

# BOMGAR™

## Bomgar Integration with ServiceNow

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## Bomgar Integration with ServiceNow

Service desks and customer support organizations using ServiceNow can integrate with Bomgar to improve service levels, centralize support processes, and strengthen compliance.

Features of the Bomgar and ServiceNow integration are summarized below. Some of these features are available only with the enterprise version of the Bomgar ServiceNow integration.

- **Outbound Support Sessions** – Technicians can launch Bomgar sessions from within ServiceNow incidents using the **Generate Session Key** button.
- **Session Updates** – Bomgar session data is written back to ServiceNow tickets. The basic integration includes chat transcripts. The enterprise integration includes chat transcripts, file transfers, system information, session notes, customer and representative exit surveys, and session recordings.
- **Inbound Support Sessions** – Remote end users can initiate Bomgar sessions with technicians through a Bomgar support portal embedded within the ServiceNow **Employee Self-Service** application. This is an enterprise-only feature.
- **Jump Sessions** – Technicians can connect directly to remote Configuration Items using Bomgar Jump Clients and/or vPro functionality. This is an enterprise-only feature.

For more details about the integration between Bomgar and ServiceNow, see [www.bomgar.com/products/integrations/servicenow](http://www.bomgar.com/products/integrations/servicenow).

# Requirements for the Bomgar Integration with ServiceNow

Outlined below are requirements for the basic and enterprise versions of the Bomgar and ServiceNow integration. If any of the integration requirements are not yet met, they will need to be in place prior to starting the integration setup process unless the associated features of the integration are not required.

## Basic Integration Requirements

1. ServiceNow instance with:
  - Version Aspen or later
  - A working Service Desk application
  - A working email configuration
2. Bomgar Appliance (physical or virtual) with:
  - Version 13.1 or later
  - At least one usable representative console which can generate session keys
  - A working Bomgar public site through which users can connect to representatives
3. Network firewall rules to allow:
  - TCP 443 traffic from the Bomgar Appliance to reach the appropriate ServiceNow instance
  - TCP 443 traffic from the appropriate ServiceNow instance to reach the Bomgar Appliance

## Additional Enterprise Integration Requirements

1. A working ServiceNow configuration management database (CMDB)
2. One or more ServiceNow Configuration Items on which Bomgar Jump Client services can be or have been installed
3. A working ServiceNow Employee Self Service (ESS) application and portal

## Firewall Test

It is important to test all requirements of the integration prior to beginning setup. Most of these can be tested by the Bomgar and ServiceNow administrators within their respective systems, but to test the network firewall, the Bomgar admin should take the following steps to confirm that the necessary rules are in place.

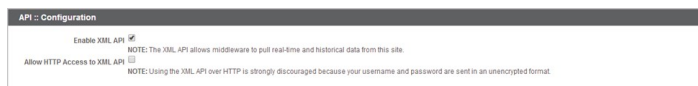
1. Log into a machine either external to the Bomgar Appliance's network or in the same VPN as the ServiceNow instance, depending on how ServiceNow is connecting to the appliance's network.
2. Log into the Bomgar Appliance's **/appliance** interface.
3. Browse to **Support > Utilities :: TCP Connection Test**.
4. Enter the hostname of the ServiceNow instance, enter the port number of **443**, and click **Test**. The result should be a **Connected** status message.

# Configure Bomgar for the ServiceNow Integration

All of the steps in this section take place in the Bomgar /login administrative interface. Access your Bomgar interface by going to the hostname of your Bomgar Appliance followed by /login (e.g., <https://support.example.com/login>).

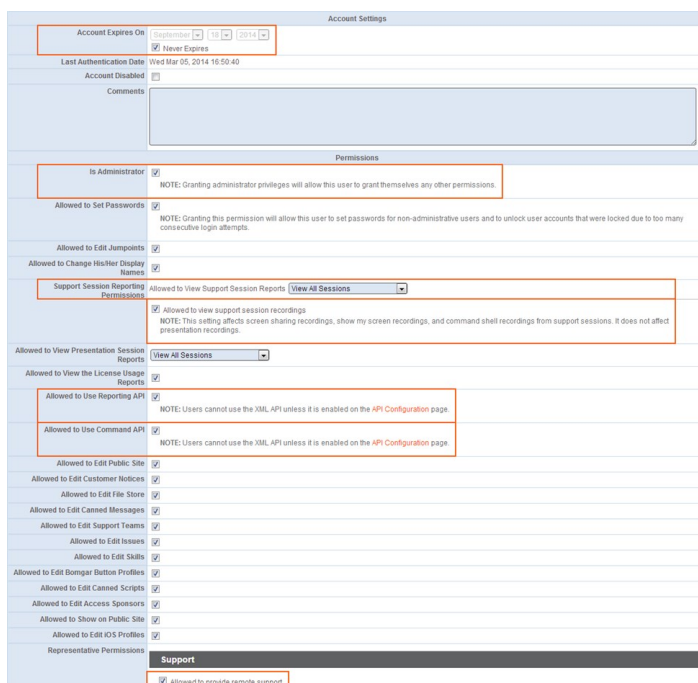
## 1. Verify that the API is enabled.

