

Jump™ Technology

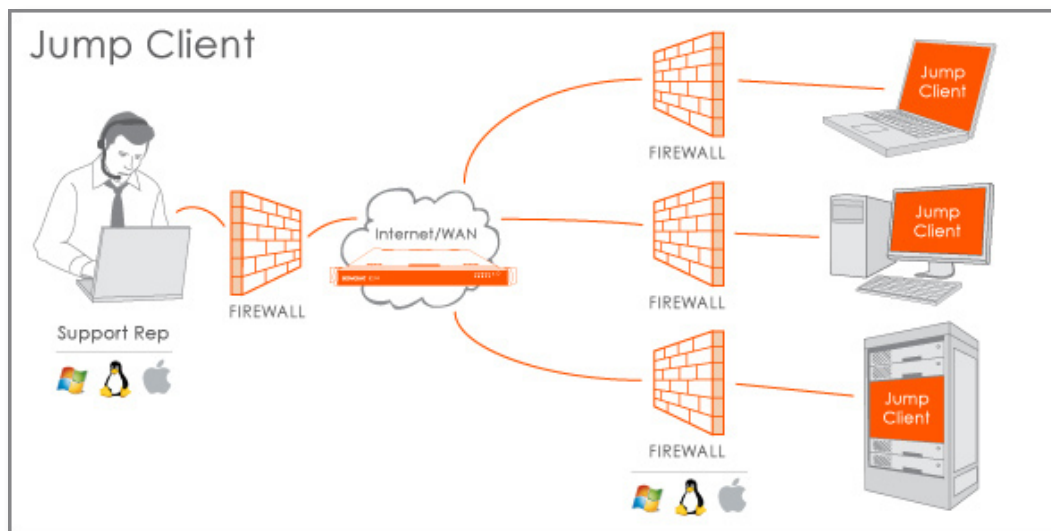
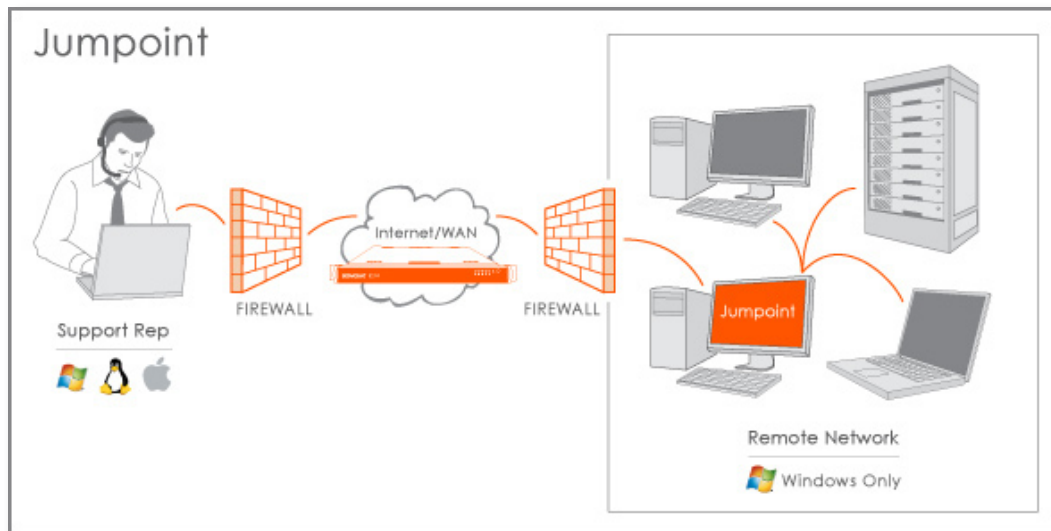
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Overview

Bomgar's Jump Technology is a revolutionary solution for supporting any unattended computer. Jump enables a remote support technician to access and control unattended computers in any network dynamically and remotely and includes both a client-based and a clientless solution. In many cases, remote control can be established even when there is no pre-installed software client on the remote computer.

Bomgar's patent-pending Jump Technology is baked into Bomgar's core product and included in all license offerings. When clientless, Jump can provide remote access to unattended computers in a local network and remote networks via a Jumpoint™. When client-based, Jump provides remote access to unattended computers by establishing sessions via a pre-installed Jump Client. The clientless and client-based solutions of Bomgar's Jump Technology enable access to any unattended computer in any network.



