BeyondTrust

Remote Support

CA Service Desk Integration

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BeyondTrust Remote Support Integration with CA Service Desk

IMPORTANT!

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

Service desks and customer support organizations using CA Service Desk 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 CA Service Desk.

The integration between CA Service Desk and BeyondTrust Remote Support enables you to initiate a request for a support session from within your support portal as an analyst or employee, providing secure remote support capabilities for your end user community. Additionally, all aspects of the remote support session can be captured directly within your CA Service Desk support ticket, offering information to the analyst and end user in order to properly diagnose, troubleshoot, and resolve user issues.

Prerequisites for the BeyondTrust Remote Support Integration with CA Service Desk

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: 19.2 and later
- CA Service Desk: 17.x (plus any associated cumulative patches and test fixes)

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	CA Service Desk	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 appliance. However, if polling is used instead of outbound events, then this port does not have to be open.

Prerequisite Installation and Configuration

The CA Service Desk integration is a BeyondTrust Middleware Engine plugin.

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.

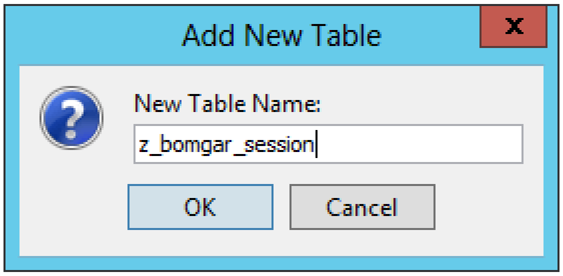
Configure CA Service Desk for Integration with BeyondTrust Remote Support

IMPORTANT!

Before beginning the installation, please ensure you have backed up your CA Service Desk primary and secondary servers.

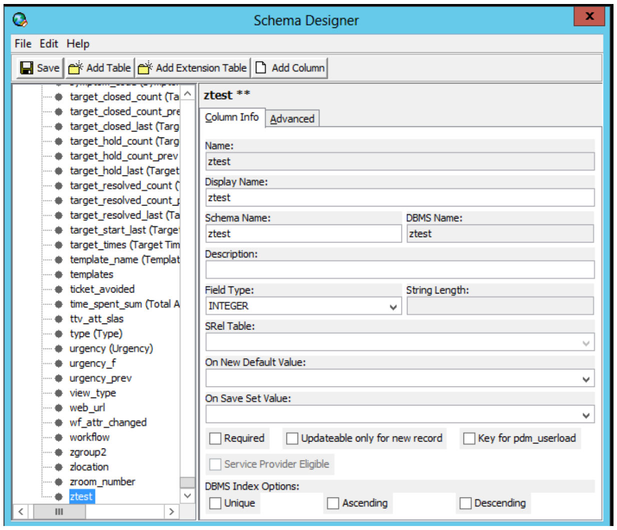
Create New Tables

1. Open the **Web Screen Painter** and log in as an administrator.
2. From within the Web Screen Painter, open **Tools > Schema Designer**.
3. Select **Add Table**, and create a table named **z_bomgar_session**.
4. Click **OK**.
5. The table info should now be displayed. Fill in the form with the following information:
    - **Name:** z_bomgar_session
    - **Display Name:** BeyondTrust Session
    - **Schema Name:** z_bomgar_session
    - **Description:** Fac_Attr_Entry z_bomgar_session
    - **Default Display Field:** bgr_session_id
    - **Foreign Key Field:** id



New Table Name: z_bomgar_session

6. Click **Save**.
7. After creating and saving the table with the required basic information, click **Add Column** to add the following columns to the table:



ztest **

Name: ztest

Display Name: ztest

Schema Name: ztest

DBMS Name: ztest

Description:

Field Type: INTEGER

String Length:

SRel Table:

On New Default Value:

On Save Set Value:

☐ Required ☐ Updateable only for new record ☐ Key for pdm_userload

☐ Service Provider Eligible

DBMS Index Options:

