

Contents

| 1. | Ver | ifying | NetBrain Auto-Update/Patch Readiness | 3 |
|----|------|--------|---|---|
| | 1.1. | Over | rview | 3 |
| | 1.2. | Pre-l | Requisites | 3 |
| | 1.2 | .1. | Validate that NetBrain Service Monitor is Fully Operational | 3 |
| | 1.2 | .2. | Validate RabbitMQ Port 15672 Connectivity | 5 |
| | 1.3. | Exec | uting the Auto-Update Verification Tool | 6 |
| | 1.4. | Inter | preting the Auto-Update Verification Tool Results | 6 |

1. Verifying NetBrain Auto-Update/Patch Readiness

1.1. Overview

In NetBrain Integrated Edition 10.0, NetBrain began to deliver our device driver updates exclusively through the NetBrain Customer Portal to ensure a more secure delivery mechanism for our customers. Starting in NetBrain 10.0a, NetBrain is also delivering our core service patches through the NetBrain Customer Portal update feature as well.

Some NetBrain systems in the field may have some undetected configuration issues that will prevent successful application of these patches using the automation now built into NetBrain Integrated Edition 10.1. This tool to help minimize the number of manual verifications that are required by the NetBrain Support and Customer Teams prior to the first patching operation. The tool discussed in this Knowledge Base article will help verify the following areas of system readiness:

- NetBrain Knowledge Cloud Proxy service configuration
- Service Monitor Agent Service Configuration
- Connectivity between WebAPI Server and Service Monitor Agent across all services

1.2. Pre-Requisites

1.2.1. Validate that NetBrain Service Monitor is Fully Operational

1. Log into the NetBrain End User interface with an account that has *administrator* (sysadmin) privileges.

2. At the end user interface desktop, click on the **domain name** in the upper-right corner of the desktop, then click **Domain/System Health**, then finally click **Service Monitor**.

| Search Incid | lent | 🖪 📮 🌽 | |
|----------------------------|-----------------|-------------------------|----------------------|
| Current Domain: Auto | mationEssential | S Select Domain | Domain Managemen |
| utomation Usage Lice | nse Usage | Domain/System Health | |
| System Health | | | Service Monitor |
| Active Web Connections: | 108 | | |
| Disconnected Server: | 0 | Connected Serve | er: 4 |
| User Tasks (Task Engine): | 0 | Data Tasks (Fron | nt Server): 0 |
| MongoDB Data Size: | 6.5 GB | (7 days ago 6.4 | GB) |
| ES Index Size: | 1.4 GB | (7 days ago 1.3 | GB) |
| Domain Health | | | Domain Health Report |
| Discovered Devices: | 17 | Unknown IP: 12 | |
| Fully CLI-Accessed Devices | 16 | Conflicted IP: 0 | |
| SNMP-Only Devices: | 0 | Unassigned to S | ite: 15.79% (3/19) |
| Missed Devices: | 9 | | |
| ustomer Since 07/29/2021 | | | |

In a few moments, a new browser tab will be opened displaying the NetBrain Service Monitor interface. The NetBrain Service Monitor displays the current running status of the NetBrain service suite along with some critical operational metrics.

3. In the NetBrain Service Monitor interface, confirm that in the lower half of the screen, all available Servers are listed.

| ∆ netbrain10a-db Connected | | Elasticsearch MongoDB NetBrain License RabbitMQ Redis | Linux-3.10.0-1160.36.2.e17.x86_64-x86_64-with-centos 1.2% | 66.02% |
|----------------------------|-----------|--|--|--------|
| 🜉 netbrain10a-wi Connected | 10.0.1.20 | IE Web Knowledge Cloud Proxy NetBrain Front Server NetBrain Front Server Controller NetBrain Task Engine NetBrain Worker Server PostgreSQL | Windows-Server-2016-Datacenter-10.0.14393-SP0 (64bit) 5.4% | 51.03% |

Image - Service Monitor Server List (Two-Server)

If any of the Service Name boxes for each of the servers is any other color than GREEN, this is an indication of a failure of potential service communication or stopped service and needs immediate correction. Open a support case with NetBrain Technical Support in our Customer Portal.

