Remote Support

BMC Remedy Integration

Table of Contents

BeyondTrust Integration with BMC Remedy

IMPORTANT!

You must purchase this integration separately for both your Remote Support software and your BMC Remedy solution. For more information, contact BeyondTrust's Sales team.

Service desks and customer support organizations using BMC Remedy can integrate with BeyondTrust to improve service levels, centralize support processes, and strengthen compliance. This document describes the installation and configuration of the BeyondTrust Remote Support integration with BMC Remedy.

The BMC Remedy integration with BeyondTrust Remote Support provides the following functionality:

- A BeyondTrust support session can be initiated from the context of a BMC Remedy ticket.
- A BeyondTrust Jump session can be initiated to a computer system Configuration Item associated with a ticket.
- At the end of a session, the incident can be updated with the session information.

Prerequisites for the BeyondTrust Remote Support Integration with BMC Remedy

To complete this integration, please ensure that you have the necessary software installed and configured as indicated in this guide, accounting for any network considerations.

Applicable Versions

- BeyondTrust Remote Support: 14.x and newer
- BMC Remedy: 8.x and newer

Network Considerations

The following network communication channels must be open for the integration to work properly.

Outbound From	Inbound To	TCP Port #	Purpose
BeyondTrust Middleware Engine Server	BMC Remedy	443	API calls from the BeyondTrust Middleware Engine server.
BeyondTrust Middleware Engine Server	BeyondTrust Appliance B Series	443	API calls from the BeyondTrust Middleware Engine server.
BeyondTrust Appliance B Series	BeyondTrust Middleware Engine Server	8180 (default) 443 (optional)	The BeyondTrust Middleware Engine server receives outbound events from the B Series Appliance. However, if polling is used instead of outbound events, then this port does not have to be open.

Prerequisite Installation and Configuration

The BMC Remedy integration is a BeyondTrust Middleware Engine plugin.

ℹ️ *For more information on installing and working with the BeyondTrust Middleware Engine, please see the BeyondTrust Remote Support Middleware Engine Installation and Configuration document at www.beyondtrust.com/docs/remote-support/how-to/integrations/middleware-engine.*

Configure BMC Remedy for Integration with BeyondTrust Remote Support

Integration between BMC Remedy and BeyondTrust Remote Support requires importing a collection of custom objects into the BMC Remedy environment. These include Filters, Active Links, Web Services, etc. The following steps outline this import and configuration process.

Initially, some manual steps must be taken before the bulk of the AR System items can be imported.

Import Forms

1. Open BMC Remedy Developer Studio.
2. From the main menu, select **File > Import**.
3. Expand **BMC Remedy Developer Studio**.
4. Select **Object Definitions** and click **Next**.
5. Select the appropriate server and click **Next**.
6. Select the **bomgar_Remedy_Int_With_Incident_Vx.x.xml** file from the appropriate location and click **Next**.
7. From the XML file, add the following forms, removing all other items:

   - **COL:BGR:SessionDetail:Staging**
   - **COL:BGR:Configuration:Params**
   - **COL:BGR:Form:Setup_Template**

8. Select the following options:
   - **Replace Objects on the Destination Server**
   - **Delete Excess Views**
   - **Replace Application Owner**
   - **Handle Conflicting Types: Display Conflict Error**

9. Click **Finish**.
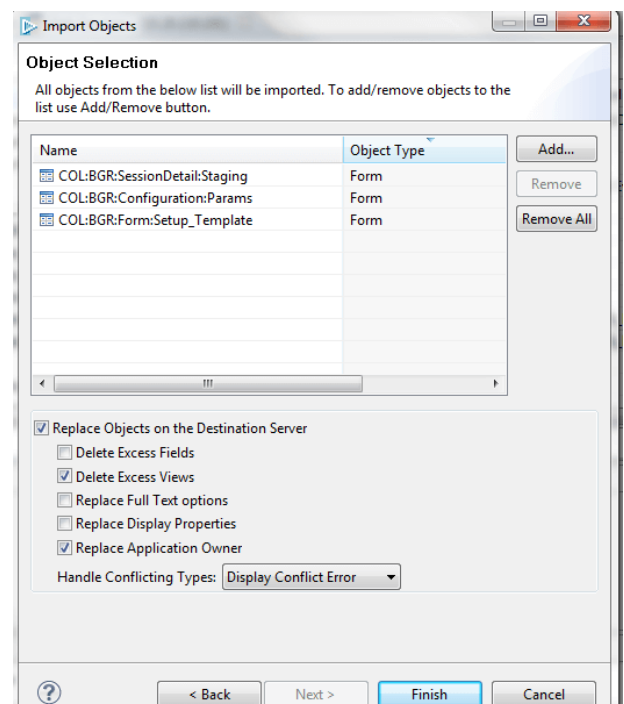
> 📌 **Note:** The import process may take several minutes to complete. Upon successful completion, the above forms will have been imported into the AR System.

Update Existing Forms - HPD:Help Desk

Note: Before this operation, determine in which views the fields will be visible.