- If running Bomgar 14.2 or later, go to **/login > Management > API Configuration** and verify that **Enable XML API** is checked.
- If running a version of Bomgar prior to 14.2, go to **/login > Management > Security** and verify that **Enable XML API** is checked.



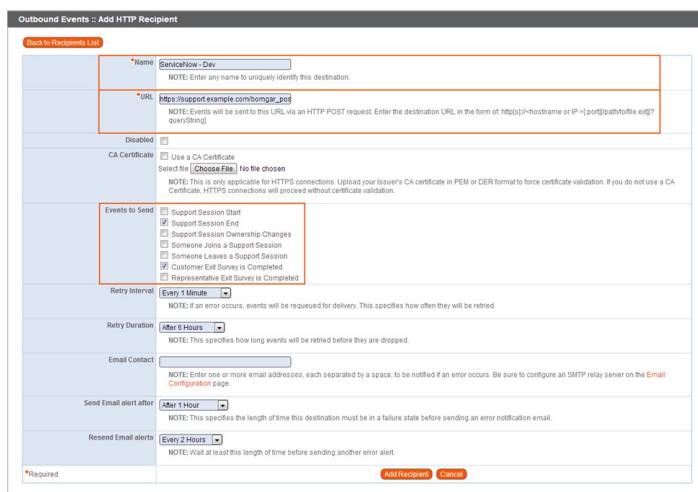
## 2. Create a ServiceNow API user account.

- Go to **/login > Users & Security > User Accounts**. Click **Create New User** and name it **ServiceNow** or something similar.
- Check **Is Administrator**.
- Set **Support Session Reporting Permissions** to **Allowed to View Reports** and **View All Sessions**.
- Check **Allowed to view support session recordings**.
- Check **Allowed to use reporting API** and **Allowed to use command API**.
- Check **Allowed to provide remote support**.
- Scroll to the bottom and save the account.
- Click **Edit** on the new account.
- Set **Password Expires On** to **Never Expires**. Save again.



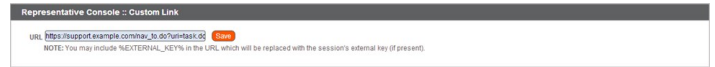
## 3. Add outbound events.

- Go to **/login > Management > Outbound Events**.
- Click **Add New HTTP Recipient** and name it **ServiceNow - Dev** or something similar, depending on your ServiceNow instance.
- Set the URL to [https://support.example.com/bomgar\\_post.do](https://support.example.com/bomgar_post.do) where [support.example.com](https://support.example.com) is the ServiceNow instance name.
- Scroll to **Events to Send** and check **Support Session End** and **Customer Exit Survey is Completed**.
- Scroll to the bottom and click **Add Recipient**.



4. Set the custom link.

- Browse to **Configuration > Options > Representative Console :: Custom Link**.
- Set the URL to `https://support.example.com/nav_to.do?uri=task.do?sys_id=%EXTERNAL_KEY%` where `support.example.com` is the ServiceNow instance name.
- Click **Save**.



Representative Console - Custom Link

URL `https://support.example.com/nav_to.do?uri=task.do?sys_id=%EXTERNAL_KEY%` **Save**

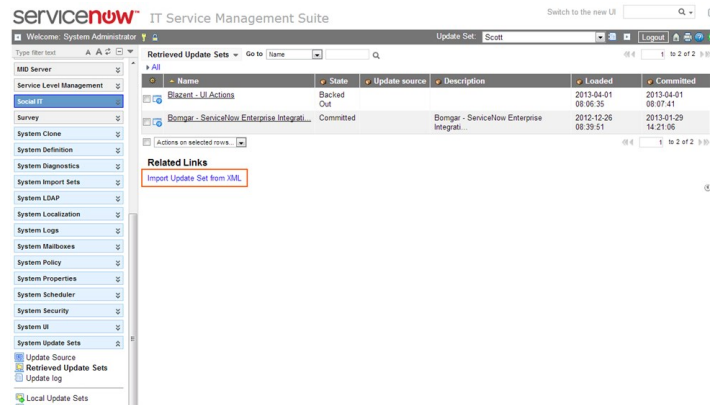
NOTE: You may include %EXTERNAL\_KEY% in the URL, which will be replaced with the session's external key (if present)

# Configure ServiceNow for Integration with Bomgar

Unless otherwise noted, all of the steps in this section take place in the ServiceNow interface. The development and/or test instances of ServiceNow should be used initially so that the integration can be thoroughly tested before installation in the production instance.