The number of servers displayed is dependent on the size of the NetBrain system deployed. Typical environments for customers with less than 2000 discovered nodes would be a "Two-Server" system comprised of (1) Linux Database and (1) Windows Application server. For larger systems (> 2000 discovered nodes), we would expect a minimum of (1) Linux Database and (3) Windows Application servers

4. Click on each of the green boxes associated with each server. This provides the current running details of the services along with chart-based metrics. Confirm that each **Metric** of the service has **Value** and **Chart** data visible, where applicable.

| Not Brain Service | Monitor | | 🎕 Alert Rules 😋 Refresh 🛛 🛆 Jeff.Notaro@netbraintech.com 🔻 | | | | | | |
|--|--|--|---|--|--|--|--|--|--|
| Home > netbrain10a-db (10.0.1.27) / RabbitMQ | | | | | | | | | |
| Search Q d an etbrain10a-administrator-fs () NetBrain Front Server | Status: Running PID: Virtual Memory: 3.2 GB Command Line: /usr/sbin | 909 Startup Type: Automatic Versior Up Time: 2021-07-30 09:29:29 AM Last Co | : 3.8.16 Physical Memory: 138.2 MB View Operation Log lection Time: 2021-11-04 10:33:38 AM | | | | | | |
| PostgreSQL | Metric | Value | Chart | | | | | | |
| | CPU Utilization | 0.38% | CPU Utilization | | | | | | |
| Redis | Memory Utilization | 0.87% | | | | | | | |

If any service is not properly displaying Value or Chart data, this is an indication of a potential failure of service communication and needs immediate correction. Open a support case with NetBrain Technical Support in our Customer Portal.

1.2.2. Validate RabbitMQ Port 15672 Connectivity

- 1. Using Remote Desktop (or equivalent), connect to the primary NetBrain Windows WebAPI server with an adminsitrator account.
- Open your internet browser of choice (Chrome, Firefox, Edge, etc.), then navigate to the following URL: http(s)://<NetBrainLinuxDatabaseIP>:15672

| HabbitMQ Management × + | \sim | - | × |
|-------------------------------|--------|---|---|
| ← → C ▲ Not secure 15672 | | ☆ | : |
| Username: * Password: * Login | | | |

Image - RabbitMQ Login Screen

3. Verify that the RabbitMQ login interface is displayed. This confirms that we will have successful port connectivity between the WebAPI server and the RabbitMQ service that runs on the Linux Database virtual machine.

Note: If the NetBrain deployment has multiple Linux Database machines deployed (HA Configuration), repeat steps 2 & 3 with each Linux Database IP Address.

If the RabbitMQ login interface displays a white screen or generates an error, port 15672 communication may be blocked between the NetBrain WebAPI Server and the NetBrain Linux Database Server. Please attempt to verify if there are any firewalls in place preventing communication, then open a support case with NetBrain Technical Support in our Customer Portal.

1.3. Executing the Auto-Update Verification Tool

- 1. Open a Command Prompt with the "Run as Administrator" privilege.
- 2. Navigate to the NetBrain KCProxy directory:

cd C:\Program Files\NetBrain\KCProxy

3. Execute the Auto-Update Verification tool with the following command:

python\python kcproxy\tool\au_check.py

If the au_check.py python script fails to execute or generates any python related errors open a support case with NetBrain Technical Support in our Customer Portal.

4. After successful execution, press ENTER to exit the verification tool and **CLOSE** the command window.

NOTE: IF the command window is not closed, the NetBrain Auto-Update process will be unable to execute completely resulting in patch application FAILURE.