To save time, it may be a good idea to set the Remedy Administrator preferences (in the **Windows > Preferences** menu) so that fields are not automatically added to all views. This way, fields are added only to the views to which they are pasted. Also, make sure to back up the Incident Form.
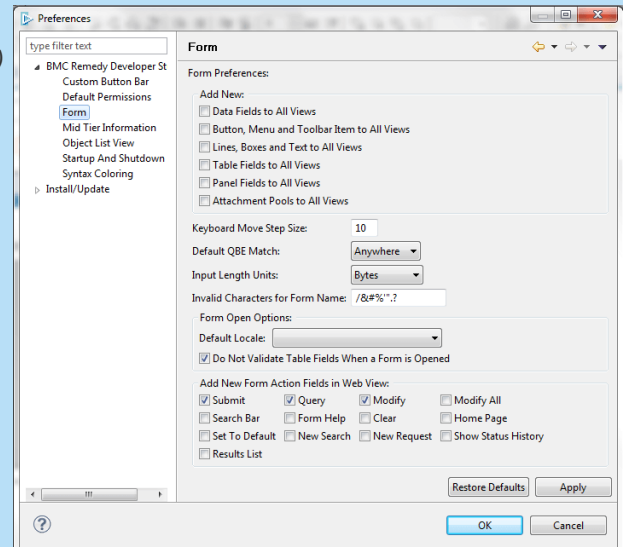
1. Open the **Incident** form (**HPD:Help Desk**) in the **Best Practices** view in Developer Studio.
2. Also open the newly imported **COL:BGR:Form:Setup_Template**.
3. If the **Incident** form does not already have an overlay, select **Forms > Create View Overlay** from the menu.
4. Add a new Panel with the following properties:
   - **ID:** 800000001
   - **Name:** COL_Pnl_BeyondTrust_Sessions
   - **Label:**BeyondTrust Sessions
   - **VisIble:** False
   - **Permission:** Public
5. Copy and paste the following fields from the **Setup_Template** form to the new panel on the **Incident** form.
   - **800000002:** COL_Tbl_Session_Summary
   - **800000003:** COL_Col_Session_ID
   - **800000004:** COL_Col_Start_Time
   - **800000005:** COL_Col_End_Time
   - **800000006:** COL_Col_Duration
   - **800000007:** COL_Col_File_Count
   - **800000008:** COL_Col_Representative
   - **800000009:** COL_Ctrl_BeyondTrust_Logo
   - **800000010:** COL_Char_Support_Session_Details

6. Once complete, the **BeyondTrust Sessions** panel should look similar to the screen shot. Save the form.
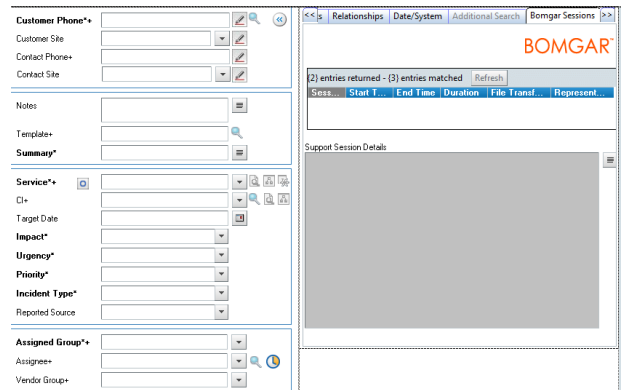
Add "Launch BeyondTrust Session Key" Link to Left Navigation

1. Add the left navigation **z2NF_LeftNavigation** to the overlay and save it.
2. Select the left navigation from the outline window and right-click it.
3. Select **Edit Menu / Navigation Items**.
4. In the **Edit** window, expand the **Functions** items to add a new item under this menu.
5. Select the **Functions** menu and click **Add Item**.
6. Once the item is added, select it and edit its properties to match the following:

   - **ID:** 900370918
   - **Name:** COL_z2NI_LaunchBomgarSession()
   - **Label:** Launch BeyondTrust Session Key
   - **Visible:** True
   - **Permission:** Public
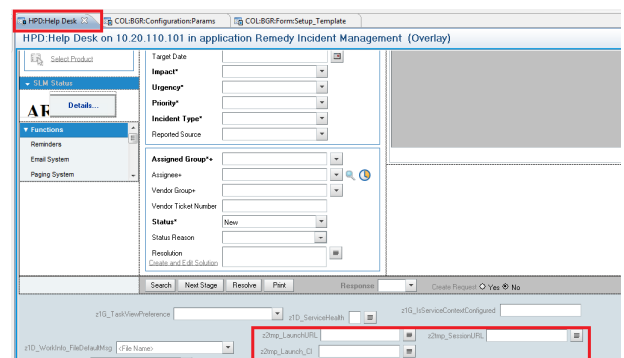
7. Save the **Incident** form.
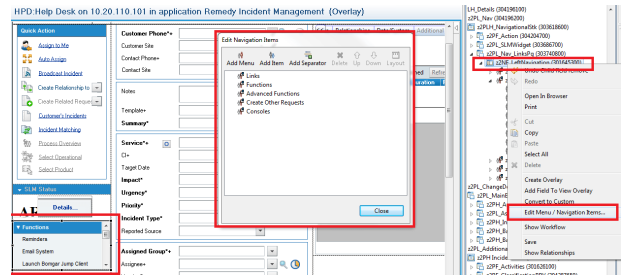
Add Display-Only Fields