Jumpoint vs. Jump Client

Bomgar's Jump Technology offers support representatives two means of virtually accessing remote computers. With the clientless solution, support representatives can Jump to (i.e., access and control) any Windows computer in a remote network via a pre-deployed Jumpoint. (Within the local area network, the support representative's computer functions as a Jumpoint.)

In contrast, the client-based solution enables support technicians to Jump to any computer running a pre-deployed Jump Client, regardless of network location. This client-based solution enables remote access to multiple operating systems and is network independent.

Both solutions are easy to use, but it is important to understand the differences in order to use each solution effectively for your organization's needs.

	Jumpoint Clientless Solution	Jump Client Client-based Solution
When to Use	To gain access to an unattended Windows computer on a known remote network.	To gain access to any unattended computer regardless of operating system and in any network, known or unknown.
Requirement	Single installation of a Jumpoint on a computer within a local area network. Supports Windows only.	Installation of a Jump Client on each remote computer being accessed. Supports Windows, Mac, and Linux.
How to Deploy It	Download a Jumpoint agent onto a single computer on a remote network via your /login administrative interface.	Create Jump Clients for mass deployment via your /login web interface or install a Jump Client from within a support session.

Jumpoint

Clientless Jump Technology Solution

Jumpoint enables a support technician to connect dynamically to any Windows computer on a local or remote network. The Jumpoint functions as a remote agent which extends the reach of the Jump feature to computers on a remote network.

A Jumpoint-enabled Bomgar session involves three computers:

1. The support technician's computer
2. A Windows-based computer that hosts the Jumpoint agent
3. The unattended Windows computer targeted for remote control

Jumpoint Prerequisites

- The administrator deploying the Jumpoint must have administrative privileges on the computer hosting the Jumpoint agent.
- The support technician must have administrative access to the target computer.
- In the /login administrative interface of the Bomgar Box, one or both of the following conditions must be true:
 - The support technician's user account permission **Allowed to Jump on the local network without a Jumpoint** must be enabled.
 - The support technician must be granted access to one or more Jumpoints, either individually or via group policy.

Jumpoint Configuration

- From your /login administrative interface, go to the **Jumpoint** page under the **Configuration** tab.
- Click **Add New Jumpoint**.

BOMGAR™ USER LOGIN
English (US) | Administrative Interface | Jenny C. | LOGOUT

STATUS MYACCOUNT CONFIGURATION **USERS & SECURITY** REPORTS PUBLICPORTALS LOCALIZATION MANAGEMENT
OPTIONS SUPPORT TEAMS ACCESS SPONSORS **JUMPOINT™** JUMP CLIENTS BOMGAR BUTTON™ CANNED MESSAGES CANNED SCRIPTS

Jumpoint™ Management

Add New Jumpoint™

Name	Disabled	Automatic Activate Time	Automatic Uninstall Time	Status		
Atlanta	No	Always Active	Never Uninstalls	Online since October 04, 2008 09:14:32 AM CDT	Edit	Delete
London	No	Fri Nov 14, 2008 08:00	Never Uninstalls	Online since November 14, 2008 08:00:00 AM CST	Edit	Delete
Ontario	No	Mon Nov 3, 2008 08:00	Wed Nov 12, 2008 17:30	Offline since November 12, 2008 05:30:00 PM CST	Edit	Delete
Sydney	No	Always Active	Never Uninstalls	Download Installer (1163808) (32-bit) (64-bit)	Edit	Delete

From here you can administrate Jumpoints™. A Jumpoint™ allows a support representative to push the support customer client to machines on remote networks. The networks a Jumpoint™ provides access to are collectively called a Jumpzone™.

NOTE: Support representatives will receive a prompt and still need authorization credentials on the machine that they are attempting to push to before the operation will succeed.