☐ Unique ☐ Ascending ☐ Descending

Schema Name	Display Name	Field Type	SREL Table or Length	Required
analyst	analyst	SREL	SREL Table: cnt	No
bgr_session_id	bgr_session_id	String	100	Yes
cr_persid	cr_persid	SREL	SREL Table: cr	Yes
end_date_time	end_date_time	Date	n/a	Yes
recording_url	recording_url	String	1000	No
session_duration	session_duration	Duration	n/a	No
start_date_time	start_date_time	Date	n/a	No
support_session_detail	support_session_detail	String	30000	Yes

8. Once all columns have been created, select **File > Save and Publish**. When prompted to continue, click **Yes**.
9. Once again, select **Add Table**, and create a table named **zbgr_connection_type**.
10. Click **OK**.
11. The table info should now be displayed. Fill in the form with the following information:
    - **Name:** zbgr_connection_type
    - **Display Name:** BeyondTrust Connection Type
    - **Schema Name:** zbgr_connection_type
    - **Description:** Fac_Attr_Entry zbgr_connection_type
    - **Default Display Field:** connection_name
    - **Foreign Key Field:** id
12. Click **Save**.
13. After creating and saving the table with the required basic information, click **Add Column** to add the following columns to the table:

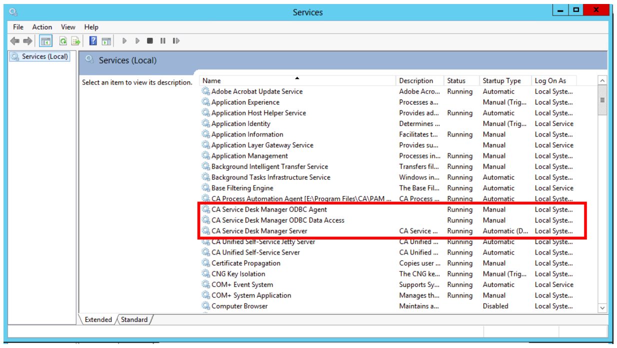
Schema Name	Display Name	Field Type	SREL Table or Length	Required
connection_name	Connection_name	String	100	Yes
default_connection_type	Default_connection_type	Integer	n/a	No
delete_flag	SRel_Attr_Entry zbgr_connection_type.delete_flag	SREL	SREL Table: Actbool	No
Description	Description	String	250	Yes
zjumpoint_required	Zjumpoint_required	SREL	SREL Table: bool (Boolean)	No

14. Once all columns have been created, select **File > Save and Publish**. When prompted to continue, click **Yes**.
15. Navigate to the **nr** table within Schema Designer.
16. Select **Add Column** and add the following fields to this table:

Schema Name	Display Name	Field Type	SREL Table or Length	Required
zbgr_conn_type	zbgr_conn_type	SREL	SREL Table: zbgr_connection_type	No
zbgr_jpoint	zbgr_jpoint	String	200	No

17. Once all columns have been created, select **File > Save and Publish**. When prompted to continue, click **Yes**.

18. Ensure all users are out of the system, and then shut down CA Service Desk services on all servers.
19. Open an administrative command prompt window and run the command **pdm_publish**.



Services (Local)

Select an item to view its description.

Name	Description	Status	Startup Type	Log On As
Adobe Acrobat Update Service	Adobe Acro...	Running	Automatic	Local Syste...
Application Experience	Processes a...		Manual (Trig...	Local Syste...
Application Host Helper Service	Provides ad...	Running	Automatic	Local Syste...
Application Identity	Determines ...		Manual (Trig...	Local Service
Application Information	Facilitates t...	Running	Manual	Local Syste...
Application Layer Gateway Service	Provides su...		Manual	Local Service
Application Management	Processes in...	Running	Manual	Local Syste...
Background Intelligent Transfer Service	Transfers fil...	Running	Manual	Local Syste...
Background Tasks Infrastructure Service	Windows in...	Running	Automatic	Local Syste...
Base Filtering Engine	The Base Fil...	Running	Automatic	Local Service
CA Process Automation Agent [E:\Program Files\CA\PAM ...	CA Process ...	Running	Automatic	Local Syste...
CA Service Desk Manager ODBC Agent		Running	Manual	Local Syste...
CA Service Desk Manager ODBC Data Access		Running	Manual	Local Syste...
CA Service Desk Manager Server	CA Service ...	Running	Automatic (D...	Local Syste...
CA Unified Self-Service Jetty Server	CA Unified ...	Running	Automatic	Local Syste...
CA Unified Self-Service Server	CA Unified ...	Running	Automatic	Local Syste...
Certificate Propagation	Copies user ...	Running	Manual	Local Syste...
CNG Key Isolation	The CNG ke...	Running	Manual (Trig...	Local Syste...
COM+ Event System	Supports Sy...	Running	Automatic	Local Service
COM+ System Application	Manages th...	Running	Manual	Local Syste...
Computer Browser	Maintains a...		Disabled	Local Syste...