1. Copy the following display-only fields from the **Setup_Template** form to the bottom area of the **Incident** form:

   - **900070914:** z2tmp_LaunchURL
   - **900070917:** z2tmp_Launch_CI
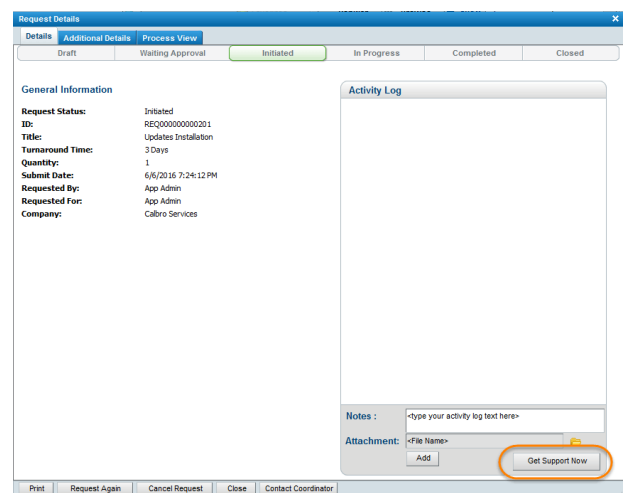   - **900270919:** z2tmp_SessionURL

2. Save the form.

Add "Launch BeyondTrust Jump Client" Link to Left Navigation

1. Select the left navigation from the outline window and right-click it.
2. Select **Edit Menu / Navigation Items**.
3. In the **Edit** window, expand the **Functions** items to add a new item under this menu.
4. Select the **Functions** menu and click **Add Item**.
5. Once the item is added, select it and edit its properties to match the following:
   - **ID:** 908970913
   - **Name:** COL_z2NI_Launch BeyondTrust CI
   - **Label:** Launch BeyondTrust Jump Client
   - **Visible:** True
   - **Permission:** Public
6. Save the **Incident** form.

Update Existing Forms - SRS:RequestDetail

1. Open the **Service Request Console** form (**SRS:RequestDetail**) in **SRS User** view in **Developer Studio**.
2. Also open the newly imported **COL:BGR:Form:Setup_Template (SRM-RQC View)**.
3. If the **Service Request** form does not already have an overlay, select **Forms > Create View Overlay** from the menu.
4. Copy and paste the following fields from the **Setup_Template** form to the new panel on the **Service Request** form.
   - **800000600:** COL_Btn_Get_Support_Now
   - **800000601:** COL_VF_Launch_Support_Window
   - **800000602:** COL_Char_Mid-Tier_URL
   - **800000603:** COL_Char_Incident_Number
5. Once complete, the request details should look similar to the screen shot. Save the form.

Import Remaining Items

Once the manual steps above have been completed, the remainder of the package can be imported.

1. From the main menu, select **File > Import**.
2. Expand **BMC Remedy Developer Studio**.
3. Select **Object Definitions** and click **Next**.
4. Select the appropriate server and click **Next**.
5. Select the **bomgar_Remedy_Int_With_Incident_Vx.x.xml** file from the appropriate location and click **Next**.
6. Import all objects, making sure to select **Replace Objects on the Destination Server**.
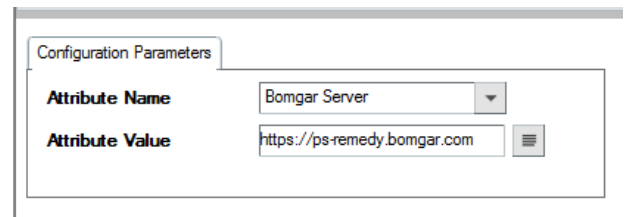7. Click **Finish**.

> 📌 **Note:** *The import process may take several minutes to complete. Upon successful completion, the required forms, workflows, and web services will have been imported into the AR System.*

8. Flush the Mid-Tier and browser caches, located at **<protocol>://<mid-tier-server>:<port>/arsys/shared/config/config.jsp**.

Configure the Integration

1. In a browser, open the **Configuration Params** form (**<protocol>://<mid-tier-server>:<port>/arsys/forms/<AR-server-name>/COL:BGR:Configuration:Params**).
2. Add attribute details for the **BeyondTrust Server** attribute for both the **Launch Session** and **Launch BeyondTrust CI (Jump Client)** items.
3. The **Attribute Value** should be **https://<BeyondTrust-site-hostname>**.