To set up a Jumpoint™:

- Log into this website and click the "Add New Jumpoint™" button.
- Describe the Jumpzone™ in the name field, and give permission to users or groups who should be able to utilize that Jumpoint™.
- Click the "Add Jumpoint™" button to add the new Jumpoint™.
- Use the "Download" link to download the Jumpoint™ installer. If you are currently at the machine on which the Jumpoint™ is intended to run, run the installer now. However, you may wish to send the downloaded installer to someone else who will install the software on some other machine. The installer is valid only for 7 days after it is downloaded.
- While the Jumpoint™ is being installed the user will have the opportunity to set a datetime for the Jumpoint™ to activate itself and to set a datetime for the Jumpoint™ to uninstall itself.
- After the Jumpoint™ is installed and active a representative that has been granted access can log in and will see the Jumpoint™ in a list. He or she will be able to push the support customer client to machines in the Jumpzone™ to which the Jumpoint™ provides access.

When selecting a system to host a Jumpoint™, keep the following criteria in mind:

- The host system should be a system on the same local area network as the systems to which you wish to Jump.
- The host system should be a system with high availability.
- IMPORTANT: The host system should NOT be a system already being used as a server. File servers, print servers, web servers, email servers, etc. all make poor choices for Jumpoint™ host systems. Jumpoints™ attempt to close any active network connections to target system before attempting the Jump, for security purposes. A Jumpoint™ that exists on such a server will often report "Network error disconnecting from host" messages when attempting to Jump, as it attempts to close a network connection but fails to do so because some other software is actively using that network connection.

- Give this Jumpoint a name and grant permission to at least one user who should be allowed to access this Jumpoint. After the Jumpoint is created, you can also grant access to groups from the **Group Policies** page under **Users & Security**.
- Click the **Add Jumpoint** button. Your new Jumpoint should appear in the list of configured Jumpoints, and a confirmation message should be displayed.

BOMGAR™ USER LOGIN
English (US) | Administrative Interface | Jenny C. | LOGOUT

STATUS MYACCOUNT CONFIGURATION **USERS & SECURITY** REPORTS PUBLICPORTALS LOCALIZATION MANAGEMENT
OPTIONS SUPPORT TEAMS ACCESS SPONSORS **JUMPOINT™** JUMP CLIENTS BOMGAR BUTTON™ CANNED MESSAGES CANNED SCRIPTS

Add Jumpoint™

Name:

NOTE: Enter any combination of alphanumeric characters (a-z, A-Z, 0-9), space and the "_" symbol to uniquely identify the Jumpzone™ that this Jumpoint™ will serve.

Disabled:

NOTE: A disabled Jumpoint™ may still connect to the appliance, but will not be usable by any representatives to perform push and start operations.

Add Users:

Authorized Users	Available Users
Admin (admin)	Agathe C. (agatha_c)
Charlotte B. (charlotte_b)	Charles D. (charles_d)
Dylan T. (dylan_t)	Clive L. (clive_l)
Jane A. (jane_a)	Elizabeth P. (elizabeth_p)
Jenny C. (jenny_c)	Eudora W. (eudora_w)
William F. (william_f)	Flannery O. (flannery_o)
	George E. (george_e)
	John T. (john_t)
	Joseph C. (joseph_c)
	Katherine M. (katherine_m)

NOTE: In addition to being a member of a Jumpoint™, a user must also have the "Allowed to Jump" permission to use a Jumpoint™.

Buttons: Add Jumpoint™, Reset, Cancel

Jumpoint Installation and Deployment

Now that your Jumpoint is configured, you will need to install the Jumpoint on a single system in the remote network you wish to access. This system will serve as the gateway for Jump sessions with other computers on the remote network. You can either install the Jumpoint agent directly to the host or email the installer to a user at the remote system.

Download the Installation Package

1. From your /login web interface, go to the **Jumpoint** page under the **Configuration** tab.
2. Find the appropriate Jumpoint and click the **Download Installer** link to download the Jumpoint installer file [bomgar-jpt-{uid}.exe].
3. NOTE: Users of some browsers such as Mozilla or Opera may need to save the .exe before opening or running it.
4. Continue with the steps in the **Complete the Installation** section below.

Email the Installation Package

1. From your /login web interface, go to the **Jumpoint** page under the **Configuration** tab.
2. Find the appropriate Jumpoint and click the **Download Installer** link to download the Jumpoint installer file [bomgar-jpt-{uid}.exe]. If you are given the option to **Run** or **Save** the file, select **Save**.
3. Attach the file to an email and send it to the remote user to deploy on the system that will host the Jumpoint agent.
4. Continue with the steps in the **Complete the Installation** section below.

