

**BOMGAR™**

**Dell KACE Integration Guide**

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# Dell KACE Integration Guide

This document provides the configuration items and necessary steps to integrate Bomgar with the service desk, inventory, and scripting capabilities of the Dell KACE K1000 Management Appliance. The functionality provided once this integration is complete is described below. For demonstrations, please refer to the Bomgar Dell KACE integration videos on YouTube:

[youtube.com/user/BomgarBox/videos?query=kace](https://youtube.com/user/BomgarBox/videos?query=kace).

## Core Features

The core features available to all Bomgar customers (including those using the hosted Bomgar support site [kace.bomgar.com](https://kace.bomgar.com)) are as follows:

1. Support technicians can email a Bomgar remote support session link to end-users from Dell KACE tickets. To do this they can open the ticket in Dell KACE, check the Email Bomgar Invite checkbox, and save the ticket. The K1000 will then send an email to the submitter of the ticket with a link to download a [Bomgar customer client](#). Once the user installs the Client, it will generate a new session in the ticket owner's personal Bomgar session queue.

**Note:** For details about KACE tickets, see *Managing Service Desk Tickets, Processes, and Reports* in the [K1000 Service Desk Administrator Guide](#).

2. KACE Service Desk tickets will automatically email a [Bomgar session link](#) to the ticket Submitter when the ticket is opened or closed. The recipient can then use this link to run a Bomgar customer client and start a Bomgar session with the representative console of the KACE ticket Owner.

**Note:** For details about KACE tickets, see *Managing Service Desk Tickets, Processes, and Reports* in the [K1000 Service Desk Administrator Guide](#).

3. Bomgar will update KACE Service Desk tickets with the [Session Events](#) of any associated Bomgar remote support sessions. This association occurs via the Bomgar [External Key](#) field. The External Key is automatically populated for sessions started from a Dell KACE ticket, but it can also be manually edited from within the Bomgar session. Once the session ends, Bomgar will automatically update the appropriate ticket with the events of the session. These events include a full chat transcript, a session recording link, and system information, among others.
4. Support technicians can quickly open KACE tickets from within Bomgar support sessions using an embedded Bomgar [Custom Link](#) button located above the Bomgar session chat window. If a KACE ticket has been keyed to the Bomgar session, the Link will open the KACE ticket. If there is no KACE ticket keyed to the session, the Link will automatically load the KACE interface for creating a new ticket.
5. Support technicians can start a Bomgar remote support session to any KACE-managed remote system using a K1000 Bomgar session KScript. This KScript works on any KACE-managed Windows or Mac system. When the Script executes on the remote host, it will automatically connect back to the Bomgar representative console using the configured Bomgar Queue.

**Note:** For details on KScripts, see the *Using Scripting* chapter in the [K1000 Administrator Guide](#).

6. Support technicians can use the K1000 Inventory to start a Bomgar Pushed Session (see [Self Service Center](#)) from the local system's representative console to a remote, KACE-managed system. This does not require a pre-installed client but it will not work outside the internal network or for machines not running Windows.

**Note:** For details about the KACE™ Inventory feature, see *Managing Computer Inventory in the [K1000 Administrator Guide](#)*.

## On-Site Appliance Features

Bomgar customers who own a Bomgar Appliance installed on-site will have access to these additional features:

1. Administrators can mass deploy Bomgar Jump Clients to any or all KACE-managed systems using either a KScript (for Windows) or a Managed Installation (for Mac).
  - The KScript can be run on any or all Windows targets managed by KACE to automatically and silently install a Jump Client using a [Bomgar Jump Client installer](#). To avoid duplicating Jump Clients, the Script can be configured with a K1000 Smart Label to automatically filter out all machines which already have Jump Clients installed. Once done, the Script can be placed on a schedule to auto-install Bomgar Jump Clients on all KACE-managed systems which do not yet have one.
  - Bomgar's [Mass Deploying to Mac through Dell KACE](#) whitepaper describes how to configure a KACE Managed Installation to deploy both Bomgar Jump Clients and representative consoles to Mac through KACE. Similarly to the KScript for Windows, Bomgar recommends limiting the installation to a Smart Label which is configured to filter out machines which already have Jump Clients installed.

**Note:** For information on Smart Labels, search the [K1000 Administrator Guide](#) for Smart Labels.

2. Support technicians can start a [Bomgar Jump Client](#) session with KACE-managed systems from the K1000 Inventory using KACE Machine Actions. Jump Clients must be pre-installed, but they support multiple platforms and work on external networks. To start the session, technicians can load the K1000 Inventory, locate the desired system, and select the Bomgar Jump Client Machine Action. This will download a Bomgar script which starts the session from the local machine's representative console to the Jump Client on the target system.
3. Support technicians can generate a [Bomgar session key](#) from their KACE Service Desk tickets via an embedded hyperlink. The Link will launch a script download on the local machine to automatically generate the Key from the Bomgar representative console. The URL encoded version of the Key can be sent by chat or email and the 7-digit version can be read over the phone for entry on the Bomgar Appliance [Public Site](#).

## Requirements

Bomgar integration features for the Dell KACE K1000 management appliance have certain requirements which must be met a) by the K1000 and b) by Bomgar.

The Bomgar requirements vary depending on whether an on-site Bomgar Appliance has been purchased or whether the Bomgar promotional [kace.bomgar.com](#) hosted site is being used. Regardless of this, the K1000 appliance requirements are the same.

Bomgar customers using [kace.bomgar.com](#) will need to follow the initial configuration steps on the [Dell KACE Configuration](#) page of the Bomgar Self Service Center.

Bomgar customers using a purchased, on-site appliance require the following:

1. The appliance must have a working DNS hostname which loads in a Web browser.
2. The appliance must be configured with a working SMTP server.
3. At least one user must be able to log into the Bomgar representative console and access remote, KACE-managed systems with it.

The following requirements must be met by the Dell KACE K1000 appliance:

1. The appliance must be installed and running a version between v5.4.70402 (inclusive) and 6.2.x (inclusive).
2. The appliance must have a working hostname which loads in a Web browser.
3. The K1000 Service Desk must be able to send email and create new incidents from inbound email.
4. The K1000 Inventory must be functional and at least one working Mac and/or Windows machine should be checked-in with an active AMP connection to the K1000.

With the exception of the Bomgar Pushed Session Device Action, all of the KACE integration features can be configured to support both Windows and Mac clients as necessary. Though not required, this guide assumes that at least one instance of each is available for testing. Sometimes the number of Macs managed through KACE and/or supported with Bomgar is insufficiently significant to warrant configuration and testing of this integration on that platform. If this is the case, simply skip the Mac-specific steps in this guide.

If one or more of the above requirements either for Bomgar or the K1000 are not met, then one or more of the Bomgar integration features will not function. If these requirements have been met and the proper setup procedures have been followed yet a specific feature is still not working, contact Bomgar Technical Support for assistance at [help.bomgar.com](http://help.bomgar.com).