> 📌 **Note:** *Access to the **BeyondTrust Sessions** tab as well as the **Session Key** and **Jump to CI** functions are controlled by users' group memberships. Any user who should have access to these items should be added to a new Group in Remedy named "BeyondTrust Users".*

Configure Smart IT for the Integration between BMC Remedy and BeyondTrust Remote Support
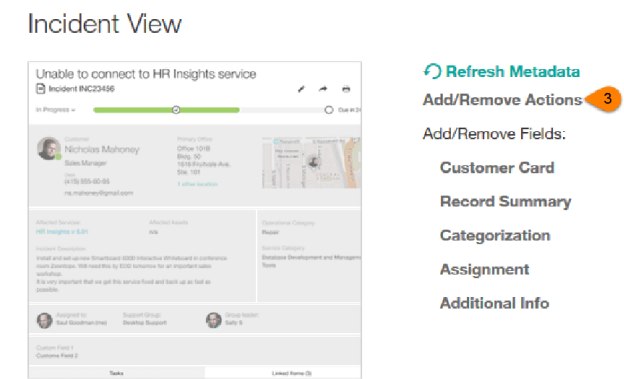
If your environment has Smart IT available, there are a few use cases that can be implemented within Smart IT.

Generate BeyondTrust Session Key

1. Log in to Smart IT as an admin user (**<protocol>://<mid-tier-server>:<port>/ux/smart-it/#/**).
2. Navigate to **Configuration > Screen Configuration**.
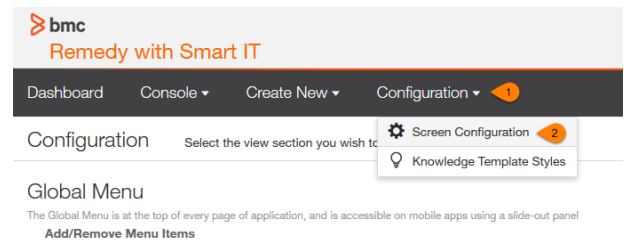
3. In the **Incident View** section, select **Add/Remove Actions**.

4. Create a new action with the following settings:
   - **Action Type:** Client-side URL
   - **Supported Platforms:** Desktop Web (UC)
   - **URL/URI:** `https://<BeyondTrust-hostname>/api/client_script?public_portal_hostname=<BeyondTrust-public-portal-hostname>&type=rep&operation=generate&action=generate_session_key&session.custom.external_key=[id]`
   - **Open Behavior:** New Browser Window
   - **Default Label Text:** Generate BeyondTrust Session Key
5. Save the action.
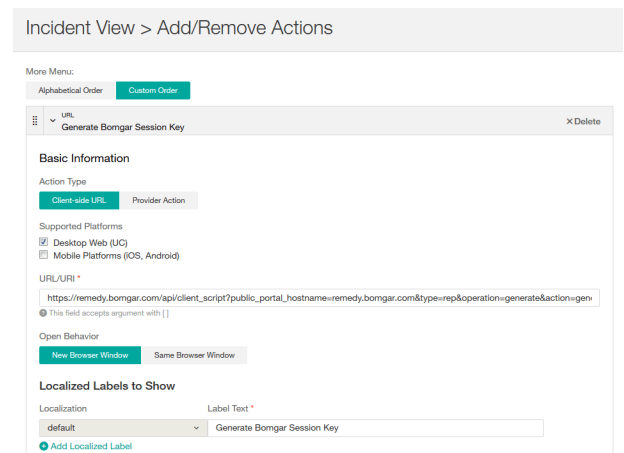
Leverage Smart Recorder to Create Incidents

BeyondTrust 15.1 and later

1. Log in to the BeyondTrust /login interface as an admin user.
2. Browse to **Rep Console > Custom Links**.
3. Under **Rep Console :: Custom Links**, click **Create New Custom Link**.
4. Create a link with the following settings:
   - **Name:** Create Incident via BMC Smart IT
   - **URL:** `<protocol>://<mid-tier-server>:<port>/ux/smart-it/#/create/smart-recorder?customer=%CUSTOMER.NAME%&desc=%SESSION.DETAILS%`
5. Click **Add Custom Link** to save the new link.

BeyondTrust 15.0 and earlier

1. Log in to the BeyondTrust /login interface as an admin user.
2. Browse to **Configuration > Options > Representative Console :: Custom Link**.
3. Set the URL to `<protocol>://<mid-tier-server>:<port>/ux/smart-it/#/create/smart-recorder?customer=%CUSTOMER.NAME%&desc=%SESSION.DETAILS%`
4. Click **Save**.

SALES: www.beyondtrust.com/contact   **SUPPORT:** www.beyondtrust.com/support   **DOCUMENTATION:** www.beyondtrust.com/docs

12
TC: 3/4/2024

Configure BeyondTrust for the BMC Remedy Integration

Several configuration changes are necessary on the B Series Appliance to integrate with BMC Remedy. You must make these changes on each B Series Appliance for which you intend to create a plugin configuration, described in "Configure the BMC Remedy Plugin for Integration with BeyondTrust Remote Support" on page 16.

All of the steps in this section take place in the BeyondTrust **/login** administrative interface. Access your Remote Support interface by going to the hostname of your B Series Appliance followed by **/login** (e.g., https://support.example.com/login).

Verify the API Is Enabled

⚙️ Management	API CONFIGURATION

This integration requires the BeyondTrust XML API to be enabled. This feature is used by the BeyondTrust Middleware Engine to communicate with the BeyondTrust APIs.