BOMGAR™ USER LOGIN
English (US) | Administrative Interface | Jenny C. | LOGOUT

STATUS | MYACCOUNT | CONFIGURATION | **JUMPPOINT™** | USERS & SECURITY | REPORTS | PUBLICPORTALS | LOCALIZATION | MANAGEMENT

OPTIONS | SUPPORT TEAMS | ACCESS SPONSORS | JUMPPOINT™ | JUMP CLIENTS | BOMGAR BUTTON™ | CANNED MESSAGES | CANNED SCRIPTS

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Sydney	No	Always Active	Never Uninstalls	Download Installer 77636808 (3248) 8010358	Edit	Delete

From here you can administrate Jumpoints™. A Jumpoint™ allow a support representative to push the support customer client to machines on remote network. The network a Jumpoint™ provides access to are collectively called a Jumpzone™.

NOTE: Support representatives will receive a prompt and still need authorization credentials on the machine that they are attempting to push to before the operation will succeed.

To set up a Jumpoint™:

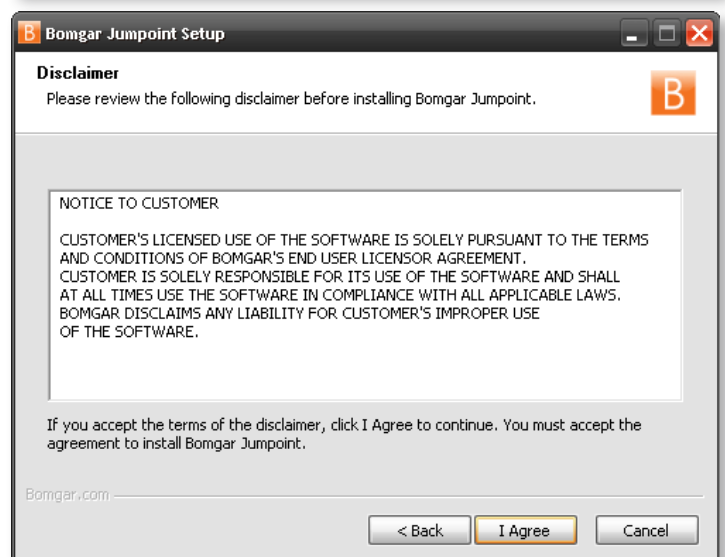
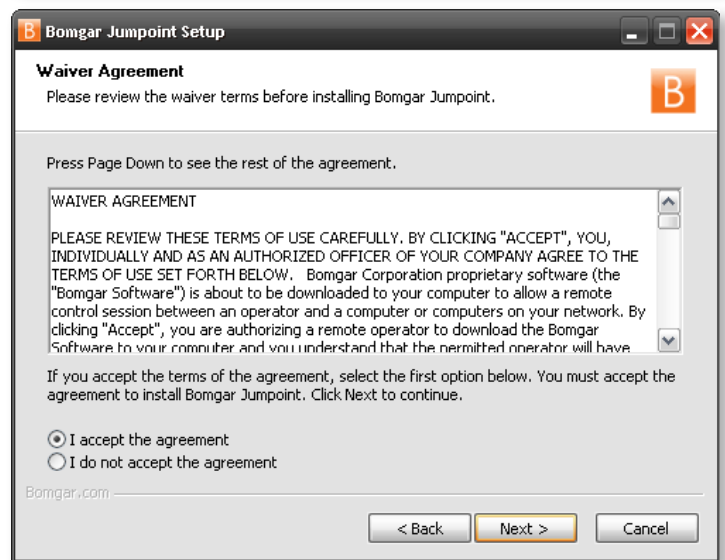
1. Log into this website and click the "Add New Jumpoint™" button.
2. Describe the Jumpzone™ in the name field, and give permission to users or groups who should be able to utilize that Jumpoint™.
3. Click the "Add Jumpoint™" button to add the new Jumpoint™.
4. Use the "Download" link to download the Jumpoint™ installer. If you are currently at the machine on which the Jumpoint™ is intended to run, run the installer now. However, you may wish to send the downloaded installer to someone else who will install the software on some other machine. The installer is valid only for 7 days after it is downloaded.
5. While the Jumpoint™ is being installed the user will have the opportunity to set a date/time for the Jumpoint™ to activate itself and to set a date/time for the Jumpoint™ to uninstall itself.
6. After the Jumpoint™ is installed and active a representative that has been granted access can log in and will see the Jumpoint™ in a list. He or she will be able to push the support customer client to machines in the Jumpzone™ to which the Jumpoint™ provides access.