**Note:** K1000 6.3 deprecated the option to submit tickets via email and no longer recognizes the string "TICK:" when used in the external key field (see "Add Ticket Updates in KACE Service Desk" on page 15). If the external key field holds only the ticket number without "TICK:", the ticket closes properly, but the session information spawns a new ticket with the session info appended. If you upgrade to KACE 6.3 and must have ticket updates working, contact Bomgar Support.

# Configure KACE K1000 Service Desk

## Email Bomgar Invitation from KACE Service Desk

This section explains how to configure a KACE K1000 Service Desk queue to allow ticket owners to email Bomgar remote support session links to ticket submitters using the KACE ticket management interface.

To enable this functionality, the Bomgar Appliance API must be enabled and it must have Issue Submission allowed to the API. In KACE, three steps are necessary: first, the **Service Desk** ticket field must be added, then the ticket rule for this field must be configured, and finally, the functionality must be tested.

**Note:** Users of *kace.bomgar.com* do not need to configure the Bomgar API. This configuration has already been completed.

### Configure the Bomgar API

1. Log into the /login interface of the Bomgar Appliance as an admin.
2. Browse to **Management > API Configuration** and check the **Enable XML API** box.

**API :: Configuration**

**Enable XML API**  NOTE: The XML API allows middleware to pull historical data from this site.

**Allow HTTP Access to XML API**  NOTE: Using the XML API over HTTP is strongly discouraged because your username and password are sent in an unencrypted format.

**Enable Real-time State API**

**Enable State Archive API**

3. Browse to **Public Portals > Public Sites** and **Edit** the site to be integrated with KACE.
4. Ensure **Use Issue Submission Survey** is set to either **Public Site and API** or **API Only**.

### Customize the Ticket Field

1. Open the **Queue Configuration** page.
  - Log into the KACE /admin interface as an admin, browse to **Service Desk > Configuration > Queues**.
  - Click on the name of the queue to be integrated with Bomgar.
  - Click **Customize Fields and Layout** to open the **Queue Configuration** page.
2. Configure the Ticket Layout.
  - Scroll down to the Ticket Layout table, identify an unused record with CUSTOM in its name field, and click the **Edit item** icon for the record.

**Note:** If no record is available, a new one can be added by scrolling to the Custom Fields table and clicking the **Add Item** icon at the top of the column containing the Edit and Remove icons.

- Focus the Label text box and enter **Email Bomgar Invite**; next, click the Permissions dropdown and select **Owners Only - Hidden from Users**.
- **Save** the record.

3. Configure the Custom Fields.
  - Scroll down to the Custom Fields table and locate the record of the same name as the Ticket Layout record configured above.
  - Click the **Edit item** icon of the record and select **Checkbox** from the *Field Type* dropdown.
  - **Save** the record.
4. Scroll to the bottom of the page and click **Save**.

### Create the Ticket Rule

1. Add a new SQL ticket rule as follows:
  - Browse to **Service Desk > Configuration > Queues** and click the name of the appropriate queue.
  - Scroll to the bottom of the page and select **Customize** next to Custom Ticket Rules.
  - Click **Choose Action** and select **New (SQL)**
2. Configure the Title and Description fields as follows.
  - Focus the *Title* field and enter **Email Bomgar Invite**.
  - Focus the *Description* field and enter:

When the ticket is saved while the "Email Bomgar Invite" field is checked, KACE will send an email to the ticket submitter which includes a hyperlink to begin a Bomgar session. This session will appear in the "General" queue of Bomgar and will be auto-encoded with the KACE ticket number such that all the session details will be posted to the KACE ticket at the end of the Bomgar session. The Bomgar session will "end" when both the remote user and the local representative have left the session.

3. Focus the *Select SQL* text box and configure it as follows:

- Paste the following:

```
select
HD_TICKET.*,
owner.EMAIL as OWNER_EMAIL,
if ((LENGTH(owner.FULL_NAME) = 0), owner.USER_NAME,owner.FULL_NAME) as
OWNER_NAME, submitter.EMAIL as SUBMITTER_EMAIL
from
HD_TICKET
left outer join USER owner on owner.ID = HD_TICKET.OWNER_ID
left outer join USER submitter on submitter.ID = HD_TICKET.SUBMITTER_ID
where
HD_TICKET.CUSTOM_FIELD_VALUE0=TRUE
```

- Replace 0 in **CUSTOM\_FIELD\_VALUE0** with the *Get Bomgar Key* Ticket Layout number, minus one.

**Note:** For example, if the Ticket Layout record name were *CUSTOM\_FIELD\_VALUE2*, then the SQL would use *CUSTOM\_FIELD\_VALUE1*. The Ticket Layout number can be found under **Service Desk > Configuration > Queues** by clicking **Customize Fields and Layout**.



## 4. Configure a comment as follows:

- Check **Append comment to ticket**.
- Check **Owners Only**.
- Focus the *Comment* text box and enter

```
A Bomgar session invitation has been sent to the ticket submitter via email.
```

5. Check **Email each recipient in query results** and fill out the email fields as follows:

- Focus the *Subject* text box and enter:

```
Remote Support Invite - [TICK:$id] : $title.
```

- Focus the *Column* containing email addresses text box and enter:

```
SUBMITTER_EMAIL
```

- Focus the *Message* text box and enter:

```
$owner_name would like to start a support session with you. To do so, please click this link: https://support.example.com/api/start_session.ns?issue_menu=1&customer_name=$submitter_email&external_key=TICK:$id.
```

- Replace support.example.com with the URL of the Bomgar Appliance. kace.bomgar.com users should enter their *Custom Ticket URL* from the **Dell KACE Configuration** page in the [Bomgar Self Service Center](#).

## 6. Focus the Update SQL text box and configure it as follows:

- Paste the following:

```
update HD_TICKET as T set T.CUSTOM_FIELD_VALUE0 = FALSE WHERE T.ID in (<TICKET_IDS>)
```

- Change `CUSTOM_FIELD_VALUE0` to match the *Select Query*.

7. Scroll to the *Schedule* section and select on **Ticket Save** for the *Frequency*.8. **Save** the ticket rule at the bottom of the page.**Test**

This test will require a Bomgar representative console to be installed on the local system.

1. Log into the Bomgar representative console.
2. Log into KACE, browse to **Service Desk**, and either select an existing ticket or create a new one.

**Note:** If it is necessary to create a new ticket, click the **Choose Action** dropdown and select **Add New Item**. It is necessary to select the appropriate queue and fill out any required fields. Be careful that the Submitter is configured with a working email address in KACE. Hovering the cursor over the Submitter name will indicate if this is so or not via the browser's URL preview. This preview is often located in the lower-left portion of the browser window.

3. Check the **Email Bomgar Invite** checkbox and click **Save**.

**Note:** The ticket should save and refresh with a new ticket entry reading: "Bomgar session has been requested via email". If this does not occur, re-check the SQL for the ticket rule with special attention to the CUSTOM\_X numbers. These must be one less than the corresponding numbers in the name of the Email Bomgar Session ticket field.