## 1. Import, preview, and commit update set(s).

- Log into ServiceNow with an administrative user account, browse to **System Update Sets > Retrieved Update Sets**, and click **Import Update Set from XML**.
- Find the update set you just imported in the list of retrieved update sets and click it. The name should include **Bomgar - ServiceNow**, and its **Loaded** date should be the most recent in the list. Then click **Preview Update Set** to check for errors. Look through each update set.
- If the preview is satisfactory, return to the main page of the update set and click **Commit**.

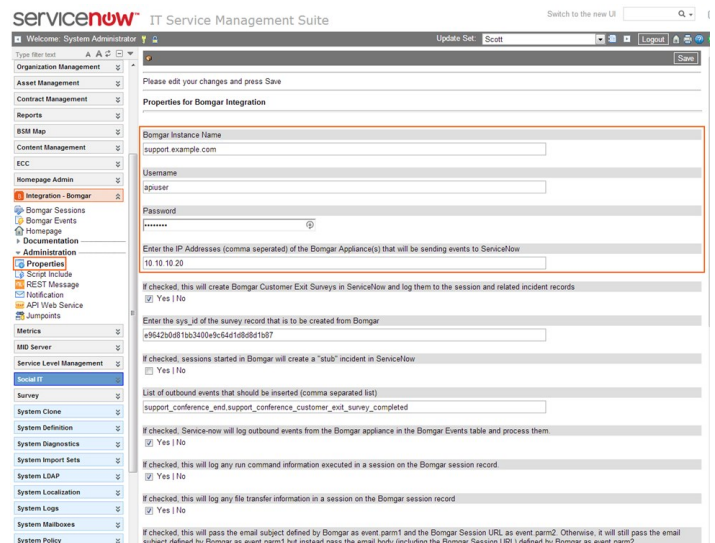


## 2. Create the local update set.

- Browse to **System Update Sets > Local Update Sets**, and click the **New** button above the list of update sets to create a new local update set.
- This update set will capture any changes you make during the configuration process. Just make sure that the **Bomgar Integration Install** update set is selected in ServiceNow's update set dropdown for the following steps.
- After configuration is complete and tested, the local update set can be imported or promoted to new instances of ServiceNow (e.g., the production instance) to quickly replicate the integration. This must be done after transferring the Bomgar - ServiceNow retrieved update set. See ["Transfer the Bomgar - ServiceNow Integration Update Sets" on page 13](#) for details.

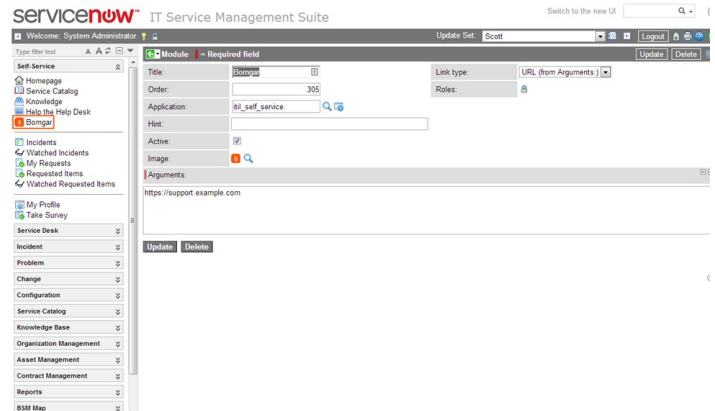
## 3. Configure Bomgar integration properties.

- Browse to **Integration - Bomgar > Administration > Properties** and at a minimum, configure the **Bomgar Instance Name**, **Username**, **Password**, and **Bomgar Appliance IP Address**. These should be taken from the DNS address of the Bomgar Appliance, the API user for ServiceNow on that appliance, and the IP address of the appliance, respectively.
- If Bomgar is using Shared IP Failover, the unique IP address of each appliance and the shared IP should be added to the integration properties using a comma-delimited list. See [www.bomgar.com/docs/content/features/failover](http://www.bomgar.com/docs/content/features/failover) for details.
- Save the settings.