When selecting a system to host a Jumpoint™, keep the following criteria in mind:

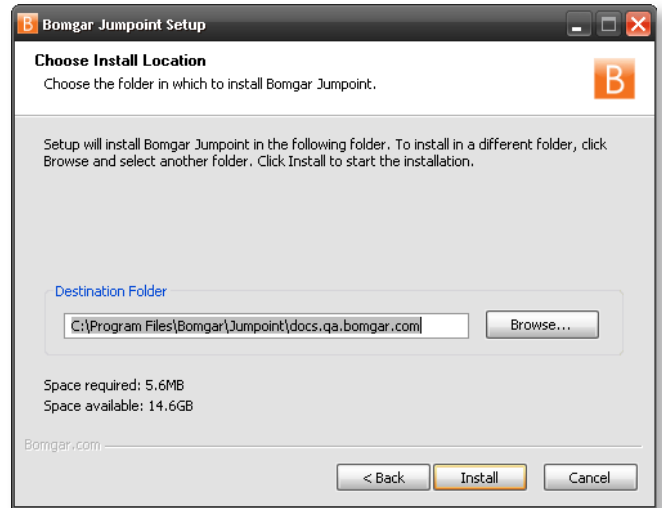
- The host system should be a system on the same local area network as the systems to which you wish to Jump.
- The host system should be a system with high availability.
- IMPORTANT: The host system should NOT be a system already being used as a server: File server, print server, web server, email server, etc. all make poor choices for Jumpoint™ host systems. Jumpoints™ attempt to close any active network connections to target system before attempting the Jump, for security purposes. A Jumpoint™ that exists on such a server will often report "Network error disconnecting from host" messages when attempting to Jump, as it attempts to close a network connection but fails to do so because some other software is actively using that network connection.

Complete the Installation

1. From the system that will host the Jumpoint agent, run the installation package. When the installation wizard appears, click **Next**.
2. Read and accept the license agreement. If you do not accept the license agreement, you will not be able to proceed with the installation.
3. Read and agree to the disclaimer.



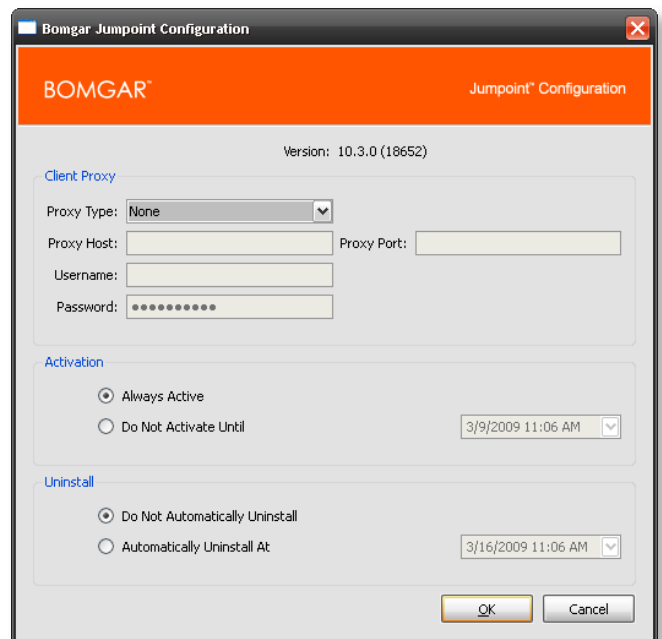
- Choose where you would like the Jumpoint agent to download. The default location is **C:\Program Files\Bomgar\Jumpoint**.