4. Check the inbox of the KACE tickets Submitter and click the link in the email invitation from KACE.
  - If there is no email, confirm that the KACE email settings are correct, that the SMTP server has relayed the email, and that the email has not been filtered or misplaced in the recipient's email system.
  - If the browser loads a **Forbidden** error, make sure Issue Submission is enabled for the Bomgar API. Log into the Bomgar /login interface as an admin, browse to **Public Portals > Public Sites**, and **Edit** the site with the URL returning the error message. **Use Issue Submission Survey** should be set to either **Public Site and API** or **API Only**.
  - If the browser loads a **Document not found** error, make sure the Bomgar API is enabled. Log into the /login interface of the Bomgar Appliance as an admin, browse to **Management > API Configuration**, and check the **Enable XML API** box.
5. Launch the Bomgar customer client.

The resulting Bomgar session should appear in the General queue of the Bomgar representative console. If this occurs, configuration has been completed successfully.

## Get Bomgar Session Key from KACE Service Desk

This section of the guide explains how to configure a KACE Service Desk queue to allow Service Desk ticket owners to generate a Bomgar remote support session key using the KACE Service Desk ticket management interface. To do this, the Bomgar API must be turned on and enabled for issue submission. In KACE, the necessary ticket Field and its associated ticket Rule must be added. Steps to test and use this feature are included in the final section.

**Note:** This feature is not supported for *kace.bomgar.com* customers due to limitations in the API for *kace.bomgar.com*.

### Configure the Bomgar API

1. Log into the /login interface of the Bomgar Appliance as an admin.
2. Browse to **Management > API Configuration** and check the **Enable XML API** box.

**API :: Configuration**

**Enable XML API**   
NOTE: The XML API allows middleware to pull historical data from this site.

**Allow HTTP Access to XML API**   
NOTE: Using the XML API over HTTP is strongly discouraged because your username and password are sent in an unencrypted format.

**Enable Real-time State API**

**Enable State Archive API**

3. Browse to **Public Portals > Public Sites** and **Edit** the site to be integrated with KACE.
4. Ensure *Use Issue Submission Survey* is set to either **Public Site and API** or **API Only**.

### Customize the Ticket Field

1. Open the *Queue Customization* page.
  - Log into the KACE /admin interface as an admin, browse to **Service Desk > Configuration > Queues**.
  - Click on the name of the queue to be integrated with Bomgar.
  - Click **Customize Fields and Layout** to open the Queue Customization page.
2. Configure the Ticket Layout.
  - Scroll down to the **Ticket Layout** table, identify an unused record with CUSTOM in its name field, and click the **Edit item** icon for the record.

**Note:** If no record is available, a new one can be added by scrolling to the *Custom Fields* table and clicking the **Add Item** icon at the top of the column containing the *Edit* and *Remove* icons.

- Focus the *Label* text box and enter *Get Bomgar Key*; next, click the *Permissions* dropdown and select **Owners Only - Hidden from Users**.
  - **Save** the record.
3. Configure the Custom Fields.
    - Scroll down to the *Custom Fields* table and locate the record of the same name as the Ticket Layout record configured above.
    - Click the **Edit item** icon of the record and select **Link** from the *Field Type* dropdown.
    - **Save** the record.

4. Scroll to the bottom of the page and click **Save**.

### Create the Ticket Rule

1. Add a new SQL ticket rule as follows:
  - Browse to **Service Desk > Configuration > Queues** and click the name of the appropriate queue.
  - Scroll to the bottom of the page and select **Customize** next to *Custom Ticket Rules*.
  - Click **Choose Action** and select **New (SQL)**
2. Configure the Name, Description, and Select SQL text fields as follows:
  - Focus the *Title* text box and enter Get Bomgar Key.
  - Focus the *Description* text box and enter: This link downloads a Bomgar Representative Console Script (.brcs-sitename) file which launches the representative console of the local system and generates a Bomgar session key. The resulting session will have the External Key of the KACE ticket from which the script was downloaded. Firefox and Chrome can be configured to auto-launch the script.
  - Focus the *Select SQL* text box and enter:

```
select
HD_TICKET.*,
owner.EMAIL as OWNER_EMAIL,
if ((LENGTH(owner.FULL_NAME) = 0), owner.USER_NAME,
owner.FULL_NAME) as OWNER_NAME,
submitter.EMAIL as SUBMITTER_EMAIL

from
HD_TICKET
left outer join USER owner on owner.ID = HD_TICKET.OWNER_ID
left outer join USER submitter on submitter.ID = HD_TICKET.SUBMITTER_ID
```

3. Focus the *Update SQL* text box and configure it as follows:

- Enter the following SQL code:

```
update HD_TICKET as T
set T.CUSTOM_FIELD_VALUE0 = concat('https://support.example.com/api/client_
script.ns?type=rep&operation=generate&action=generate_session_
key&session.custom.external_key=TICK:', T.ID)
where T.HD_QUEUE_ID=X
```

- Replace 0 in CUSTOM\_FIELD\_VALUE0 with the Get Bomgar Key Ticket Layout number, minus one.

**Note:** For example, if the Ticket Layout record name were CUSTOM\_2, then the SQL would use CUSTOM\_1. The Ticket Layout number can be found under **Service Desk > Configuration > Queues** by clicking **Customize Fields and Layout**.

- Replace support.example.com with the URL of the Bomgar Appliance.

- Replace X with the queue id of the queue being modified.

**Note:** To find the queue id, browse to Service Desk > Configuration > Queues and hover the cursor over the queue's name. The queue id is the number at the end of the resulting URL.

4. Scroll to the *Schedule* section, click the *Frequency* dropdown, and select **on Ticket Save**.
5. **Save** the ticket rule at the bottom of the page.

## Test

This test assumes there is a Bomgar representative console installed on the local system.

1. Log into KACE, browse to Service Desk, and either select an existing ticket or create a new one for testing.

**Note:** Before the ticket is saved, it is normal for the *Get Bomgar Key* field to read, *Please Enter a Valid URL*. If it is necessary to create a new ticket, click the **Choose Action** dropdown and select **Add New Item**. It is necessary to select the appropriate queue and fill out any required fields as configured by the KACE admin.

2. Click **Save**.

**Note:** When the page reloads, the *Get Bomgar Key* field should update automatically with a hyperlink similar to the following: `https://bomgar.example.com/api/client_script.ns?type=rep&operation=generate&action=generate_session_key&session.custom.external_key=TICK:17`. If this does not occur, re-check the SQL for the ticket rule with special attention to the *CUSTOM\_X* numbers. These must be one less than the corresponding numbers in the name of the *Get Bomgar Key* ticket field.

3. Click the link and run the resulting brcs file download.

**Note:** It may be necessary to allow pop-ups for this to work. The brcs file has an extension which is specific to the Bomgar site that generates it; therefore, it is both safe and convenient to have the browser auto-launch the file, if possible. In Chrome, right-click the download in the downloads bar and select **Always launch files of this type**. In Firefox, select **Open with Bomgar Representative Console (default)** and check **Do this automatically**. IE cannot auto-launch downloads.

The test is successful if the Bomgar representative console on the local system opens, prompts for login (if auto-login is not enabled), and displays a *Session Key Generated* window.