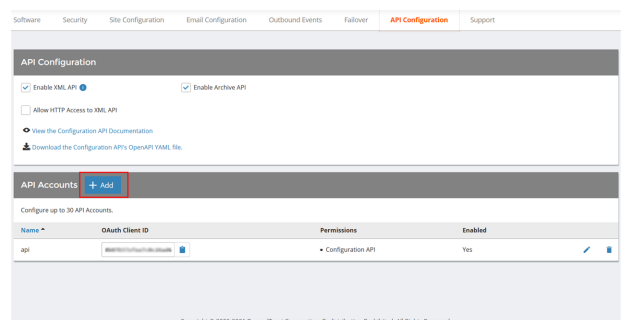Go to **/login > Management > API Configuration** and verify that **Enable XML API** is checked.
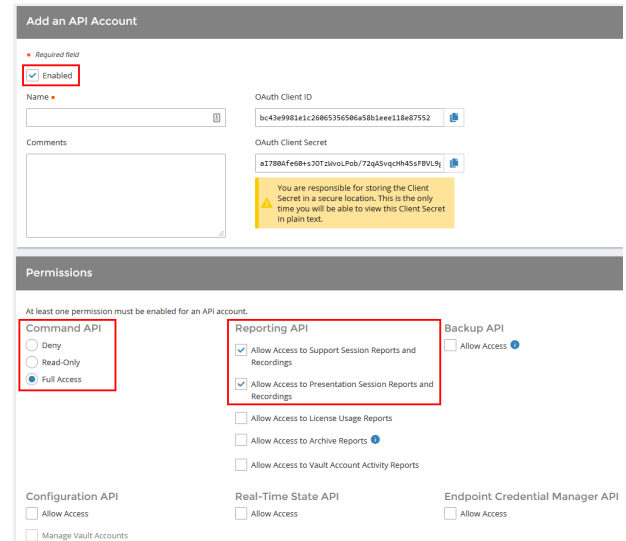
Create an OAuth API Account

⚙️ Management	API CONFIGURATION

The BMC Remedy API account is used from within BMC Remedy to make Remote Support Command API calls to Remote Support.

1. In **/login**, navigate to **Management > API Configuration**.
2. Click **Add**.

3. Check **Enabled**.

4. Enter a name for the account.

5. **OAuth Client ID** and **OAuth Client Secret** is used during the OAuth configuration step in BMC Remedy.

6. Under **Permissions**, check the following:

   - Command API: **Full Access**.
   - Reporting API: **Allow Access to Support Session Reports and Recordings**, and **Allow Access to Presentation Session Reports and Recordings**.

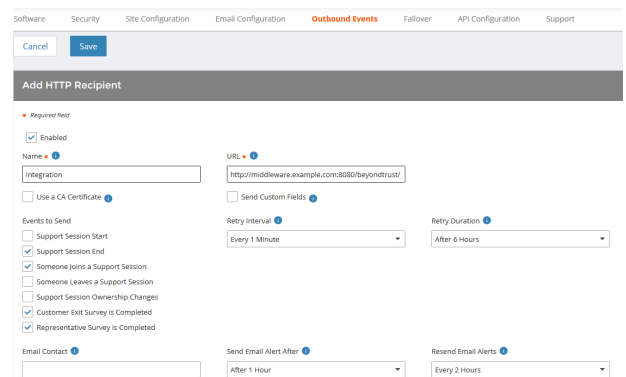7. Click **Save** at the top of the page to create the account.

Add an Outbound Event URL

⚙ Management	OUTBOUND EVENTS

1. Go to **/login > Management > Outbound Events**.

2. In the HTTP Recipients section, click **Add** and name it **Integration** or something similar.

3. Enter the URL to use:

   - If using an appliance ID of **default**: **http://<middleware-host>:<port>/ERSPost**. The default port is **8180**.

   - If using an appliance ID other than **default**: **http://<middleware-host>:<port>/ERSPost?appliance=<appliance-id>** where **<middleware-host>** is the hostname where the BeyondTrust Middleware Engine is installed. The default port is **8180**. The **<appliance-id>** is an arbitrary name, but note the value used, as it is entered later in the plugin configuration. This name accepts only alphanumeric values, periods, and underscores.

4. Scroll to **Events to Send** and check the following events:

   - **Support Session End**
   - **Customer Exit Survey is Completed**
   - **Representative Survey is Completed**
   - **Someone Joins a Support Session** (Optional)

5. Click **Save**.

6. The list of outbound events contains the event just added. The **Status** column displays a value of **OK** if communication is working. If communication is not working, the **Status** column displays an error which you can use to repair communication.

HTTP Recipients + Add

Configure up to 10 external HTTP servers that will be notified when certain session events occur. These servers must respond to each event with HTTP 200 in order to be considered successful.

