



# NetBrain® Integrated Edition 7.0 Release Notes

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# 1. Highlights

NetBrain Integrated Edition 7.0b1 is a minor upgrade to offer feature enhancements and a number of fixes.

## Feature Enhancements

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- Optimizes the collaboration by auto-releasing the map editing rights of site maps and device group maps.
- Supports to export more data units to Visio map in the expanded style.
- Improve the performance of exporting large maps to local disk.
- Supports to align objects on a map.
- Adds more keyboard shortcuts for map operations.
- Improves A/B Path, Multi-vendor and MPLS features to enhance user experience.
- Optimizes the external authentication to make it more robust and stable.
- Upgrades the TLS protocol from version 1.1 to 1.2, which is used to encrypt the communications among NetBrain components (MongoDB/License Agent/Cache/Message/Worker/WebAPI Server).
- Supports to update the system built-in path scripts in backend database and enable each Worker Server in a cluster to automatically read the path scripts from the database to synchronize its own.

## Compatibility Enhancements

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- Supports to deploy NetBrain system on Windows Server 2016 (Standard/Datacenter Edition).
- Supports to install both Network Server (EE6.2) and Proxy Server (IE7.0b1) on the same machine.

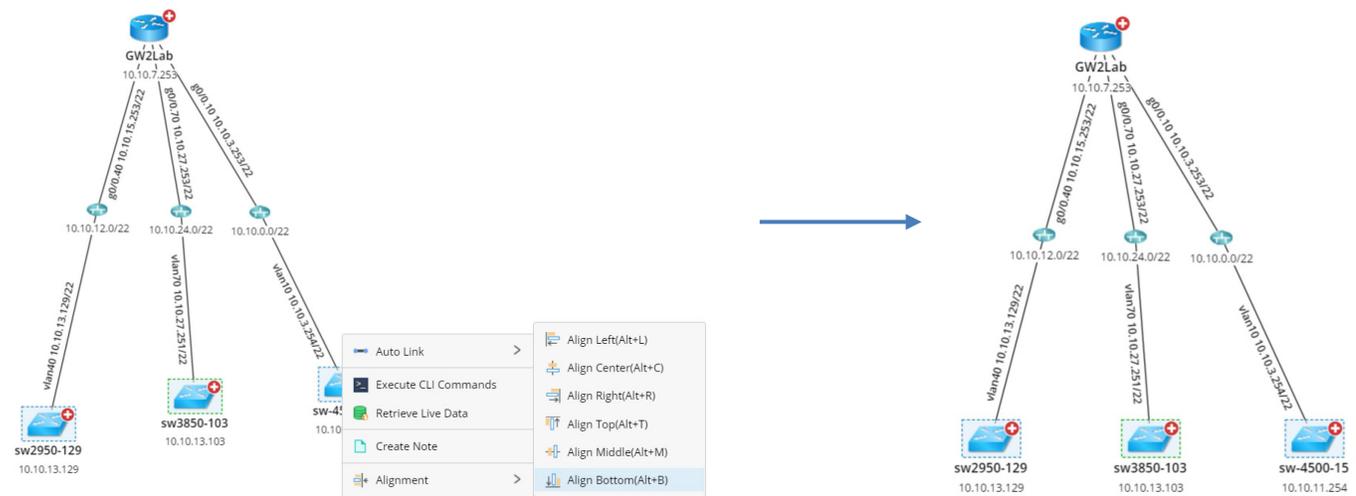
## 2. Feature Summary

NetBrain Integrated Edition 7.0b1 introduces a lot of feature enhancements.