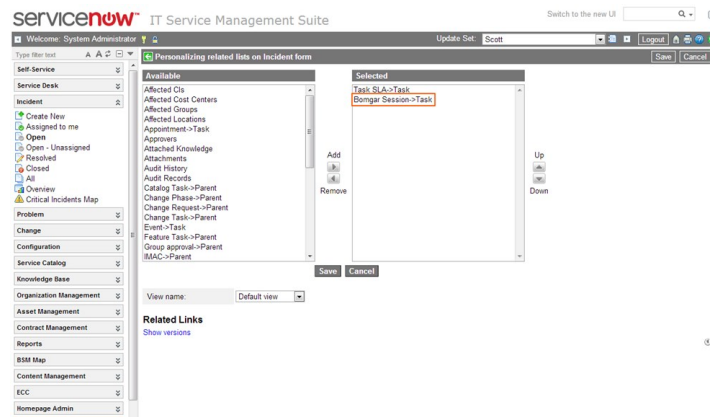
#### 4. Edit the Bomgar ESS module.

- This ESS module is available only with the enterprise version of the integration.
- Browse to **Self-Service**, right-click on the Bomgar icon, and select **Edit Module**.
- Note that right-clicking the Bomgar icon has an entirely different effect than left-clicking it, as does right-clicking the text beside the icon.
- In the **Arguments** field, put the Bomgar Appliance's URL (e.g., <https://support.example.com>).
- Click **Update** when done.



#### 5. Personalize incidents.

- Related Lists** – Browse to **Incident** and click **Create New** or select an incident by clicking the **Incident Number**. Right-click the **Incident** title bar and select **Personalize > Related Lists**. Ensure that **Bomgar Session > Task** has been moved to the **Selected** column, and then click **Save**.

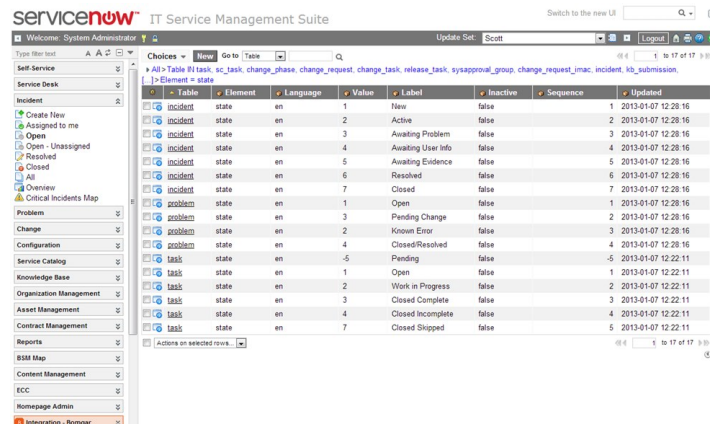


- Dictionary** – Skip this step if configuring the basic integration. Otherwise, open the test incident, right-click the label **Configuration Item**, and select **Personalize Dictionary**. Find the **Attributes** field and make sure one of the following is included in the comma-separated list:

- `ref_contributions=bomgar_jump`
- `ref_contributions=bomgar_vpro`
- `ref_contributions=bomgar_jump;bomgar_vpro`

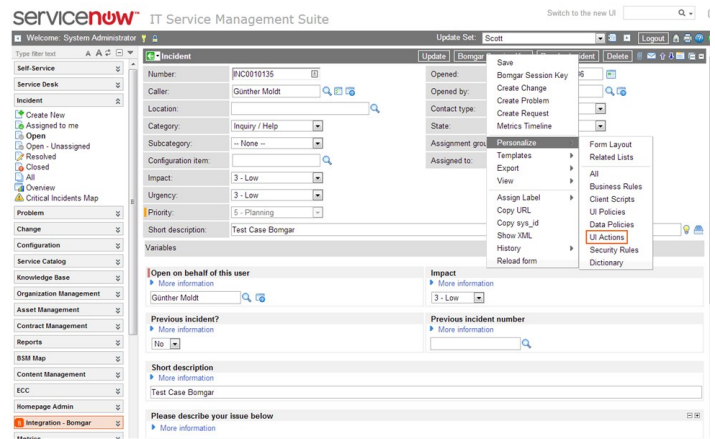
Be aware that **bomgar\_jump** requires that Bomgar Jump Clients be connected to each remote machine used and that **bomgar\_vpro** requires vPro to be set up and working separately, outside of ServiceNow and Bomgar.

- Choice List** – Open the test incident, right-click on the label **State**, and select **Show Choice List**. Take note of the different incident choices (you may want to filter the list by the **incident\_state** Element), specifically the value of incidents with a label of **Resolved** or **Closed** and any custom incident states for which **Bomgar Session Key** should not appear.