Name ▲	Disabled	URL	Events to Send	Status		
Integration	No	http://middleware-host	Access Session End	The given remote host was not resolved.	✎	🗑
Integration1	No	http://middleware-host:8190	Access Session End	The given remote host was not resolved.	✎	🗑
Test	No	http://middleware-host:8190	Access Session End	The given remote host was not resolved.	✎	🗑
Testing	No	https://icpam1-qa.bomgar.com/	Access Session End	The requested url was not found or returned another error with the HTTP error code being 400 or above.	✎	🗑

Configure the BMC Remedy Plugin for Integration with BeyondTrust Remote Support

Now that you have configured BMC Remedy and the B Series Appliance, deploy and configure the BMC Remedy plugin.
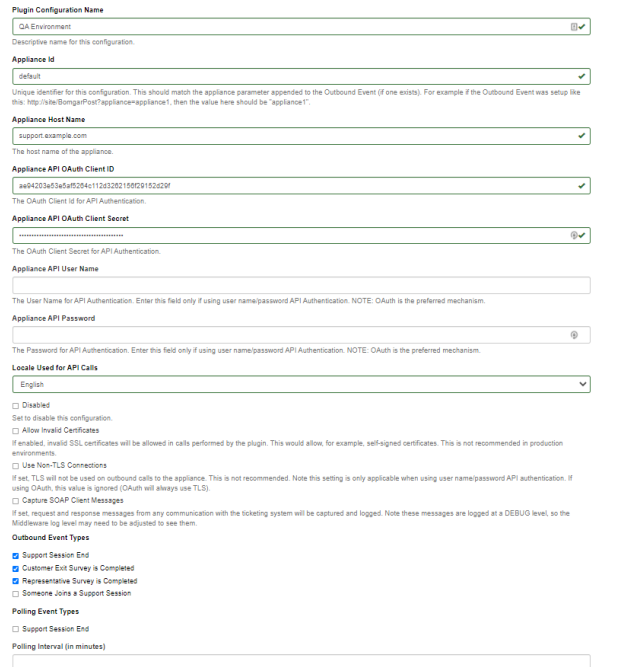
> ℹ️ *For more information on installing and working with the BeyondTrust Middleware Engine, please see the [BeyondTrust Remote Support Middleware Engine Installation and Configuration](https://www.beyondtrust.com/docs/remote-support/how-to/integrations/middleware-engine) document at www.beyondtrust.com/docs/remote-support/how-to/integrations/middleware-engine.*

1. Copy the provided plugin ZIP file to the server hosting the BeyondTrust Middleware Engine.
2. Extract the plugin ZIP file to the **Plugins** folder in the directory where the BeyondTrust Middleware Engine is installed.
3. Restart the BeyondTrust Middleware Engine Windows service.
4. From the server, launch the middleware administration tool. The default URL is http://127.0.0.1:53231.
5. The **BMC Remedy Plugin** shows in the list of plugins. Click the clipboard icon to add a new configuration.

BeyondTrust Appliance B Series

The first portion of the plugin configuration provides the necessary settings for communication between the plugin and the B Series Appliance. The configuration sections include:

1. **Plugin Configuration Name:** Any desired value. Because multiple configurations can be created for a single plugin, allowing different environments to be targeted, provide a descriptive name to indicate how this plugin is to be used.

2. **Appliance Id:** This can be left as **Default** or can be given a custom name. This value must match the value configured on the outbound event URL in the B Series Appliance. If outbound events are not being used, this value is still required, but any value may be used.

3. **BeyondTrust Appliance B Series Host Name:** The hostname of the B Series Appliance. Do not include **https://** or other URL elements.

4. **BeyondTrust Integration API OAuth Client ID**: The client ID of the OAuth account.

5. **BeyondTrust Integration API OAuth Client Secret:** The client secret of the OAuth account.

6. **Locale Used for BeyondTrust API Calls:** This value directs the B Series Appliance to return session data in the specified language.

7. **Disabled:** Enable or disable this plugin configuration.

8. **Allow Invalid Certificates:** Leave unchecked unless there is a specific need to allow. If enabled, invalid SSL certificates are allowed in calls performed by the plugin. This would allow, for example, self-signed certificates. We do not recommend this in production environments.

9. **Use Non-TLS Connections:** Leave unchecked unless it is the specific goal to use non-secure connections to the B Series Appliance. If checked, TLS communication is disabled altogether. If non-TLS connections are allowed, HTTP access must be enabled on the BeyondTrust **/login > Management > API Configuration** page. We strongly discourage using non-secure connections.

> 📌 *Note: When using OAuth authentication, TLS cannot be disabled.*

10. **Outbound Events Types:** Specify which events the plugin processes when received by the middleware engine. Keep in mind that any event types selected here must also be configured to be sent in BeyondTrust. The Middleware Engine receives any events configured to be sent in BeyondTrust but passes them off to the plugin only if the corresponding event type is selected in this section.

    - **Support Session End**
    - **Customer Exit Survey is Completed**
    - **Representative Survey is Completed**

11. **Polling Event Types:** If network constraints limit connectivity between the B Series Appliance and the middleware engine such that outbound events cannot be used, an alternative is to use polling. The middleware engine regularly polls the B Series Appliance for any sessions that have ended since the last session was processed. At this time, only the **Support Session End** event type is supported.

> 📌 *Note: One caveat to polling behavior versus the use of outbound events is that if a session has ended but the customer exit survey has not yet been submitted within the same polling interval, the customer exit survey is not processed. This does not apply to representative surveys since the session is not considered to be complete if a representative survey is still pending.*

12. **Polling Interval:** Enter only if polling is used. This determines how often the middleware engine polls the B Series Appliance for sessions that have ended.