## Send KACE Service Desk Ticket Event Emails

This section explains how to configure a Dell KACE K1000 appliance to automatically send Bomgar session links to end-users when tickets are opened or closed in the K1000 Service Desk. The links in these emails allow the end user to start a Bomgar support session with the service desk by downloading and running a Bomgar client.

### Configure Emails

1. Log into the Dell KACE K1000 /admin interface, browse to **Service Desk > Configuration > Queues**, and select the queue which will be using Bomgar.

**Note:** Make note of the *Email Address* and *Alternate Email Address* on the resulting page. One or both of these will be used for testing later.

2. Scroll down to the *Email on Events* section and click the **[Customize Emails]** link.

**Note:** Make sure the **Ticket Closed** and/or **New Ticket Via Email** boxes are checked.

3. Append the following to the contents of *Ticket Created from Email* and *Ticket Closed*:

```
To start a remote support session with a Service Desk representative, click here:  
https://bomgar.example.com/api/start_session.ns?issue_menu=1&customer_name=$ticket_  
submitter_email&external_key=$ticket_number.
```

4. Replace bomgar.example.com with the hostname of your Bomgar Appliance.

**Note:** Free-license, kace.bomgar.com customers should use the System Ticket URL found in the [Dell KACE Config](#) page of the Bomgar Self Service Center.

5. Scroll to the bottom of the page and click **Save**.

### Test

1. Install a Bomgar representative console, if necessary, and log into it.
2. Send an email to the Service Desk queue's email address and/or alternate email address.
3. Wait for the K1000 to reply with the *Ticket Create from Email* response template.
4. Click on the **click here** link and confirm a new Bomgar session runs successfully.
5. Log into the K1000 /admin interface, browse to the test ticket, and change the value of the *Status* dropdown to **Closed**.
6. Wait for the K1000 to send the *Ticket Closed* template email and use the link to confirm a Bomgar session starts successfully.

## Add Ticket Updates in KACE Service Desk

This feature enables Bomgar to automatically update the appropriate KACE tickets with Bomgar session data, including chat transcripts, system information and session recording links, depending on the configuration. Once configured, after a Bomgar session is ended which was keyed to a KACE ticket, the details for that session will be automatically entered in the KACE ticket for the session by Bomgar. The KACE ticket id is stored in the "External Key" field of the Bomgar session. This will be done automatically for Bomgar sessions started from KACE, but it can be done manually using the **Edit External Key** field, if the necessary permission is granted to the user.

**Note:** Users of `kace.bomgar.com` do not need to follow the configuration steps below; instead, they should simply enter their KACE appliance URL, Email, and Time Zone in the [Dell KACE Config](#) page of the Bomgar Self Service Center.

### Create a Bomgar Outbound Event

1. Log into the Bomgar Appliance's /login web interface as an admin user and browse to **Management > Email Configuration**.
2. Enter the appropriate SMTP server details for the mail server which Bomgar should use to send email.

**Note:** If there are errors, first verify Bomgar can reach the server over the SMTP port you specified. This can be done from the /appliance interface under **Support**. If this succeeds and SMTP is still failing, contact the SMTP server administrator and make sure the Bomgar Appliance's email address has been explicitly added as an allowed relay address.

3. Switch to the **Outbound Events** page, click **Add New Email Recipient** and take the following configuration steps.
  - Focus the **Name** field and enter the name of the KACE Service Desk which will be using Bomgar.
  - Enter the email address which the Service Desk uses to create and update tickets from users.
  - Check the **Require External Key** box.
  - Customize the **Events to Send** as desired by following the instructions and macros on the configuration page.
  - Click **Add Recipient** at the bottom of the page.

### Create a Service Desk User

1. Log into the Dell KACE K1000 /admin interface as an admin user.
2. Browse to **Settings > Users**, click the **Choose Action** dropdown, and pick **New** from the list.

**Note:** In previous versions of KACE, this was located under **Service Desk > Users**.

3. Take the following steps to configure the user.
  - Focus the **User Name** field and enter `noreplybomgar`, or something similarly descriptive.
  - Focus the **Email** field, enter `noreply@bomgar.example.com` where `bomgar.example.com` is the address of the Bomgar Appliance.

**Note:** The email of the Bomgar Appliance is configurable, but it can be copied from **Management > Email Configuration** in the /login interface.

- Assign any password and click **Save**.

## Test the Configuration

1. Log into a Bomgar representative console and start a session with the local host or another test machine.
2. Log into the K1000 /admin interface, create the new ticket (or open one), and copy the ticket's ID number (e.g., `TICK:0017`).
3. Return to the Bomgar console, click **Edit External Key** immediately below the chat box, and paste the clipboard contents into the resulting window.

**Note:** The result should include both `TICK:` and all subsequent numbers.

4. Click **OK** in the *Edit External Key* dialogue and end the session.
5. Open the KACE ticket used above and validate that the session details are added to it as a ticket update from the "noreplybomgar" user.

If the ticket is not updated within approximately 60 seconds, check the Bomgar Appliance's outbound event status in the /login interface. If this reads "OK", then check the logs on the SMTP server configured for Bomgar and validate the email message was received and relayed. If it was, check to make sure the email address for the "noreplybomgar" user matches that shown in the Bomgar SMTP configuration page. If all of this is the case, redirect the outbound event in Bomgar to your personal email address and re-run the test. If you receive the email (be sure to check for spam), then contact Dell KACE support.

**Note:** K1000 6.3 deprecated the option to submit tickets via email and no longer recognizes the string "TICK:" when used in the external key field. If the external key field holds only the ticket number without "TICK:", the ticket closes properly, but the session information spawns a new ticket with the session info appended. If you upgrade to KACE 6.3 and must have ticket updates working, contact Bomgar Support.



## Open KACE Service Desk Ticket from Bomgar Representative Console Link

The Bomgar Representative console can be configured with a link that opens a new or existing KACE ticket using the default browser. This link appears in the Bomgar session window of the representative console in the chat window bar immediately to the left of the "End or Leave the Support Session" red "X" icon. If the Bomgar session containing the link has an "External Key" with the number of a KACE ticket, that KACE ticket will open. If there is no KACE ticket number, the KACE K1000 appliance's new ticket creation page will load. If a new ticket is created, its ticket number can be added back to the Bomgar session. When Bomgar and KACE are properly configured, Bomgar will post the session details into the appropriate KACE ticket at the end of the session.

**Note:** Users of `kace.bomgar.com` simply need to enter their KACE appliance hostname, email address, and time zone on the [Dell KACE Config](#) page in the Bomgar Self-Service Center, and this feature should work automatically if the External Key of the Bomgar Session includes a valid KACE ticket number.

### Add the Link

1. Log into the KACE K1000 /admin interface and click **Service Desk**.
2. Right-click the "Title" or "Number" of any ticket on the resulting *Tickets* screen and copy the address.
3. Log into the Bomgar /login web interface as an admin user, and browse to **Rep Console > Custom Links**.
4. Under **Rep Console :: Custom Links**, click **Create New Custom Link**. Enter a name for the link, then paste the clipboard contents in the URL field and replace the id number at the end with `%EXTERNAL_KEY%`. If needed, you can use any of the available macros to customize the link according to your specifications. Click **Add Custom Link** to save the new link.

