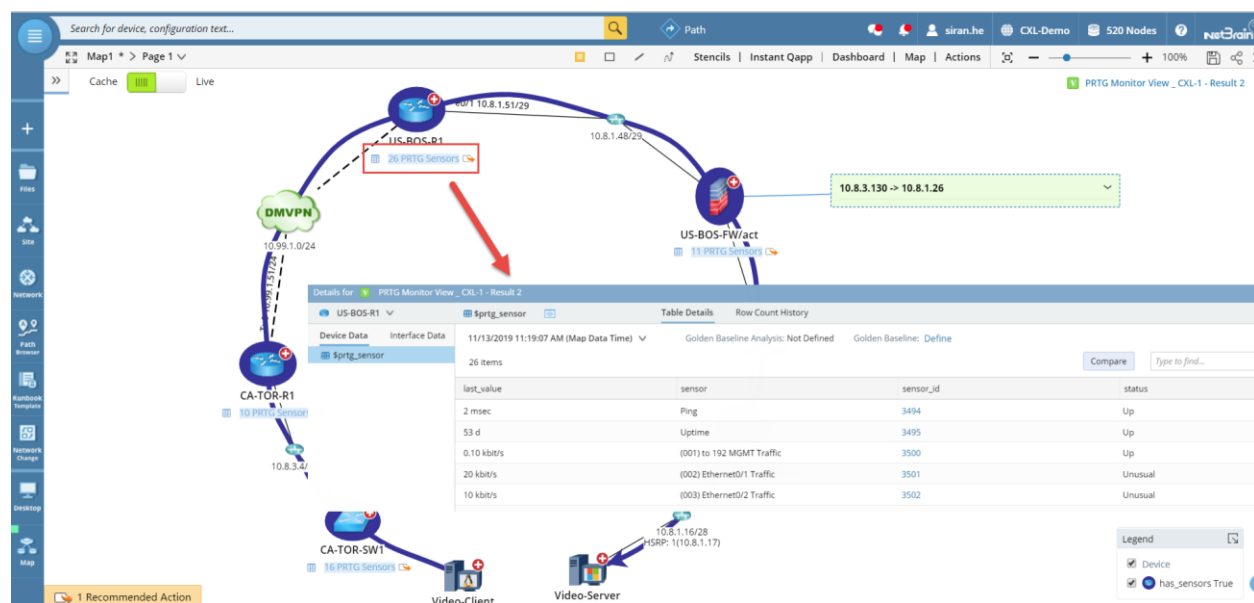
Pre-requisites

Application Version

Application	Version
NetBrain Integrated Edition	IEv8.0 (or newer)

PRTG	PRTG 17.4(or newer)

Network Connectivity

Source	Destination	Protocol
NetBrain Front Server	PRTG Server	HTTP/HTTPS

User Account and Privileges

Application	User Account	Required Role Assignment(s)
NetBrain Integrated Edition	Required	System Admin
PRTG	Required	Admin

Note: Please check if the user has privilege to get API call result before configure in NetBrain Domain Management Page

Deployment Instructions

Deploy the NetBrain PRTG API Adaptor

1. Download the NetBrain PRTG API Adapter, **PRTG API Adaptor.py**, from the NetBrain GitHub and stage locally on the machine typically used to connect to the NetBrain User Interface.
2. Using a web browser, login to the NetBrain **System Management** UI using the *System Admin* credentials

    http://<NetBrain Web Server IP>/admin

3. In the NetBrain System Management UI, Navigate to ***Operations → API Adaptors***.
4. In the API Adaptors screen, click "**Add**".
5. Complete the ***Add API Adaptor*** dialog screen as follows:

    Adapter Name: *PRTG API Adaptor*
    Description: *NetBrain PRTG API Adaptor*
    Script: *<PRTG API Adaptor.py>*

6. Review the adaptor configuration, then click "**Save**".
7. Log out of the Netbrain Integrated Edition System Management UI.

Create PRTG API Server Connection

Note: If the environment has been deployed with multiple Front Servers, repeat this section for each of the Front Servers.

1. Using a web browser, login to the NetBrain **Desktop** UI using the *System Admin* credentials
    http://<NetBrain Web Server IP>