### 2.1. Map Enhancements

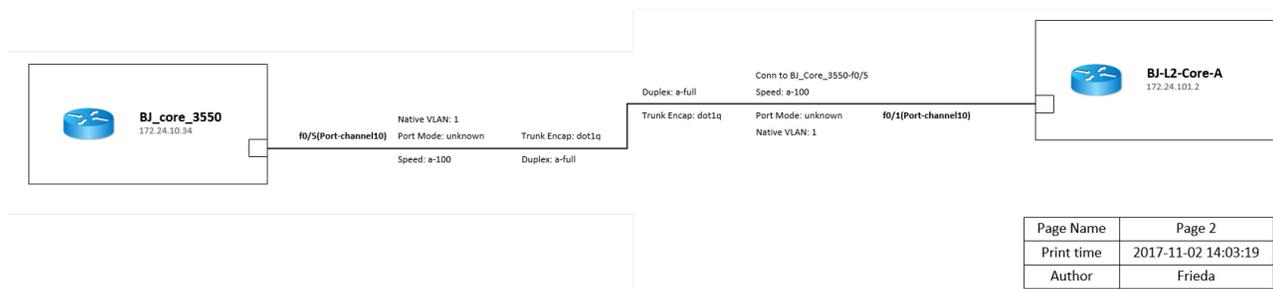
#### Alignment

In version 7.0b1, you can align map objects directionally from the right-click menu or from the keyboard shortcuts, to make the map layout well organized.



#### Export to Visio

In version 7.0b1, the data units of data views on an expanded style map can be exported to Visio.



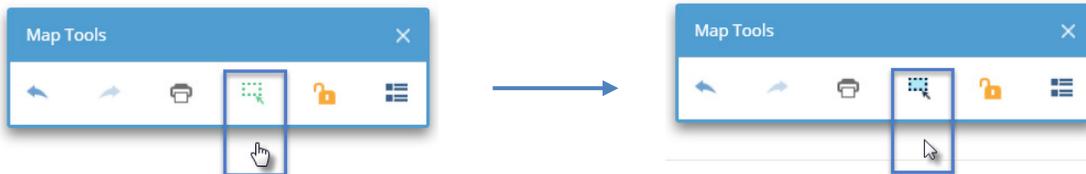
#### Keyboard Shortcuts

Besides the keyboard shortcuts for alignment, the following keyboard shortcuts are added in this release:

Action	Shortcut
Bulk select map objects of the same type, such as sites, or devices that belong to the same device type.	Hold the <b>Shift</b> key when selecting a map object.
Move specific map objects.	Select the objects, and press the <b>Arrow</b> key (↑↓← →) on your keyboard or directly drag the objects on the map.  <b>Tip:</b> To finely move map objects, press the <b>Alt + Arrow</b> keys when selecting them on a map.

## Area Selecting Tool

After you select the area selecting tool, the button will be shaded and the mouse pointer will be changed from a hand to an arrow.



## 2.2. Collaboration Enhancements

To make the collaboration of site maps and device group maps more agile and smooth, the logic of editing rights is optimized as follows.

For site maps:

- The editing rights of a site map is granted to the user who firstly opens the map and also has the Site Management privilege, and it will be automatically released when the user closes the map.
- Users without the Site Management privilege cannot be granted with or request for the editing rights of a site map.

For device group maps:

- The map editing rights of a system device group is granted to the user who firstly opens the device group map, and it will be released when the user closes the map.
- By default, the map editing rights of a customized device group belongs to the user who created the device group.

When a map editor transfers the editing rights of a site map or a system device group map, the user who is transferred the editing rights to must be online.

## 3. Fixed Issues

The following issues have been fixed in NetBrain Integrated Edition 7.0b1.

Category	Issue Description
Installation and Setup	When installing the Index Server on a Linux server, the error message “Failed to initialize the username and password in the elasticsearch. The installation will be aborted.” is displayed. This issue occurs because the system user <b>elasticsearch</b> created to start the Index Server service does not have enough privileges.
	Remove the mandatory restriction of 50GB free space for the DataPath argument during the MongoDB Server installation.
	The “failed to initialize database” error message is displayed when NetBrain Integrated Edition is upgraded from 7.0a to 7.0b, which is caused by an empty data view template.
	The proxy service (proxyservice) cannot be automatically started after you install the Proxy Server of Integrated Edition v7.0b on the same machine where the Network Server of Enterprise Edition v6.1b is installed.
	During a login failure, the error message “Failed to log in due to database issue” does not match with the root cause that server hostname change causes the disconnection of RabbitMQ.
	Fails to log in to the system with the local admin account after the IP address of the IE Server is changed.
User Management	When you configure the credentials to connect to the TACACS+ server for external authentication, the secret key is not displayed as ciphertext for security purpose.
	The users imported from AD server cannot log in to their accessible domains. Additionally, some AD users lose their domain access unexpectedly.
	When an admin responds to user registration, the rejection or approval fails, no matter whether the email server settings are configured or not.
	AD user accounts are automatically removed after they are imported successfully into NetBrain for a while.
	The AD Group list is limited to 1000 entries and the search function does not expand beyond the listed 1000 entries so that more users cannot be authorized.
	When you configure the domain access privilege on the Share Policy page, the statistical data that shows how many users have the domain access cannot be refreshed even if you click the Refresh button.