**Note:** For example, `http://k1000beta/adminui/ticket.php?ID=15` would read `http://k1000beta/adminui/ticket.php?ID=%SESSION.CUSTOM.EXTERNAL_KEY%`.

### Test

1. Log into a Bomgar representative console, start a session with the local host or another test machine, and click the **Custom Links** icon in the upper-right corner of the representative console session window.



**Note:** The KACE K1000 new ticket creation page should load.

2. Log into the K1000 /admin interface (if necessary), create the new ticket, and copy the ticket's ID number (e.g., `TICK:0017`).
3. Return to the Bomgar console, click **Edit External Key** immediately below the chat box, and paste the clipboard contents into the resulting window.

**Note:** The result should include both `TICK:` and all subsequent numbers.

4. Click **OK** in the *Edit External Key* dialogue and click the **Custom Link** icon again.

**Note:** The new ticket should load in the K1000 /admin interface.

If the above steps complete successfully, configuration is complete. If the browser fails to load the correct page, make sure the format of the *Custom Link* field in Bomgar's /login interface matches the ticket URL copied from the K1000 /admin interface precisely. If changes are made, the representative console must be re-logged to load the changes.

# Configure KACE K1000 Scripts

## Create Scripted Sessions

The following sections explain how to configure a Dell KACE K1000 script which will automatically start a one-time Bomgar session with any given KACE-managed Windows or Mac system. At the end of the session, the Bomgar client will remove itself automatically, but the script can be re-run to start another session (or multiple sessions) with the same system. Windows systems do not require a user to be logged-in for the script to work, but Mac systems do.

**Note:** This guide is primarily intended for users of [kace.bomgar.com](http://kace.bomgar.com) since they have no access to Jump Clients. Users of the on-premises Bomgar Appliance should use the Jump Client script instead of the script described here. A Jump Client is a persistent service which allows recurrent Bomgar sessions to the same host while the KACE-scripted session must be run each time a session is to be started.

### Windows Script

1. Configure the **InitiateBomgarSession vbs** script.

- Use a convenient location to save the **InitiateBomgarSession.vbs** file from the [Dell KACE Config](#) page on [help.bomgar.com](http://help.bomgar.com).

**Note:** Users of the on-premises Bomgar Appliance can download the file here:  
<https://tracker.bomgar.com/public/InitiateBomgarSession.vbs>

- Users of [kace.bomgar.com](http://kace.bomgar.com) should open the `InitiateBomgarSession.vbs` script with a text editor, locate `WScript.Arguments(0)` on line 14, paste over it with the K1000 Run Now Script URL from the Dell KACE Configuration page, and enclose the pasted URL in quotation marks.

**Note:** Users of the on-premises Bomgar Appliance should replace `WScript.arguments(0)` with `"https://bomgar.example.com/api/start_session.ns?issue_menu=1"` where `bomgar.example.com` is the URL of the Bomgar Appliance.

- Save the script and close the text editor.

2. Log into the Dell KACE /admin interface as an admin, click **Scripting**, and select **New** from the *Choose Action* dropdown.

3. Configure the KACE script parameters.

- Focus the *Name* text box and enter Bomgar - Start Session (`bomgar.example.com`) where `bomgar.example.com` is the Bomgar Appliance address (e.g., `kace.bomgar.com`).
- Focus the *Description* text box and enter:

```
This script automatically connects to support.example.com, downloads a Bomgar customer client, and launches it to begin a new Bomgar session.
```

where `support.example.com` is the Bomgar Appliance address used above.

- Scroll to *Operating Systems*, uncheck **Pick Specific OS Versions**, and select **Microsoft Windows**.
- Scroll to *Schedule* and check **Allow to run without a logged-in user**.

- Scroll to *Dependencies*, click **Add new dependency > Choose File**, and **Open** the `InitiateBomgarSession.vbs` script.
- Configure the KACE script task.
  - Scroll to *Tasks* and click **New Task**.
  - Select the *Continue* radio button for *On Failure*.
  - Click **Add** under *Verify*, click **Add a new step** and pick **Verify a directory exists**.
  - Focus the *Directory* text box, enter `C:\Program Files`, and click **Save Changes**.
  - Click **Add** under *On Success*, click **Add a new step**, and select **Launch a program**.
  - Focus the *Directory* text box and enter `C:\Windows\System32`.
  - Focus the *File* text box and enter `wscript.exe`.
  - Check the **Wait for completion** checkbox.
  - Focus the *Parameters* text box and enter `$(KACE_DEPENDENCY_DIR)\InitiateBomgarSession.vbs`.
  - Click **Save Changes**.
- Click **Save** at the bottom of the page.

## Test

The following test assumes there is access to a working Bomgar representative console and that the system whereon the script is to be run is included and online in the K1000 inventory.

This will require a working KACE agent must be present on the machine which will run the script. Though there are several ways of installing the agent, a simple method for installation on a single system is given below.

1. Log into the K1000 /admin interface as an admin, browse to **Settings**, and click **Security Settings**.
2. Check the **Enable File Sharing** box, scroll to the bottom of the page, and click **Save**.
3. Wait for the K1000 appliance to reboot, browse to `\\k1000\client\agent_provisioning`, and install the agent from the directory appropriate for the test machine's operating system.

Once these steps are complete, the new agent's host should appear listed on the **Inventory** page of the K1000 in about one minute, depending on the network.

The following test assumes there is access to a working Bomgar representative console and that the system whereon the script is to be run is included and online in the K1000 inventory. This will require a working KACE agent on the system.

1. Log into the Bomgar representative console.

**Note:** This can be done on any available system. It does not need to be in the K1000 inventory, nor does it need to be the same as the system on which the script is to be run, though it may be.

2. Log into the K1000 /admin interface, click the **Scripting** page, and select **Run Now**.
3. Select the **Bomgar - Start Session (bomgar.example.com)** script using either the dropdown menu or the filter text box.
4. Select the desired test machine using either the dropdown or the filter text box.
5. Click **Run Now** and wait for the script run to complete.

The script's run status will be shown on the **Run Now Status** page. Details of the script execution during and after its run can be seen by clicking on the timestamp of the appropriate entry in the Started field to load the Run Now Status Detail page. Once complete, the exact command which was run on the remote system can be reviewed from the **View Logs** link under either **Failed**

**Execution** or **Successful Execution**, depending on whether or not the script succeeded. Once the script completes successfully, a new session should appear in the Bomgar representative console in about one minute, depending on the network. This session will appear in the default queue of the Console. After the session appears, double-click or right-click to **Accept** the session and gain remote access.

### Mac OS X Script

The following steps assume that a Windows version of the script has already been configured and the administrator would like to upgrade the existing script to add support for Mac OS X.

1. Use a convenient location to save the **InitiateBomgarSession.sh** file from the [Dell KACE Config](#) page on help.bomgar.com.

**Note:** Users of an on-premises Bomgar Appliance can download the file from here: <https://tracker.bomgar.com/public/InitiateBomgarSession.sh>.