- For a Jumpoint to be deployed on a remote LAN that is behind a proxy, appropriate proxy information may be necessary for the Jumpoint to connect back to the Bomgar Box. Configure proxy settings here. The Jumpoint supplies this proxy information whenever Jumping to another system on the remote network, providing the authority necessary to download and run the customer client.

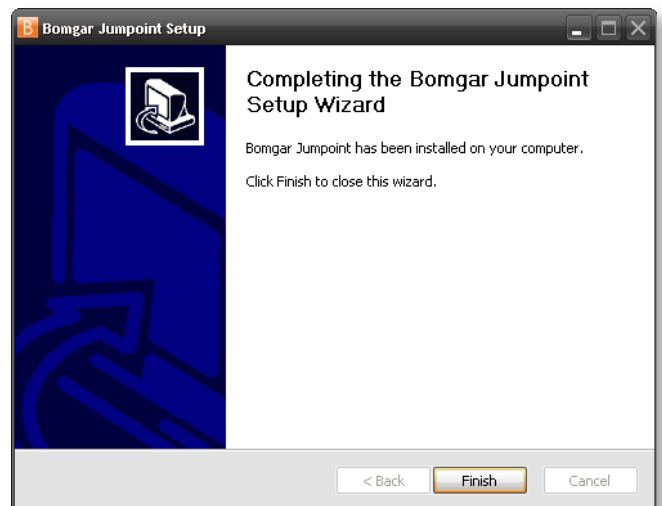
You also may specify a date and time when the Jumpoint should become active and when it should automatically uninstall. Setting these delimiters determines the duration of time for which permitted representatives can access the remote network through this Jumpoint.

Once the Jumpoint has been installed, this settings dialog can be accessed again by clicking the Jumpoint's **Change** button in the **Add or Remove Programs** menu of the host system.



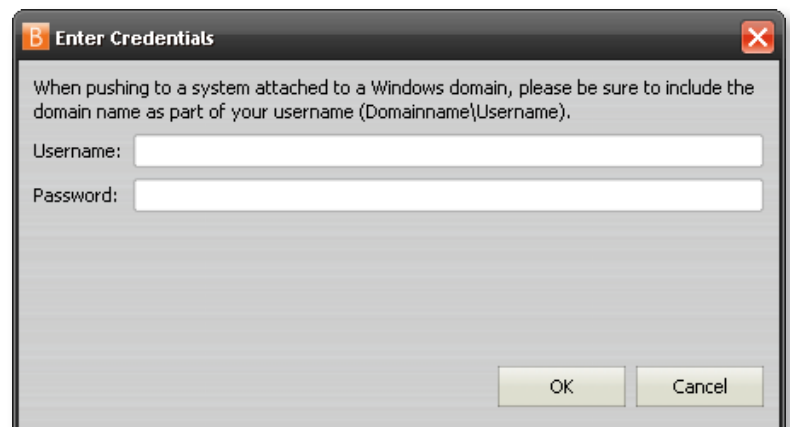
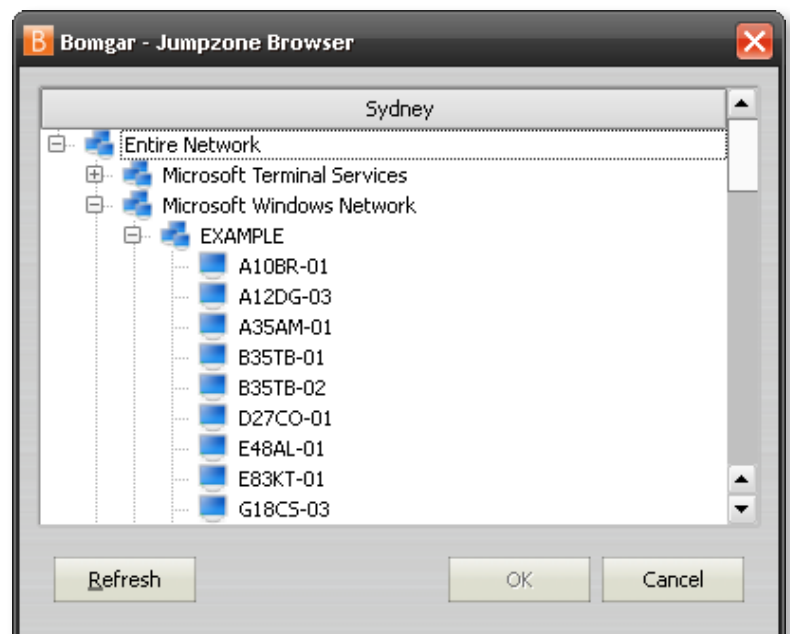
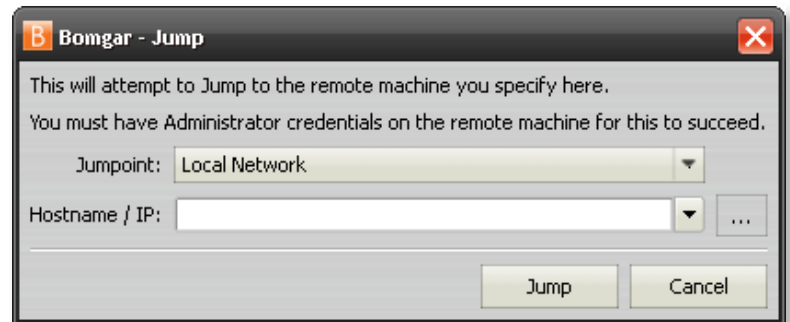
- After installing the Jumpoint agent, you will receive a confirmation message. Click **Finish**.