<b>Data Migration</b>	After data migration from Enterprise Edition to Integrated Edition, many duplicated entries for one same customized field in Site Properties are created.
<b>Discovery/Benchmark/Live Acces</b>	<ul style="list-style-type: none"> <li>▪ The benchmark task and discovery task failed to build the Layer 3 topology because the data of an MPLS cloud is more than 16MB in the database.</li> <li>▪ When a port on a F5 load balancer is configured as “any” in its virtual server table, the data parsing fails and the log shows exception in retrieving data.</li> </ul> <p>After you add an OID of a device in the <b>Unknown SNMP SysObjectID</b> list to the <b>Vendor Model</b> table, the OID still exists in the <b>Unknown SNMP SysObjectID</b> list after you rediscover the device.</p> <p>When you discover Cisco ASA firewalls using admin context management IP, the hostname of a virtual context firewall is incorrect (the virtual context name is placed at the end of the hostname, which obeys the rule of the specified display name style).</p> <p>The system benchmark task is running more than 30 hours without ending and the CPU of the Worker Server is consumed between 60% and 70%, due to MAC tables missing headers.</p>
<b>Map</b>	<p>It takes too long time to export a map file. For example, nearly 30 minutes for a 7MB map file.</p> <p>Fails to export a map to the .xmap format if the time zone information contains a fraction.</p>
<b>Export Map to Visio</b>	<p>Visio map has missing data compared to the original map, such as port number, duplex, speed, VLAN information, and so on.</p> <p>Cannot change any variables in the Visio map, and a lot of unnecessary blank boxes are displayed after you select all objects.</p>
<b>Qapp</b>	<p>The variable name in the proxy ping alert message of the built-in Qapp ‘Overall Health Monitor [SNMP]’ is spelled incorrectly.</p> <p>The built-in Qapp ‘Overall Health Monitor [CLI Juniper]’ cannot display the device status alert when a device is down because of incorrect condition settings.</p>
<b>Path</b>	<p>When you calculate a L2 path through a port-channel interface, it will fail due to API call failure.</p> <p>Juniper firewall IPSec tunnels cannot be displayed completely during A-B path calculation because the NCT procedure does not support the new format of IPSec VPN table of the firewall.</p> <p>A-B path failed due to policy issue on Juniper SRX firewalls.</p> <p>A-B path failed if the output interface name contains “PO”, because “PO” is incorrectly translated into “port-channel”.</p> <p>L3 path stops at Alcatel Lucent routers with the “get NCT table failed” error message reported.</p> <p>A-B path stops at Cisco ASA firewalls due to the IPsec VPN python error.</p> <p>Some routing entries of Juniper routers cannot be parsed during path calculation due to path parser issue.</p>

	A-B path failed due to path driver issue on F5 load balancers with the error message "40-S" reported.
	A-B path stops at NetScreen firewalls with python error reported because a variable name is incorrectly used in path driver.
	A-B path stops at Palo Alto firewalls when the next hop points to a virtual router, because it cannot match the destination routing entry in the route table.
	A-B path stops at NetScreen firewalls when the next hop points to a virtual router, because it cannot match the destination routing entry in the route table.
	L2 path calculation may fail since NetBrain is not going to check anymore when it finds an IP in the Unknown End System Manager even though the same IP has been discovered as a device in the system.
	L2 path calculation may fail due to MAC table aging.
	When you calculate a bidirectional path through ASA site-to-site VPN, one of the two paths may fail due to interface paring error.
<b>Others</b>	The domains failed to be created are listed in the domain list but cannot be used.
	Wording typo.
	If a route table retrieved through benchmark tasks is bigger than 16MB, it cannot be synchronized into the Current Baseline data folder.