2. Log into the Dell KACE /admin interface as an admin, click **Scripting** and click the name of the **Bomgar - Start Session (bomgar.example.com)** script configured previously.
3. Configure the KACE script parameters.
  - Scroll to *Operating Systems* and ctrl-click **Mac OS X**.
  - Scroll to *Dependencies*, click **Add new dependency > Choose File**, and **Open** the **InitiateBomgarSession.sh** script.
  - Scroll to the bottom of the page and click **New Task**.
  - Select the **Continue** radio button for *On Failure*.
  - Click **Add** under *Verify*, click **Add a new step**, and pick **Verify a directory exists**.
  - Focus the *Directory* text box, enter `/usr/bin`, and click **Save Changes**.
  - Click **Add** under *On Success*, click **Add a new step**, and pick **Launch a program**.
  - Focus the *Directory* text box and enter `$(KACE_DEPENDENCY_DIR)`. Be sure to include the K1000 Run Now Script URL from the Dell KACE Configuration page.
  - Focus the *File* text box and enter **InitiateBomgarSession.sh**.
  - Check the **Wait for completion** checkbox.
  - Focus the *Parameters* text box and paste the *K1000 Run Now Script URL* from the [Dell KACE Configuration](#) page.

**Note:** Users of an on-premises Bomgar Appliance should enter `https://bomgar.example.com/api/start_session.ns?issue_menu=1` where `bomgar.example.com` is the Bomgar Appliance hostname.

4. Click **Save Changes** and then **Save** the script at the bottom of the page.
5. Test the script as described in the testing section of this guide.

### Bomgar Team (Optional)

Using the above setup steps, the Bomgar session launched via the KACE script will appear in the default queue of the Bomgar console. For larger support organizations, this may not be advisable as it allows any and all logged-in reps in the Bomgar system to pick up the session and gain access to the associated machine.

It is possible to create a separate Bomgar support team in order to isolate the sessions from being accessed by any and all representatives in the Bomgar console. This allows the Bomgar administrator to control exactly which representatives have access to these sessions and which representatives do not by modifying the membership of the appropriate team in Bomgar.

This step is not necessary if there is no security requirement to isolate Dell KACE scripted sessions from being accessed by all the representatives in Bomgar. kace.bomgar.com users do not have access to Bomgar support team functionality, so they must use the default queue. This should not pose a serious security risk since kace.bomgar.com does not support a team of more than 2 simultaneous users at a time.

1. Add a Bomgar team and issue for KACE-scripted sessions.

**Note:** If a team already exists for KACE-scripted sessions, skip adding a new team. Alternatively, it may be desirable to create multiple teams, each with its own Bomgar session script.

- Log into the Bomgar /login web interface as an admin and browse to Configuration > Support Teams.
- Click Add New Team, assign it a name, then add users and configure any other settings as necessary. Once done, click Add Team.
- Click Issues and click Add New Support Issue. Add a description (e.g., Dell KACE Script), select the team in the Route To dropdown, and click Add Support Issue.

2. Add the issue id to the KACE vbs script.

- Open the *InitiateBomgarSession.vbs* script with a text editor, locate `WScript.Arguments(0)` on line 14 and paste over it with: `"https://bomgar.example.com/api/start_session.ns?issue_menu=1&id=x"` where bomgar.example.com is the URL of the Bomgar Appliance.
- Copy the following URL into the address bar of a browser:  
`https://bomgar.example.com/api/command.ns?username=admin&password=password&action=get_support_teams`
- Replace `bomgar.example.com` with the URL of the Bomgar Appliance, admin with the username of an admin user for the site, and password with the password of the given admin.
- Load the page using the URL as modified above, copy the issue id for the desired Bomgar team, and paste this id number over the x at the end of the Bomgar Appliance URL in the vbs script.
- Log into the KACE /admin interface, browse to **Scripting**, and click the name of the Bomgar session script.
- Scroll to the *Dependencies*, remove the existing vbs script, and upload the new one. If the script is not to be used for Mac OS X systems, save the KACE script at the bottom of the page, and skip to the testing phase.

3. Add the issue id to the KACE sh script.

- Open the Bomgar session script in KACE, scroll to the Task section for Mac OS X, and edit the Launch task in the *On Success* section.
- Focus the *Parameters* text box and append `&id=x` to the end such that the result is similar to:  
`https://bomgar.example.com/api/start_session.ns?issue_menu=1&id=x.`
- Replace x with the issue id of the appropriate team as described in the vbs script configuration steps.

**Note:** Depending on the preferred workflow, it may be desirable to use a separate team for Mac OS X sessions, or it may be desirable to use one team for all KACE-scripted sessions.

Save the task changes and then save the script at the bottom of the page.

4. Test the session script.

- Log into the KACE /admin interface, browse to **Scripting > Run Now**, and select the Bomgar session script from the Script dropdown.
- Focus the Devices text box and add one or more Windows machines. Do the same with one or more Mac OS X machines, if these are to be supported.

- Click **Run Now** and log into the Bomgar representative console with a user account that is a member of the Bomgar teams configured to receive KACE-scripted sessions.

If the script is working correctly, the new session(s) should appear in the queue of the team(s) for which the KACE scripts (sh and/or vbs) were configured. If this is not the case, re-check the id numbers in the script URLs against the result of the `get_support_teams` API command URL.

## Configure KACE Inventory & Distribution for Jump Clients

KACE provides a Managed Installation tool, designed to easily and consistently mass-deploy software to KACE-managed systems, as well as to monitor the status of this deployment. Bomgar can leverage this tool to mass-deploy Jump Clients on Windows and Mac. To learn more about Jump Clients, refer to Bomgar's [Jump Client Guide](http://www.bomgar.com/docs/remote-support/how-to/jump-clients) at [www.bomgar.com/docs/remote-support/how-to/jump-clients](http://www.bomgar.com/docs/remote-support/how-to/jump-clients).

**NOTE:** These instructions are for a Windows deployment using a fully licensed Bomgar site. For Mac deployment instructions, please see [Mass Deploying Bomgar Software to Macs](http://www.bomgar.com/docs/remote-support/how-to/mass-deploy-kace/index.htm) at [www.bomgar.com/docs/remote-support/how-to/mass-deploy-kace/index.htm](http://www.bomgar.com/docs/remote-support/how-to/mass-deploy-kace/index.htm).

Users of kace.bomgar.com do not have the option to mass-deploy Jump Client software. Jump Client limits for fully licensed Bomgar systems are documented in Bomgar's [Jump Client Guide](http://www.bomgar.com/docs/remote-support/how-to/jump-clients/index.htm) at [www.bomgar.com/docs/remote-support/how-to/jump-clients/index.htm](http://www.bomgar.com/docs/remote-support/how-to/jump-clients/index.htm).

With on-premises Bomgar Appliances, it is possible to create a Bomgar support team to control which Bomgar users have access to new, KACE-deployed Jump Clients by default. If it is acceptable for all Bomgar representatives to have access to newly-installed Jump Clients, there is no need to create a support team.

### KACE Agent Installation

Jump Client installation through KACE requires the KACE Agent to be installed on all systems which will receive a copy of the Jump Client. If the Agent is not already installed, follow these steps to do this on a test machine.