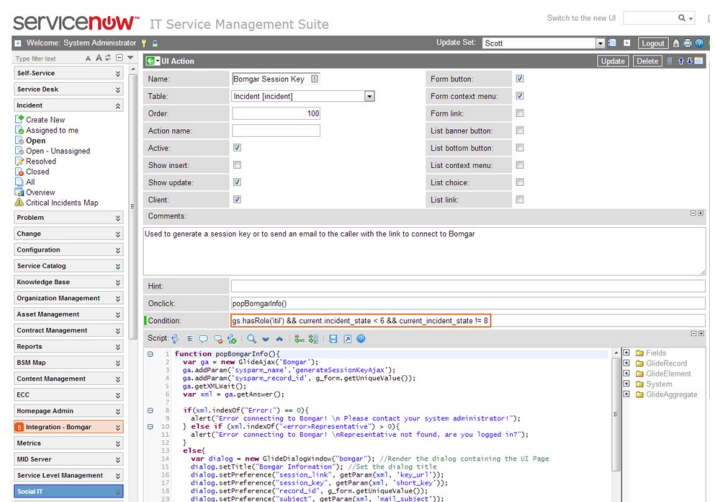
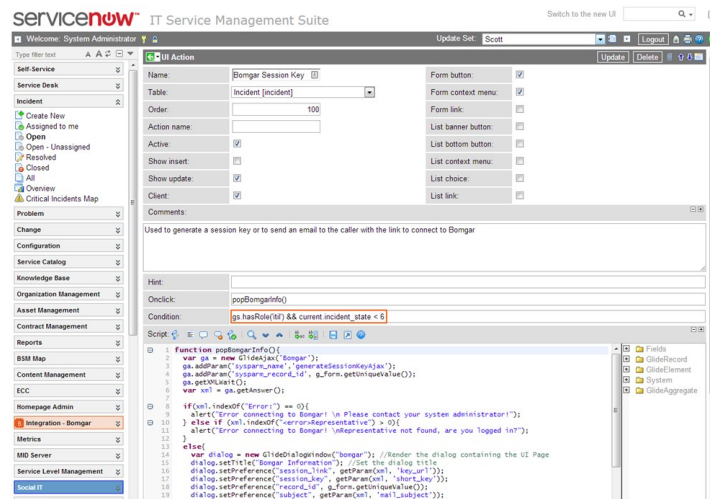




- UI Actions** – Go back to the incident, right-click on the **Bomgar Session Key** button located in the **Incident** title bar, and select **Personalize > UI Actions**. In the UI Actions list, click **Bomgar Session Key**, focus the **Condition** field, and ensure **current.incident\_state** is configured to include the IDs of the incident states for which the session key button should not appear.

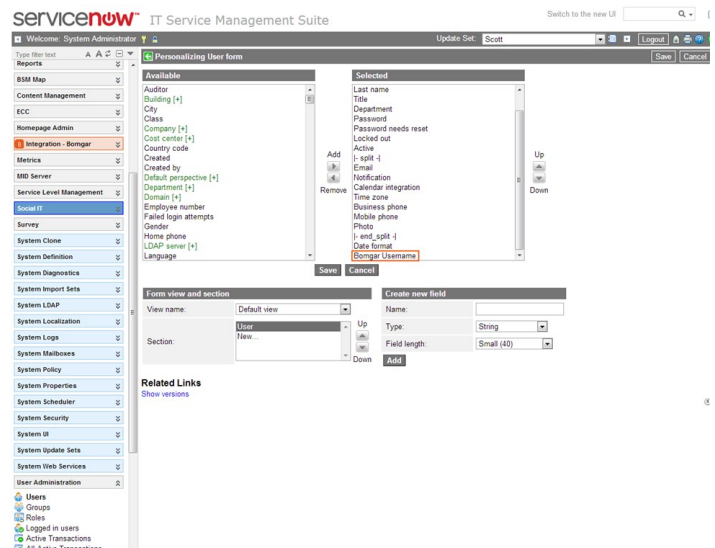
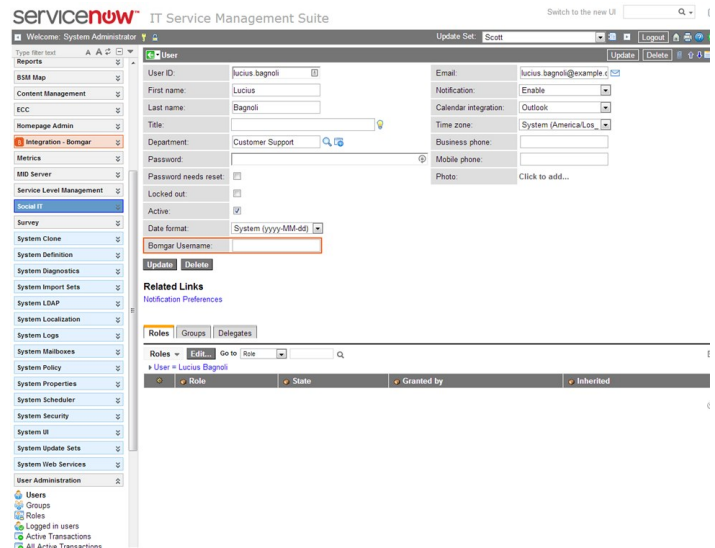