Once the configuration and deployment are complete, the Jumpoint should be ready for use.



Using the Jumpoint

1. From the Bomgar representative console, open the Jump dialog from:
 - the **Support** menu of the representative console
 - the **Start** button above your personal queue
 - the **Jump To...** button above the Jump interface
 - the right-click menu of the system tray icon
2. From the **Jumpoint** drop down, select the network that hosts the computer you wish to access. You can access your local network or any network on which you have installed a Jumpoint agent.
3. Next, either enter the remote computer's hostname or IP address or browse to it from the network directory. Once you have located the computer to which you wish to connect, click **Jump**. Your Bomgar Box will push the customer client files to the remote system and attempt to start a session.
4. You will be required to provide valid credentials before you can access the remote system. Once the customer client is started, you can access and control the remote computer.



Jump Client

Client-Based Jump Technology Solution

A Jump Client is an application or service that enables a support representative to connect to any unattended remote computer on any network. Jump Clients may be used on Windows, Mac, and select Linux-based computers.

A Bomgar™ session using a Jump Client involves two computers:

1. The support technician's computer.
2. The unattended computer with a Jump Client installed, targeted for remote access.

Jump Client Configuration/Installation

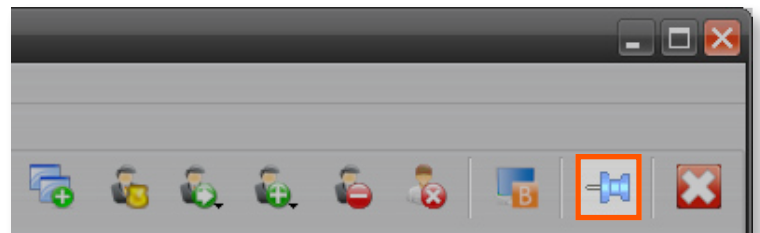
There are two possible ways of installing a Jump Client. Jump Clients can be installed during a support session or pre-installed via mass deployment when the need to access multiple unattended computers virtually is anticipated. These two methods of installation are outlined below.

During a Support Session

A Jump Client may be installed during a standard virtual support session. This will permit the support technician to access the unattended remote computer at a later time. This method of installation is also known as session pinning and may be achieved by clicking on the **Pin as Jump Client** button.

NOTE: A Jump Client pinned in an elevated state in which the support representative has administrative rights to the remote computer will allow a system to be always available. This applies to Windows computers.

1. From within a support session, click the **Pin as Jump Client** button in the session toolbar at the top right corner of the representative console.
2. Select whether to pin the session to your personal queue, to a team queue, or to the general queue.
3. If prompting is enabled, the customer will receive a message that the representative is requesting to install a Jump Client. The customer must allow or refuse the request.
4. Once the Jump Client is installed, the remote computer will appear in the Jump interface of the representative console.