**NOTE:** These steps will require admin access to the K1000 /admin web interface.

1. Log into the K1000 /admin interface as an admin (e.g., <http://k1000/admin>).
2. Browse to **Settings > Security Settings**.
3. Check the **Enable File Sharing** box.
4. Scroll to the bottom of the page and click **Save**.
5. Wait for the K1000 appliance to reboot.
6. Browse to `\\k1000\client\agent_provisioning\windows_platform`, and install the **AMPagent MSI**.

Once the KACE Agent is deployed to all the necessary machines, proceed with the following steps to set up the Jump Client installation.

### Jump Client Installation

The first step is to create a Jump Client installation MSI, install it, and update the KACE Software Inventory with the new installation. You must:

- Obtain admin access to the Bomgar /login web interface.
- Use a Windows machine on which you can install software.
- Install the KACE Agent on the above machine.

After this is done, take the following steps to install a Jump Client and post it to the KACE Software Inventory:

1. Log into your Bomgar /login admin web interface (e.g., <https://support.example.com/login>).
2. Make note of the **Primary Hostname** and **Product Version**.
3. Browse to **Configuration > Jump Clients**.

4. Configure a **Jump Client Mass Deployment**:
  - Select **1 Week** or more for **This Installer is Valid For**.
  - Uncheck **Prompt for Elevation Credentials if Needed** and check **Start Customer Client Minimized When Session is Started**.
  - See **Jump Clients** at [www.bomgar.com/docs/remote-support/getting-started/admin/jump-clients.htm](http://www.bomgar.com/docs/remote-support/getting-started/admin/jump-clients.htm) to determine what other options to select, if any.
5. Click **Create**, select **Windows (x86) MSI** for the **Platform**, and copy the `KEY_INFO` string.
6. Click **Download/Install**, save the file, and install it:
  - Right-click the downloaded MSI file and click **Create Shortcut**.
  - Right-click the shortcut, click **Properties**, and paste your `KEY_INFO` string to the end of the **Target** field (e.g., `"C:\Documents and Settings\bob\Desktop\bomgar-scc-win32.msi" KEY_INFO=w0dc30w8i18z711gggyjyzizyefgieiffwzdfc40jc90`).
  - Click **OK**, and launch the shortcut.
7. Force Check-In with the KACE Software Inventory:
  - Open a command prompt and run `Services.msc`.
  - Open the **Properties** of the **Dell KACE Agent** service.
  - Copy the **Path to executable**.
  - Return to the command prompt and paste the path (e.g., `C:\Program Files (x86)\Dell\KACE\AMPAgent.exe`).
  - Replace `AMPAgent.exe` with `runkbot.exe`, add `4 0` to the end of the line (e.g., `"C:\Program Files (x86)\Dell\KACE\runkbot.exe" 4 0`), and hit **Enter**.

After a few minutes, the KACE Software Inventory should update with a record for the new Jump Client. Once this is done, it will be possible to create a Managed Installation to mass-deploy the Jump Client. It is important to note that **Prompt for Elevation Credentials if Needed** should be unchecked and **Start Customer Client Minimized When Session is Started** checked on the Jump Client options in order to ensure it will install silently.

### Managed Installation

Once the Bomgar Jump Client MSI has been successfully created, tested, and posted to the KACE Software Inventory, KACE can be configured with a Managed Installation to deploy the Jump Client. In the following instructions, the `/qn` option is used on the Install command line to facilitate a silent install.

**NOTE:** These steps will require admin access to the K1000 /admin web interface.

1. Log into your K1000 /admin web interface (e.g., <http://k1000/admin>).
2. Click **Distribution** in the left nav-bar.
3. Click **Choose Action > New**, and configure the software options:
  - Uncheck **Only display records with an associated file**.
  - Click **Select software** and enter `Bomgar Jump Client` followed by your Bomgar **Primary Hostname** (e.g., `Bomgar Jump Client support.example.com`).
  - Select the appropriate result based on the Bomgar **Product Version** noted earlier.
  - Click **Browse** under **Upload and Associate New File**.
  - Select your Jump Client MSI and click **Open** to upload it.



#### 4. Configure the Managed Installation:

- Select **Override Default Installation** and enter the following in the **Full command line**: `msiexec.exe /qn /i bomgar-scc-win32.msi KEY_INFO=w0idc306z7zgx7x58d6w8he5zgelh5iewwyiyfc40jc90`.
- Replace `w0idc306z7zgx7x58d6w8he5zgelh5iewwyiyfc40jc90` with the `KEY_INFO` string used earlier.
- Check **Don't Prepend msiexec.exe**.

#### 5. Name and deploy the Managed Installation:

- Select the appropriate **Labels** and/or enter the **Devices** on which to install the Jump Client.
- Scroll to the top of the page, and enter an appropriate **Name** for the Managed Installation based on your parameters (e.g., `Bomgar Jump Client support.example.com (14.3.2.0)`).
- Select **Anytime** under **Execution**
- Scroll to the bottom of the page and click **Save**.

KACE will now deploy the Jump Client MSI for your Bomgar site to all the systems specified in the Managed Installation. In order for this to occur, the K1000 Agent on each machine must report to the K1000. This event can be forced either from the **Force Inventory** button on the **Device** page for each device in the K1000 Inventory, or it can be forced from the local device using the `runkbot.exe` command described earlier.

The entire deployment can take 24-48 hours, depending on how quickly the K1000 Agents update the Inventory (among other factors). As this happens, the Managed Installation will show how many systems have installed the Jump Client, and how many have yet to complete the Installation. As the Jump Clients are installed, they will populate in the Bomgar representative console for the Bomgar site from which the Jump Client MSI was downloaded.

The Managed Installation will not install twice on the same machine, but it can be expected to continue installing Jump Clients on new machines until either the Jump Client MSI package reaches its expiration date or the Bomgar Appliance is updated. The expiration date is a value set by the admin in Bomgar immediately before generating and downloading the Jump Client MSI.

When the Jump Client MSI package expires and/or is outdated, existing Jump Clients will persist, but in order to continue installing new Jump Clients, it will be necessary to update the Managed Installation with a new Jump Client MSI and a new `KEY_INFO` string per the instructions in this guide.

#### Managed Uninstall

After a Jump Client has been installed, it will remain installed until such time as someone removes it. This can be done either from the Bomgar representative console, the local machine, or the Jump Client MSI using the `/x msiexec` command switch. This last option is the recommended method, and it can be done silently through a KACE Managed Installation. Because of this, it is best practice when using Managed Installation deployments to do two things:

1. Disable the Bomgar user permission to **Deploy, Remove and Modify Jump Clients** (see Settings and Field Details: User Permissions in the [User Accounts for Password Reset](http://www.bomgar.com/docs/remote-support/getting-started/admin/user-accounts.htm) at [www.bomgar.com/docs/remote-support/getting-started/admin/user-accounts.htm](http://www.bomgar.com/docs/remote-support/getting-started/admin/user-accounts.htm)).
2. Check **Restrict Local Uninstall/Disable of Jump Clients** in the Jump Client configuration of Bomgar (see [Jump Clients](http://www.bomgar.com/docs/remote-support/getting-started/admin/user-accounts.htm) at [www.bomgar.com/docs/remote-support/getting-started/admin/user-accounts.htm](http://www.bomgar.com/docs/remote-support/getting-started/admin/user-accounts.htm)).