- current.incident\_state example** – If the **Resolved** and **Closed** fields you took note of earlier have values of **6** and **7**, then the **Condition** field mentioned above should include the code `current.incident_state < 6` so as not to show a Bomgar Session Key button on resolved or open incidents. If there are custom incidents (e.g., **Complete**), then the condition field may require logic such as `&& current.incident_state != 8`.



## 6. Set up Bomgar username authentication.

- Log into your Bomgar /login interface with the same credentials as a ServiceNow user who is expected to be using Bomgar. Download and install a Bomgar representative console from the **/login > My Account** tab.
- If login fails:
  - Make sure that Bomgar and ServiceNow are checking credentials against the same LDAP server(s), if appropriate. Check the LDAP server in the Bomgar interface under **/login > Users & Security > Security Providers**. To check the LDAP server for ServiceNow, see the LDAP Integration Setup article at [wiki.servicenow.com/index.php?title=LDAP\\_Integration\\_Setup](https://wiki.servicenow.com/index.php?title=LDAP_Integration_Setup)
  - If LDAP authentication is not being used, log into ServiceNow, browse to **User Administration > Users**, select the user to be used for testing, and focus the **Bomgar Username** field.
  - If this field does not exist while viewing a user, hover over the icon next to **User** on the title bar, select **Personalize > Form Layout**, and move the **Bomgar Username** field from the **Available** list to the **Selected** list. Once done, enter the name of a known-working Bomgar user account in this field and save.



## 7. Check email notifications.

- Browse to **Integration - Bomgar > Administration > Notification**. On the **Email Notifications** screen, click the **Bomgar Notification** link. Verify that **Send When** equals **Event is fired** and **Event Name** equals **bomgar.link.notification**. Finally, check that **Users/groups in fields** under the **Who will receive** tab equals **Caller**.
- Browse to **System Properties > Email**. On the **Email Properties** screen, verify that the SMTP and POP settings are correct, security settings are correct, and advanced settings are correct.

# Test the Setup of the Bomgar and ServiceNow Integration

## 1. Test the ServiceNow API user.

- Log into a machine outside of the Bomgar Appliance's network and enter the following URL into a web browser:  
`https://support.example.com/api/command.ns?username=API_USERNAME&password=API_PASSWORD&action=generate_session_key&type=support&queue_id=general&external_key=123`, being sure to use the hostname of the Bomgar Appliance and the appropriate values for the username, password, and external key.
- If the browser returns an XML document tree in `<session_key>` tags, the test was successful. In most browsers, the following message is expected: "This XML file does not appear to have any style information associated with it." In case of failure:
  - Check the username and password of the Bomgar local user account. This is located in the Bomgar interface under **/login > Users & Security > User Accounts**.
  - Check access in the Bomgar interface under **/login > Management > Security :: /login Network Restrictions** to confirm that the IP address range for ServiceNow is allowed.
  - Check that TCP port 443 is allowed through the firewall to Bomgar. This can be done using telnet as follows:  
`telnet support.example.com 443`. If the terminal window returns a blank, black screen and blinking cursor, the port is open.

## 2. Test the Bomgar Session Key button.

- Log into ServiceNow and open a closed incident and a resolved incident to make sure the **Bomgar Session Key** button does not appear.
- In ServiceNow, open a test incident. Confirm the **State** field matches one of the values for which the **Bomgar Session Key** button should appear, and make sure the button appears as expected. Remember that the incident must be saved before the **Generate Session Key** button will appear. Once done, click the button. It should return a window with a seven-digit session key, a session URL, and a button to email the key. In case of failure:
  - Ensure that the ServiceNow user account is mapped to a Bomgar user account as described in ["Configure Bomgar for the ServiceNow Integration" on page 5](#).
  - Make sure TCP port 443 is allowed from the ServiceNow network (typically the WAN) to the Bomgar Appliance (typically the DMZ).
  - In ServiceNow, open **Integrations - Bomgar > Administration > Properties** and make sure the **Bomgar Instance Name**, **Username**, and **Password** fields are set correctly per the ServiceNow API user test above.