13. **Retry Attempt Limit:** Enter the number of retries that can be attempted if the plugin fails to process an event.

14. **Retry Outbound Event Types:** Specify which outbound events the plugin retries if it fails to process an event.

15. **Retry Polling Event Types:** Specify which polling events the plugin retries if it fails to process an event.

BMC Remedy Instance

The remainder of the plugin configuration provides the necessary settings for communication between the plugin and the BMC Remedy instance. The configuration settings include:

1. **BMC Remedy Services URL:** URL of the AR Service for the BMC Remedy instance (e.g., `https://remedy.example.com/arsys/services/ARService`).

2. **BMC Remedy Username:** The username of the API account.

3. **BMC Remedy Password:** The password of the above user.

4. **BMC Remedy AR Server:** The name of the AR/app server instance.

5. **Session Reports Storage:** Populate the session reports into the BeyondTrust Sessions tab, as a Work Note, or both.

    The following settings apply only if **Session Reports Storage** is set to **Work Notes** or **Both**:

    - **Work Info Source:** The default value for the Source field on the Work Note (e.g., Email, Phone, Web, Other, etc.).
    - **Work Info Type:** The default value for the Type field on the Work Note. The name should contain no spaces or other non-alpha characters (e.g., CustomerCommunication, GeneralInformation, IncidentTaskAction, etc.).

- **Publish as Public Notes:** Specifies whether to publish the notes as public or not.
- **Lock Log:** Specifies whether to lock the work log or not.

After saving the configuration, click the test icon next to the new plugin configuration. No restart is needed.

Report Templates

On the BeyondTrust Middleware Engine server, in the **<install dir>\Plugins\<integration>\Templates** folder, there are multiple files ending with ***.hbs**. These are Handlebars template files. These files are used by the plugin to format the session report and exit surveys that are added to the corresponding ticket each time a BeyondTrust session ends or each time a survey is submitted. The templates can be edited if desired.

> *Note:* *If you are editing a template, we recommend copying and saving the original in case the changes need to be reverted.*
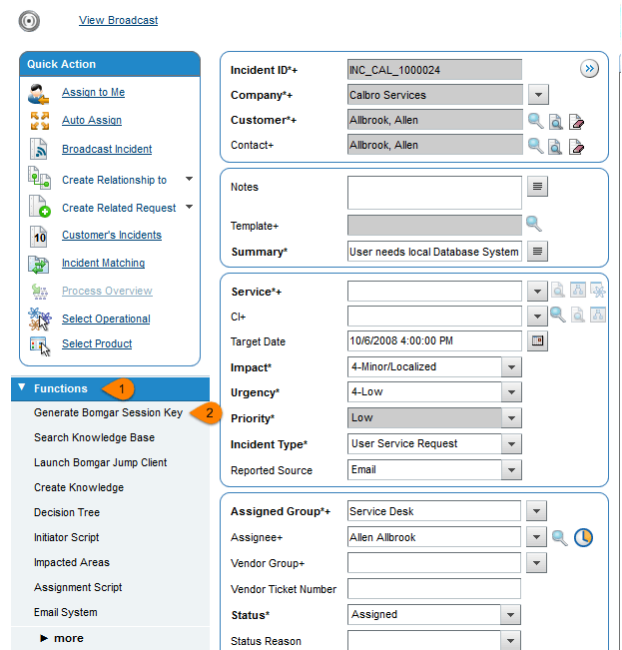
> *For more information on Handlebars templates, please see the* Handlebars website *at* handlebarsjs.com.

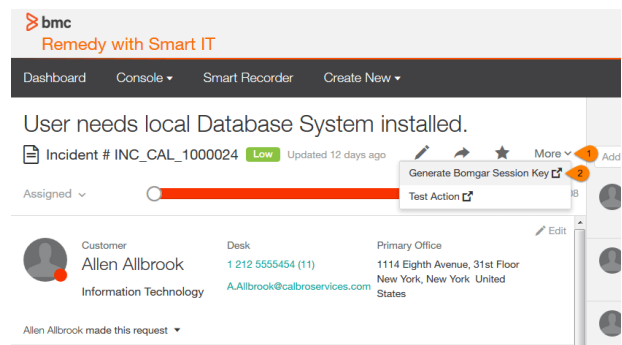# Use Cases for the BMC Remedy Integration with BeyondTrust Remote Support

Generate Session Key

Support staff can generate a session key that can be given to the end user over the phone or via email to initiate a support session that is automatically associated with the selected ticket.

This can be done from within Smart IT.