## 4. Known Issues

The following table lists the known issues and workarounds of this version.

Category	Description
<b>Back-End Servers</b>	When the physical or virtual machines on which NetBrain servers are installed are shut down because of natural power outage or manual operation, the Worker Server service (ResourceManager) may not be automatically restarted after the recovery if the recovery takes a long time.
<b>Installation</b>	<p>If you install the Message Server on a machine with the Webroot software turned on, the Message Server will hang up after running for a period of time.</p> <p>After you successfully set up a three-member Cache Server cluster by using hostnames, the connection validation to the Cache Server can pass during the IE installation. However, when you execute a discovery task afterwards, it fails and the “Unable to auth the redis connection” error message is displayed in the RMAgent log file.</p> <p>If you use the fully qualified domain name (FQDN) of the Windows servers to connect each Message Server member during the cluster deployment, both of the two Message Servers cannot be logged in to after the installation.</p> <p><b>Workaround:</b> Complete the following steps after the installation:</p> <ol style="list-style-type: none"><li>1) Stop the <b>RabbitMQ</b> service on each Message Server.</li><li>2) Rename the <b>db</b> and <b>log</b> directories located under the <i>NetBrain_Home\RabbitMQ\var</i> directory to <b>db.old</b> and <b>log.old</b> respectively.</li><li>3) Modify the value of the <b>cluster_node</b> argument in the <b>rabbitmq.config</b> file located under the <i>NetBrain_Home\RabbitMQ\var</i> directory to the hostnames of the Windows servers and save the changes.</li><li>4) Restart the <b>RabbitMQ</b> service on each Message Server.</li><li>5) On one of the Message Server, log in to the <a href="http://localhost:15672">http://localhost:15672</a> page by using the user name and password <b>guest/guest</b>.</li><li>6) Under the <b>Admin</b> tab, input the user name and password that you configure during the Message Server installation, and click <b>Admin</b> to set the tags. Click <b>Add user</b> to add the user.</li><li>7) From all the user list, select the user that you created in step 6) and click <b>Set permission</b> without making any changes.</li></ol> <p>If you install a standalone MongoDB Server on Linux with the fully qualified domain name of the Linux server configured (by setting the value of the <b>BindIp</b> argument to <b>0.0.0.0</b> in the <b>install_mongodb.conf</b> file) and then use the domain name to connect to the MongoDB Server during IE installation, the connection validation fails.</p> <p><b>Workaround:</b> Use either of the following methods.</p> <ul style="list-style-type: none"><li>▪ Add the mapping relationship between the IP address and the hostname of the Linux server into the <b>C:\Windows\System32\drivers\etc\hosts</b> file on the Windows server where IE will be installed.</li><li>▪ Make sure the hostname of the Linux server is the same with its fully qualified domain name.</li></ul>

Category	Description
	<p>When you use an existing system user configured in the ESSystemuser argument of the <b>install.conf</b> file to uninstall the Index Server, the error message "No such file or directory" is displayed and all files owned by the user are deleted.</p>
	<p>When you set up a Message Server cluster, the cluster ID cannot contain any special characters. Otherwise, the installation will fail.</p>
	<p>It is not supported to install the master-only node first when you set up an Index Server cluster.</p>
<b>User Management</b>	<p>By default, at most 1000 user groups retrieved from LDAP/AD server can be listed on the External Authentication page. When you search out and select a user group which is not listed, save the changes, and then go back to this page after visiting other pages, the selected group cannot be displayed in the current group list.</p>
<b>Search</b>	<p>The data synchronization mechanism of Index Server does not support the situation when live data and other domain data is stored on a different MongoDB Server.</p>
<b>Live Access</b>	<p>The search scope in the <b>Tune Live Access</b> tab is only limited to the <b>Device Name</b> field.</p>
<b>Compare</b>	<p>When you do not launch the comparing feature from a map or via the Compare link in the Device Details pane, the feature will not work if you select to search data by time period in the Compare Historical Data dialog.</p>