2. Navigate to the NetBrain ***API Server Manager***
    Domain Management → Operations → API Server Manager

3. In the **API Server Manager** screen, click "**Add**".
4. Complete the Add API Server dialog screen as follows:

Server Name: *PRTG API Server <Front Server>*
Description: *PRTG*
API Source Type: *"PRTG API Adaptor"*
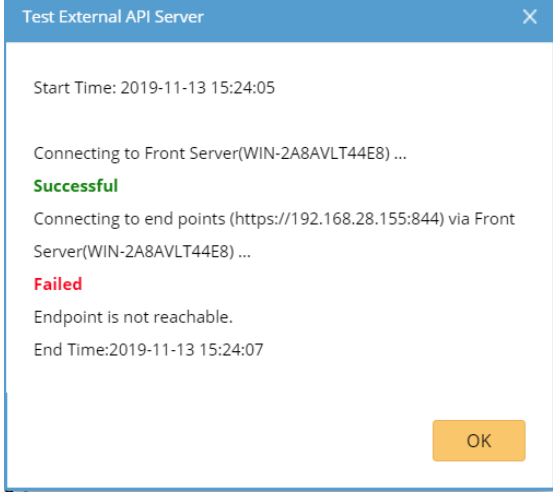**Endpoint:** *PRTG instance endpoint (ex "http://192.168.31.92")*
Username: *PRTG login account's username*
Password: *PRTG login account's password*
Front Server/Front Server Group: Select FS/FSG which would have reachability to PRTG server

5. Click "**Test**" to initiate a connectivity test between the NetBrain front server and the PRTG instance configured. Pictured below is the result of a successful connectivity test followed by two typical failure scenarios: Incorrect credentials and connectivity between NetBrain and PRTG.

Successful Connection	Test External API Server ✕
	Start Time: 2019-11-13 15:15:57 Connecting to Front Server(WIN-2A8AVLT44E8) … **Successful** Connecting to end points (https://192.168.28.155:8443) via Front Server(WIN-2A8AVLT44E8) … Endpoint and crendentials are verified **Successful** End Time:2019-11-13 15:15:59 OK
Error Scenario: Invalid username/password. **Possible Resolution:** Confirm credentials specified in the PRTG API Adaptor configuration and try it agin.	Test External API Server ✕ Start Time: 2019-11-13 15:17:12 Connecting to Front Server(WIN-2A8AVLT44E8) … **Successful** Connecting to end points (https://192.168.28.155:8443) via Front Server(WIN-2A8AVLT44E8) … **Failed** Invalid username/password End Time:2019-11-13 15:17:13 OK

Error Scenario: PRTG endpoint is unreachable. **Possible Resolution:** Confirm that the NetBrain Front Server(s) can reach the PRTG platform using 3rd party tools (Ping, Traceroute, Wireshark)	**Test External API Server** ✕ Start Time: 2019-11-13 15:24:05 Connecting to Front Server(WIN-2A8AVLT44E8) … **Successful** Connecting to end points (https://192.168.28.155:844) via Front Server(WIN-2A8AVLT44E8) … **Failed** Endpoint is not reachable. End Time:2019-11-13 15:24:07 OK

6. Once successful connection with the local PRTG instance has been confirmed, click "**OK**" to finalize PRTG server connection.
7. Repeat Steps 2-6 for each additional deployed Front Server.

Import PRTG Data View Template

1. Download the NetBrain PRTG Dataview Template, *PRTG Monitor Sensor Data.xdvt*, from the NetBrain GitHub and stage locally on the machine used to connect to the NetBrain User Interface.
2. Using a web browser, login to the NetBrain **Desktop** UI with the *System Admin* credentials
           http://<NetBrain Web Server IP>

3. Navigate to the NetBrain ***Data View Template Manager***
           Start Menu (The Four Dashed Lines) → *Dynamic Map* → ***Data View Template Manager***

4. Right-Click "**Shared Templates in Tenant**", then click "**New Folder**".
5. Name the folder ***PRTG Single Pane of Glass***
6. Right-Click the "**PRTG Single Pane of Glass**" folder, then click "**Import Template**"
7. In the *Import Data View Template* dialog, click "**Add Data View Template …**"
8. Select the ***PRTG Monitor Sensor Data.xdvt*** file, then click "**Open**".
9. Confirm that the *Import Data View Template* dialog screen reflects the following information:
           Name: PRTG Monitor Sensor Data.xdvt
           Size: *291.66k*
           Status: *Ready*
           Related Resources: *1 Parsers*

10. Click "**Import**" to initiate the import of the data view template to the NetBrain system.

   Note: On successful completion, the status will transition from ***Ready*** to ***Successful****.* If any other status is reported, retry the operation, then contact NetBrain support.

11. Navigate to NetBrain *Parser Library*

        Start Menu (The Four Dashed Lines) → ***Automation*** → ***Parser Library***

12. In the Parser Library, search for "PRTG". One PRTG parser should be returned in the search results:

        [PRTG] Monitor Sensor Data

13. Double-click ***[PRTG] Monitor Sensor Data*** to open the custom parser in the ***Parser Editor***.
14. In the ***Parser Editor***, update the ***Parser Type*** associated with the ***[PRTG] Monitor Sensor Data*** to the following:

        Parser Type: *API, **PRTG API Adaptor***

15. Click the Save icon in the upper-right corner of the screen, then close the browser tab.

Creating PRTG Enabled Device Groups

Note: If the environment has been deployed with multiple Front Servers, repeat this section for each of the Front Servers.