TC: 3/4/2024

Import BeyondTrust Session Data into Ticket

Once the session ends, the ticket is automatically updated with information gathered during the session, including:

- **Chat Transcript** (including files transferred, special actions, and other events)
- **System Information** (the General section plus other select details such as disk, memory, and network)
- **Session Notes**
- **Surveys** (customer and representative)

To be flexible in meeting varying needs, session data can be displayed within a custom BeyondTrust Sessions tab on the Incident form, added as a Work Note, or both.
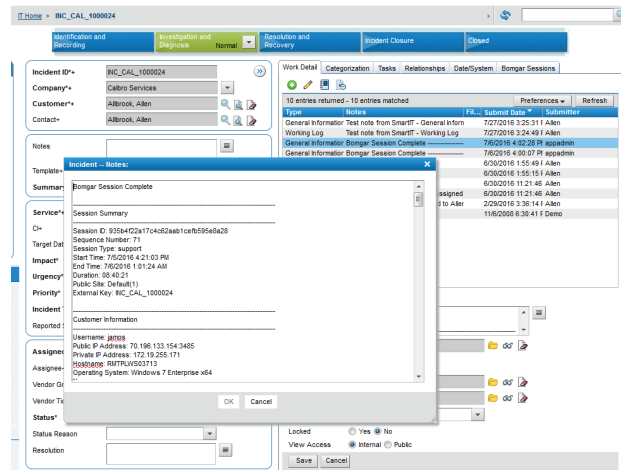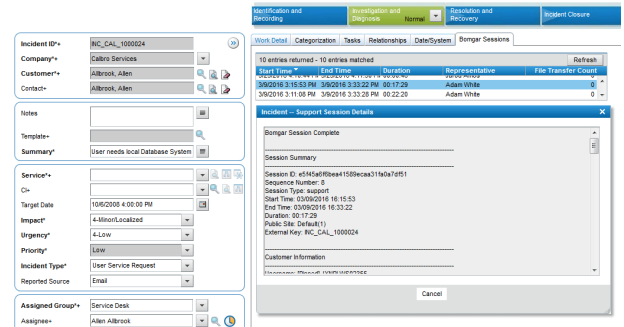
Jump to Configuration Item

Support staff can leverage BeyondTrust Jump Technology to access a configuration item associated with a ticket directly from the BMC Remedy ticket.
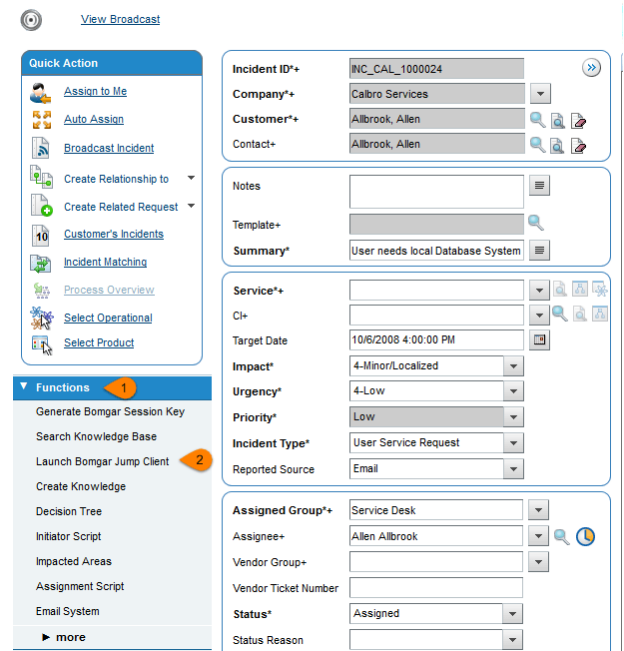
Click-to-Chat for Self Service Users

Self Service users can open their submitted requests in the SRM Request Entry Console and start a chat support session directly from the BMC Remedy ticket. This allows the user the quickest path to resolution while also providing the representative with the necessary context to assist the user. Sessions can be elevated to full support sessions if enabled and when necessary.
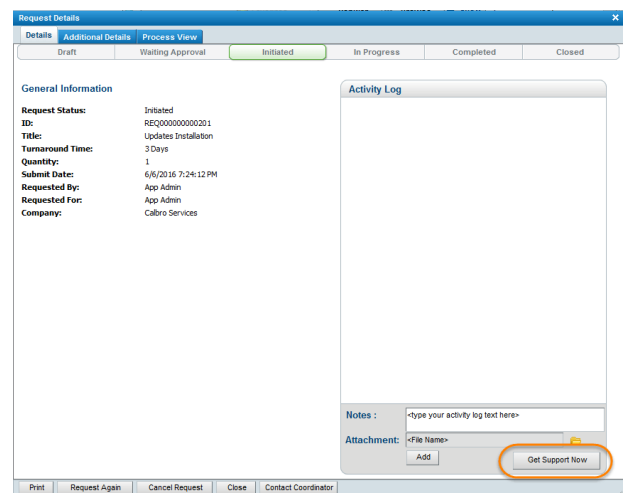
Access Ticket from Representative Console

Using BeyondTrust's custom links ability, a representative can access the associated ticket directly from within the representative console. This saves time searching for the ticket in BMC Remedy and provides the representative with any available \issue details, history,

or other context to help quickly resolve the issue.

Create Ticket via Smart IT

Using the Smart Recorder in Smart IT for BMC Remedy and BeyondTrust's custom links, a ticket can be created from within the representative console with a single click when the representative is in session. The customer name and issue description from the BeyondTrust session are automatically passed into the new ticket. If available, this can save time and unnecessary clicks for support staff.

TC: 3/4/2024