## 3. Test session updates.

- In ServiceNow, use the **Generate Session Key** button to start a Bomgar session, and then stop the session.
- In the Bomgar interface, check Bomgar's outbound event status at **/login > Management > Outbound Events**. Make sure that it reads **OK**. Otherwise, check the configuration of the event.
- Return to the ServiceNow incident from which the session key was generated, scroll to the bottom of the page, and check the **Bomgar Sessions** tab. There should be an entry for the recent session. If not:
  - Check that TCP port 443 is allowed from the Bomgar Appliance to ServiceNow using the Bomgar /appliance TCP connection test outlined in ["Requirements for the Bomgar Integration with ServiceNow" on page 4](#).
  - Switch to ServiceNow, open **Integration - Bomgar > Administration > Properties**, and make note of the **Bomgar Appliance IP Address**. Browse to **System Logs > Transactions**, filter the list by **bomgar\_post**, and click one of the results. Make sure the originating IP address of the transaction matches that set in the integration properties.

## 4. Test the Employee Self-Service application (enterprise only).

- Log into ServiceNow as a non-admin (non-ITIL) user, or use the key icon in the upper left of the screen to switch to such a user if an admin is already logged in.

- Open a new incident and click **Get Support Now**. A Bomgar session client or chat session should spawn. If not:
  - In the Bomgar interface, go to **/login > Public Portals > Public Sites** and edit the public site for the DNS address entered in ServiceNow's Bomgar ESS module, and make sure **Use Issue Submission Survey** is enabled.

5. Test Jump sessions (enterprise only).

- Log into the Bomgar representative console and search for a Jump Client which is currently running on a machine included in the ServiceNow CMDB. This will ensure the Jump Client in question can be accessed using the Configuration Item in ServiceNow incidents.
- In ServiceNow, create or open an incident, assign the above host as the Configuration Item (CI) of the incident, and click the orange **Jump to CI with Bomgar** button.
- Run the resulting .brcs file and make sure the representative console launches a session with the remote host in question.
- If applicable, test the **Jump to CI with vPro via Bomgar** and **Push and Start with Bomgar** buttons for the ServiceNow CI in the same way as above.

## Transfer the Bomgar - ServiceNow Integration Update Sets

The steps below are typically used after the integration has been imported and configured in a test/development instance of ServiceNow and is being transferred to a production instance. However, they are also applicable to transferring the integration between any ServiceNow instances.

1. Follow the steps in the ServiceNow documentation to transfer the **Bomgar - ServiceNow Integration** update set(s) into the destination instance of ServiceNow.

**Note:** This is typically done by retrieving the update sets from the destination instance or by exporting the update sets from the original instance as XML files. See "Transferring Update Sets" in the ServiceNow product documentation for details: [https://wiki.servicenow.com/index.php?title=Transferring\\_Update\\_Sets](https://wiki.servicenow.com/index.php?title=Transferring_Update_Sets).

2. Follow the same steps to transfer the **Bomgar Integration Install** update set.
3. In the Bomgar interface, go to **/login > Management > Outbound Events** and add a new event which uses the URL of the destination ServiceNow instance. Click **Add Recipient**.
4. Locate the outbound event created during testing and click **Edit**. Check the **Disabled** checkbox and save.

**Outbound Events :: Add HTTP Recipient**

[Back to Recipients List](#)

**Name**  NOTE: Enter any name to uniquely identify this destination.

**URL**  NOTE: Events will be sent to this URL via an HTTP POST request. Enter the destination URL in the form of http(s)://hostname or IP + [:port]/path/to/file.ext?queryString

**Disabled** ☐

**CA Certificate** ☐ Use a CA Certificate   NOTE: This is only applicable for HTTPS connections. Upload your issuer's CA certificate in PEM or DER format to force certificate validation. If you do not use a CA Certificate, HTTPS connections will proceed without certificate validation.

**Events to Send**

- ☐ Support Session Start
- ☒ Support Session End
- ☐ Support Session Ownership Changes
- ☐ Someone Joins a Support Session
- ☐ Someone Leaves a Support Session
- ☒ Customer Exit Survey is Completed
- ☐ Representative Exit Survey is Completed

**Retry Interval**  NOTE: If an error occurs, events will be requested for delivery. This specifies how often they will be retried.