1. Navigate to the NetBrain ***Device Group Manager***.

        Start Menu (The Four Dashed Lines) → ***Device Group***

2. In the ***Device Group Manager***, right-click the "**Public**" folder, then click "**New Device Group**".
3. In the ***Device Group Properties*** dialog, Name the device group as follows:

        [PRTG] DG <Front Server Hostname>

4. Under ***Devices*** and ***Interfaces***, click "**+Dynamic Search",** then "**Dynamic Search Device**".
5. In the ***Dynamic Search Device*** dialog,
        Search Scope: *All Devices (default)*
        Device Criteria: *Front Server | Matches | <Front Server>*

        where *<Front Server>* is the front server specified in step 3.

6. Click "**Search**" to populate the device list to front server mapping.
7. Click "**OK**" button to create a Dynamic Search association.
8. In the ***Device Group Properties*** dialog, click "**OK**" to complete Device Group creation.
9. In the ***Device Group Manager***, right-click the ***[PRTG] DG<Front Server Hostname>*** object, then click "**Open Group Map**".
10. In the resulting NetBrain device group map, right-click any device, then click "***Shared Device Settings***".
11. In the ***Shared Device Settings…*** dialog, click the select the ***API*** tab then populate the dropdown fields as follows:
        PRTG API Adaptor *| PRTG API Server <Front Server> | <Select Front Server>*

12. Check "*Apply above Settings to device group*", then select *[PRTG] DG <Front Server Hostname>*
13. In the API tab content table, check *PRTG API Adaptor*
14. Click "**Submit**".
15. Repeat steps 1-14 for each additional deployed Front Server.

Adding PRTG URL on Sensor ID

Create Generic Variable

1. Navigate to the *NetBrain Generic Variable*.

    Start Menu (The Four Dashed Lines) → *Single Pane of Glass URL* → *NetBrain Generic Variable*

2. Click "**Add**" button to add a new Generic Variable, and provide following information:
    Name: PRTG
    Value: <The URL to browse to PRTG>. (ex "https://192.168.28.155:8443")

Create a Page Link

1. Navigate to the *Page Link.*

    Start Menu (The Four Dashed Lines) → *Single Pane of Glass URL* → *Page Link*

2. Click "*Add Page Link*" and provide following information:
    Page Name: Sensor
    Page URL: (ex "**{$$PRTG}/sensor.htm?id={$sensor_id}**")
    - Click plus sign on right side, select "*Insert Generic Variable*", then "*PRTG*".
    - Manually type "*/sensor.htm?id=*"
    - Click plus sign on right side, select "*Insert Parser Variable*" and then navigate *[PRTG] Monitor Sensor Data* parser in *Shared Parsers in Tenant folder*, then select *sensor_id*.

Add Link to DataView Template

1. Navigate to the *PRTG Monitor Sensor Data* in *Data View Template Manager*

    Start Menu (The Four Dashed Lines) → *Dynamic Map* → *Data View Template Manager* → *Shared Templates in Tenant* → *PRTG Single Pane of Glass* → *PRTG Monitor Sensor Data*

2. Click "*Sensor_Detail(table)*" under the device icon
3. Click "*+Add Action*" then **SPOG URL**
4. Select *Sensor* and click "*Select*".
5. Click the **Save** button in the upper-right corner of the screen, then close the browser tab.

Visualizing the PRTG Data with NetBrain Data View Template

On-Demand Data Overlay

1. From the NetBrain *Desktop Management* UI, open the desired map to overlay PRTG data.
2. In *Dynamic Data View* tab, search for "*PRTG Monitor Sensor Data*".
3. In the *Preview – Data View Template* dialog, click "*Apply*"
4. On the NetBrain map, confirm that the *Cache/Live* data source switch is set to *Live.*

5. Confirm that the objects (devices and interfaces) are properly instrumented with the expected PRTG data.

   Note: Overlay of the PRTG data may take seconds-to-minutes to complete refresh depending on the number of devices on the map.

Schedule Data Import from PRTG

1. In the *NetBrain Domain Management* page, navigate to *Schedule Task*.
2. Click on "**Schedule Data View Template/Parser**", then click on "**Add Task**"
3. In the *Add Task* dialog, specify the frequency for which to import device and interface data from PRTG.
4. Click on "**Device Scope**" tab, then click "**Device Group**" radio button. Add each device group created as part of the integration to limit device scope of the available devices.
5. Click on "**Select Data View Template/Parser**" tab, click on "**Add**" and search for *[PRTG] Monitor Sensor Data*
6. Click "*Submit*" to create the scheduled task for PRTG data import to NetBrain.

Note: The PRTG data will not be available on the map until after the first time that the scheduled task has completed execution.

Troubleshooting

If there are any problems encountered during deployment or integration of NetBrain with PRTG, contact NetBrain Support at support@netbraintech.com.