**NOTE:** The following steps will require admin access to the K1000 /admin web interface.

#### 1. Locate and copy the Bomgar Jump Client Uninstall Command:

- Log into your K1000 /admin web interface (e.g., `http://k1000/admin`).
- Browse to **Inventory > Software** and search for `Bomgar Jump Client` followed by your Bomgar **Primary Hostname** (e.g., `Bomgar Jump Client support.example.com`).

- Select the **Name** of the result which has the **Version** that matches the Bomgar **Product Version** noted earlier.
  - Copy the **Uninstall Command** (e.g., `MsiExec.exe /I{58418483-BC6C-488C-A062-E7053C33B28D}`).
- Duplicate the Managed Installation to create the Uninstall:
    - Click **Distribution** in the left nav-bar and select the Managed Installation created earlier.
    - Scroll to the bottom of the page and click **Duplicate**.
    - Open the newly created copy of the Managed Installation.
    - Paste the **Uninstall Command** into the **Full command line**, replacing `/I` with `/qn /x` (e.g., `MsiExec.exe /qn /x {58418483-BC6C-488C-A062-E7053C33B28D}`).
    - Check the boxes for **Uninstall**, **Run Command Only (do not download file)**, and **Don't Prepend msiexec.exe**.
  - Name and deploy the Uninstall:
    - Update the Managed Install **Name** to reflect the changes (e.g., `Uninstall of Bomgar Jump Client support.example.com (14.3.2.0)`).
    - Set the Install **Execution**, if you want to uninstall the Jump Client.
    - Scroll down to **Deploy** and select the appropriate **Labels** and/or enter the **Devices** from which you wish to remove the Jump Client, if any.
    - Scroll to the bottom of the page and click **Save**.

At this point, the Jump Client software will be removed from the system(s) specified in the Uninstall. Be careful never to have the Install Managed Installation active at the same time as the Uninstall Managed Installation.

**NOTE:** It is important to note that the GUID used in the command line of the Uninstall is unique to the Jump Client MSI package. If a new MSI package is used, this GUID can be expected to change. This means that the Uninstall Managed Installation is specific to the Jump Client MSI package which was used to create the KACE Software Inventory record from which the **Uninstall Command** was retrieved. This command should be updated if and when the MSI package is updated in the KACE Software Inventory.

### Set Up Bomgar Team (Optional)

In larger environments, it may not be desirable to allow all logged-in Bomgar users to access newly-deployed Jump Clients installed by KACE. To restrict access, it is possible to designate a Bomgar support team to contain the Jump Clients. From here, they can be moved to different teams as necessary. The steps to configure this setup are given below.

For more information on team configuration, refer to [Support Teams: Group Representatives into Teams](http://www.bomgar.com/docs/remote-support/getting-started/admin/support-teams.htm) at [www.bomgar.com/docs/remote-support/getting-started/admin/support-teams.htm](http://www.bomgar.com/docs/remote-support/getting-started/admin/support-teams.htm).

- Add a Bomgar team for the Jump Clients (if such a team already exists, skip this step).
  - Log into the Bomgar /login web interface as an admin (e.g., `https://support.example.com/login`).
  - Browse to **Configuration > Support Teams**.
  - Click **Add New Team**, assign it a name, and configure any other settings as necessary.
  - Click **Add Team** when done.
- Create a Jump Client installer as described above but use the **Pin Location** dropdown menu to select the appropriate team.
- Complete the rest of the setup steps as described earlier.

Once these steps are complete, Jump Clients installed using the new installer will appear in the Bomgar representative console listed under the Jump Group of the team (or user) matching the **Pin Location** of the installer. At default settings, only Bomgar user

accounts which are members of the appropriate team will be able to access the Jump Clients; however, it is possible for an administrator to grant certain users rights to access Jump Clients for all teams in the system. See Jump Clients Permissions in the [Admin Interface](http://www.bomgar.com/docs/remote-support/getting-started/admin/user-accounts.htm) at [www.bomgar.com/docs/remote-support/getting-started/admin/user-accounts.htm](http://www.bomgar.com/docs/remote-support/getting-started/admin/user-accounts.htm) for details.

## Use Device Actions to Connect through KACE

The Device Actions feature provides an automated way to connect with remote hosts through Bomgar using Dell KACE's Inventory.

**Note:** Customers using `kace.bomgar.com` will not have access to the Jump Client Device Action; however, they will be able to use the Local Push version.

### Configure

1. Log into the Bomgar /login interface as an admin user, browse to **Management > API Configuration**, and validate the *Enable XML API* box is checked.
2. Log into the Dell KACE Management Center as an admin user and navigate to **Settings > General Settings**.
3. Scroll to *Device Actions* and modify or create an action using the following steps.
  - Focus the *Name* field and enter *Bomgar Push*.
  - Click the **Custom Action** dropdown and select **Bomgar Push and Start Using HOSTNAME** from the list.
  - Focus the *Command Line* field, highlight `http://[REPLACE WITH BOMGAR SITE NAME]`, and enter `https://bomgar.example.com` where `bomgar.example.com` is your Bomgar Appliance hostname.

**Note:** `kace.bomgar.com` customers should enter `kace.bomgar.com` for this step.

4. Repeat the above step using `Bomgar Pin` for the *Name* field and **BOMGAR Pre-installed Jump Client Using HOST NAME** for the **Custom Action** dropdown.

**Note:** `kace.bomgar.com` customers cannot use Jump Clients and should skip this step as a result.

5. Repeat the above step using *Bomgar Intel vPro* for the *Name* field and **BOMGAR vPro Connection Using HOST IP** for the **Custom Action** dropdown.

**Note:** Intel vPro has an extensive set of hardware, software, and configuration requirements which must be met prior to using this feature in Bomgar or in KACE. Please contact your hardware vendor to confirm whether or not Intel vPro is supported on your machines. If so, follow their instructions to enable it and then add the machines to Bomgar per our Jumpoint guide on [www.bomgar.com/docs](http://www.bomgar.com/docs).

6. Click **Save Actions**.

### Test

The following test assumes there is already a Bomgar representative console installed on the local system.

1. Log into the KACE K1000 /admin interface, browse to **Inventory**, and locate a device which has a Jump Client installed on it.
2. Click the name of the device, click **Action** next to the *IP Address*, and select `Bomgar Pin`.

3. Allow pop-ups from the KACE K1000, if necessary, and launch the resulting brcs file download.

**Note:** Consider checking *Do this automatically* for files like this from now on for the brcs file in Firefox's downloads or **Always open files of the type** in Chrome's download bar. The brcs file extension ends with a name unique to your Bomgar Appliance, so it is safe to launch automatically.

4. Repeat device **Action** using the `Bomgar Push` option.

The Bomgar representative console should launch (it may require authentication) and automatically launch a pinned or pushed session (depending on the action selected in KACE) with the IP address of the device for which the action was selected in KACE.