1.4. Interpreting the Auto-Update Verification Tool Results

- 1. Once execution is complete, press **ENTER** to exit the verification tool.
- 2. NetBrain has made it easy to verify that all operations have successfully completed with a simple GREEN, YELLOW, RED color scheme for the logging statements that are output:

YELLOW - Warning

RED - Failure

Both YELLOW and RED logging statements are indications that there is corrective action that must be taken by the NetBrain admin. The Auto-Update Verification Tool will output some suggested potential corrective actions. If you are unsure how to proceed, open a support case with NetBrain Technical Support in our Customer Portal.

Validating that a critical Service API key for communication is correct.

```
Checking the API key of KCProxy service...
The API Key of KCProxy service is correct.
```

Validating that each NetBrain Server and Service is accessible using Service Monitor.

| Checking NetBrain server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) |
|--|
| NetBrain server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) is online reported by Service Monitor Agent. |
| Checking NetBrain services on server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) |
| There are 5 NetBrain services on server netbrain10a-db/61eb1baaf01411eb9e7a42010a00011b). |
| The NetBrain service Elasticsearch is running on server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) identified by Service Monitor Agent. |
| The nois of NetBrain service Electicsearch on server netbrain10a.db/61eb1basf61411eb0a7a42010a90011b) is Any identified by Service Monitor Agent |
| The Pole of NetBrain Service Elasticsearch on Server netbraintea-ub(ofebibaaroi+ifeb9e/a+zoi0adoofib) is any identified by Service Monitor Agent. |
| The NetBrain service MongoDB is running on server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) identified by Service Monitor Agent. |
| The role of NetBrain service MongoDB on server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) is Single identified by Service Monitor Agent. |
| The NetBrain service NetBrain License is running on server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) identified by Service Monitor Agent. |
| The role of NetBrain service NetBrain License on server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) is Any identified by Service Monitor Agent. |
| The NetBrain service RabbitMQ is running on server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) identified by Service Monitor Agent. |
| The role of NetBrain service RabbitMQ on server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) is Any identified by Service Monitor Agent. |
| The NetBrain service Redis is running on server netbrain10a-db(61eb1baaf01411eb9e7a42010a00011b) identified by Service Monitor Agent. |
| The role of NatBrain service Redis on server nethrain10a-dh(61eh1haaf01411eh0e7a42010a00011h) is Single identified by Service Monitor Agent |

Validating that the NetBrain Auto-Update Services Group is working across all NetBrain Servers.

| Chec | king the | connectio | on between the | Auto-update server(aus | erver) and all | the Auto-update | clients(au | :lient) | | |
|------|----------|------------|----------------|------------------------|------------------|-----------------|-------------|------------------|----------------|----------|
| Wait | for all | clients t | o login. Auser | ver's SSL is not enabl | ed. The outbound | d Service IP is | 10.0.1.26, | and the outbour | d Service Port | is 9099. |
| 10. | 0.1.26, | and the lo | cal listening | oort is 9099. | | | | | | |
| The | auclient | logged in | successfully, | hostname:netbrain10a- | automation-fs, | platform:Window | s, id:e0071 | L0cf39d11eb9542a | ae977520f82 | |
| The | auclient | logged in | successfully, | hostname:netbrain10a- | administrator-f | s, platform:Wir | dows, id:f2 | :30968f39b11ebb5 | 6093afa72766b1 | |
| The | auclient | logged in | successfully, | hostname:netbrain10a- | db, platform:Li | nux, id:61eb1ba | af01411eb9e | 7a42010a00011b | | |
| The | auclient | logged in | successfully, | hostname:netbrain10a- | windows, platfor | rm:Windows, id: | b13d3752f17 | 311eba038a937b12 | 305b9 | |
| A11 | auclient | s logged i | n successfully | | | | | | | |

NOTE: IF the command window is not closed, the NetBrain Auto-Update process will be unable to execute completely resulting in patch application FAILURE.