Prior to Support

Jump Clients can be pre-installed on remote computers in anticipation of the need for virtual support. This method of installation may be applied to one system or multiple systems simultaneously.

1. From your /login web interface, go to the **Jump Clients** page under the **Configuration** tab.
2. Pinning the Jump Clients to your personal queue means that only you can access these remote computers through their Jump Clients. You can also choose to pin the Jump Clients to the general queue to allow access to all representatives or to a specific team to allow access to only those support team members.
3. Adding a **Group Name** helps to organize your Jump Clients into categories within the representative console. You can also add **Comments**, which can be helpful in searching for and identifying remote computers.
4. The Jump Client will remain available for installation only as long as specified in **Mass Deployment Duration**. If someone should attempt to run the Jump Client installer after this time, installation will fail, and a new Jump Client installer will have to be issued.
5. If **Attempt an Elevated Install** is selected, the Jump Client will attempt to install with administrative rights, as a system service. If the elevated installation attempt is unsuccessful or if this option is deselected, the Jump Client will install with user rights, as an application. This option applies only to Windows operating systems.
6. Once you click **Deploy**, you can install the Jump Client immediately if you are at the computer that you need to later access. You can also email the installer to one or more remote users. Multiple recipients can install the Jump Client from the same link.

The screenshot shows the 'Jump Client Mass Deployment Wizard' configuration page. At the top, there is a navigation bar with 'BOMGAR™' and 'USER LOGIN' (English (US) | Administrative Interface | Jenny C. | LOGOUT). Below the navigation bar are tabs for 'STATUS', 'MYACCOUNT', 'CONFIGURATION', 'USERS & SECURITY', 'REPORTS', 'PUBLICPORTALS', 'LOCALIZATION', and 'MANAGEMENT'. The 'CONFIGURATION' tab is active, and the 'JUMP CLIENTS' sub-tab is selected. The main content area is titled 'Jump Client Mass Deployment Wizard' and contains the following fields and options:

- Pin this client to:** A dropdown menu set to 'Personal'.
- Group Name:** A text input field.
- Comments:** A text input field.
- Mass deployment duration:** A dropdown menu set to '10 Minutes'.
- Attempt an elevated install if the client supports it:** A checked checkbox.
- Deploy:** A red button.

Below the wizard is the 'Jump Client Statistics' section, which includes a 'Configure' button and a list of statistics to be collected:

- OS
- Uptime
- CPU
- Screen
- Disk

The 'Jump Client Settings' section includes:

- Jump Client Statistics Update Interval:** A dropdown menu set to '1 Minute'.
- Maximum number of concurrent Jump Client upgrades:** A text input field set to '50'.
- Allow simultaneous representative access to a single Jump Client:** A checked checkbox.
- Restrict Local Uninstall/Disable of Jump Clients:** A checked checkbox.

There are several 'NOTE' blocks providing additional information about the settings.

The screenshot shows the 'Jump Client Mass Deployment Wizard' deployment options page. At the top, there is a navigation bar with 'BOMGAR™' and 'USER LOGIN' (English (US) | Administrative Interface | Jenny C. | LOGOUT). Below the navigation bar are tabs for 'STATUS', 'MYACCOUNT', 'CONFIGURATION', 'USERS & SECURITY', 'REPORTS', 'PUBLICPORTALS', 'LOCALIZATION', and 'MANAGEMENT'. The 'CONFIGURATION' tab is active, and the 'JUMP CLIENTS' sub-tab is selected. The main content area is titled 'Jump Client Mass Deployment Wizard' and contains the following options:

- Download or install the Client Now:** A red button.
- Download/Install:** A red button.
- Deploy to Email Recipients:** A red button.
- Email:** A text input field.

Using the Jump Client

1. In the representative console, Jump Clients are grouped according to who can access them – only the representative, a particular team, or all representatives. You can further organize Jump Clients by categorizing them in groups.
2. Browse through groups or dynamically search for computers. The search tool looks across all text fields associated with Jump Clients, including group and owner name, comments, platform, etc.
3. Once you have found the computer you wish to access, click the **Jump** button. This will attempt to start a session with the remote computer. Once the customer client is started, you can access and control the remote computer.