**Retry Duration**  NOTE: This specifies how long events will be retried before they are dropped.

**Email Contact**  NOTE: Enter one or more email addresses, each separated by a space, to be notified if an error occurs. Be sure to configure an SMTP relay server on the Email Configuration page.

**Send Email alert after**  NOTE: This specifies the length of time this destination must be in a failure state before sending an error notification email.

**Resend Email alerts**  NOTE: Wait at least this length of time before sending another error alert.

\*Required

5. Go to **/login > Configuration > Options** and scroll down to **Representative Console :: Custom Link**. Update the URL to direct to the destination instance of ServiceNow.
6. Test the integration setup in its new location following the same steps used to test the original instance. See "Test the Setup of the Bomgar and ServiceNow Integration" on page 11.

**Representative Console :: Custom Link**

**URL**   NOTE: You may include "%EXTERNAL\_KEY%" in the URL, which will be replaced with the session's external key (if present).

## Properties for Bomgar Integration with ServiceNow

After the initial setup is complete and tested, you may wish to customize the **Properties** page of the **Integration - Bomgar** application in ServiceNow. The meaning and expected behavior of these options are explained below.

### Bomgar Instance Name

The hostname or IP address of your Bomgar site.

### Username

The Bomgar username which is set up in the Bomgar /login interface.

### Password

The password for the Bomgar user which is set up in the Bomgar /login interface.

### Bomgar Appliance IP Address

The IP address of the Bomgar Appliance.

### Create Bomgar Exit Surveys

Writes customer exit survey information into ServiceNow session and related incident reports. It is recommended to uncheck this setting. This setting requires a ServiceNow customer exit survey setup exactly the same as the Bomgar customer exit survey setup. ServiceNow supports only one survey per incident, but Bomgar supports one survey per session. This does not match up very well for most customers.

### Survey Record sys\_id

The System ID of the survey record to which Bomgar surveys are matched.

### Create Stub Incident

Creates a stub incident in ServiceNow for sessions started in Bomgar. This automatically creates an incident in ServiceNow for sessions started outside of ServiceNow, i.e., sessions that are not already associated with a ServiceNow incident. This setting is generally unchecked because it contains very limited data and clutters the list of incidents, but you may find it useful because it provides additional audit trail. These stub incidents are also unassigned in ServiceNow.

### Outbound Events

Comma-separated lists of outbound events. The complete list of outbound events which can be used here is: **support\_conference\_end, support\_conference\_customer\_exit\_survey\_completed, support\_conference\_rep\_exit\_survey\_completed**.

### Log Outbound Events

Logs Bomgar outbound events that come to ServiceNow into the Bomgar Events table and processes the events.

### Log Run Commands

Logs Bomgar run commands which happen in the Bomgar session into ServiceNow. This allows links to command shell recordings to be imported into ServiceNow.

### File Transfers

Logs Bomgar file transfers into ServiceNow.

### Pass Email Subject

This relates to emailing through ServiceNow. It is possible to specify an email template to use in ServiceNow, but most users start with the default email template.

### System Information

Logs Bomgar session information into ServiceNow.

### Session Key Validity Duration

The amount of time a session key should be valid. If left blank, the Bomgar /login default is used.

### Jump Client Button

Activates a button on the `cmdb_ci_computer` table to Jump to the CI. If integration is not going to use Jump Clients, then uncheck this setting.

### Work Notes

Notes added during a Bomgar session can be imported and tied to the Bomgar session within ServiceNow. This option also allows the work note to be rolled up into the incident so that it is logged in two places.

### Button and Session Notes

Logs a work note on the incident every time the **Get Support Now** or **Generate Session Key** buttons are clicked or when a Bomgar session is completed.

### System Messages

Displays all Bomgar system messages that were created during the chat session. If unchecked, only the chat dialogue between the representative and the customer will be displayed in ServiceNow. It is recommended to check this setting so that all system messages can be seen, giving a full picture of the session.

### View Recorded Sessions

Shows a button which allows you to view recorded Bomgar sessions. Bomgar must be configured to record sessions.

### General Queue

If checked, generated session keys will always go to the general queue and not to a specific representative. In most cases, a session should go to the representative who generated the session key.

**Click-to-Chat**

Enables click-to-chat when starting sessions from Self Service. If this is not checked, the full Bomgar customer client is downloaded to the end user.

**Available Reps**

Allows the end user to select from a list of available representatives when choosing to get support now. It is recommended to uncheck this setting.

**Start Session from Ticket**

Allows the end user to start a Bomgar session from their submitted ticket.