Implement Web Customizations

1. If not already stopped, stop CA Service Desk services.
2. Browse to the directory where CA Service Desk is installed (e.g., **C:\Program Files (x86)\CA\Service Desk Manager**).
3. Copy the components package (**CA_Service_Management_Integration_Components.zip**) to the primary server and extract the contents to **\patches**.

> ***Note:*** *The **patches** folder is not created during CA Service Desk installation and may need to be manually created.*

4. Locate **detail_in.htmpl** in **.\patches\CA_Service_Management_Integration_Components\CA_ServiceDesk_FrontEnd_Code\site\mods\www\htmpl\web\analyst** and open the file in a text editor such as Notepad.
5. Open **detail_in.htmpl** in **.\site\mods\www\htmpl\web\analyst** in a text editor.

> ***Note:*** *If you have not previously customized your Analyst Incident interface, you will not find a **detail_in.htmpl** file located in **.\site\mods\www\htmpl\web\analysts**. In this case, you need to copy the **detail_in.htmpl** file from **.\bopcfg\www\htmpl\web\analyst** to **.site\mods\www\htmpl\web\analyst**.*

6. Within the first file, from the **patches** folder, there are six code snippets that must be copied to the corresponding location in the second file. These snippets are surrounded by lines which read **<!-- Integral Customization -- Start -->** and **<!-- Integral Customization -- End -->**. Copy the code between those lines and paste them in the same locations in the second file.

> ***Note:*** *Do NOT copy the "Start" and "End" lines.*

7. Save the file when complete.

IMPORTANT!

*If you have multiple Analyst type form groups, make sure to apply the changes to each **detail_in.htmpl** form located in each respective Analyst type form group. An Analyst type form group is any sub-folder underneath **.\site\mods\www\htmpl\web\analyst**.*

8. Copy the following files from **.\patches\CA_Service_Management_Integration_Components\CA_ServiceDesk_FrontEnd_Code\site\mods\www\htmpl\web\analyst** to **.\site\mods\www\htmpl\web\analyst**:

- detail_z_bomgar_session.htmpl
- detail_zbgr_connection_type.htmpl
- list_z_bomgar_session.htmpl
- list_zbgr_connection_type.htmpl

9. Repeat steps 4-7 above but for **cmdb_detail.htmpl** in **.\patches\CA_Service_Management_Integration_Components\CA_ServiceDesk_FrontEnd_Code\site\mods\www\htmpl\web\analyst** as the source file and **.site\mods\www\htmpl\web\employee** as the destination. There should be two snippets that must be copied and placed in the destination file.
10. Repeat steps 4-7 above but for **nr_cmdb_har_worx_tab.htmpl** in **.patches\CA_Service_Management_Integration_Components\CA_ServiceDesk_FrontEnd_Code\site\mods\www\htmpl\web\analyst** as the source file and **.site\mods\www\htmpl\web\employee** as the destination. There should be one snippet that must be copied and placed in the destination file.
11. Repeat steps 4-7 above but for **detail_in.htmpl** in **.\patches\CA_Service_Management_Integration_Components\CA_ServiceDesk_FrontEnd_Code\site\mods\www\htmpl\web\employee** as the source file and **.\site\mods\www\htmpl\web\employee** as the destination. There should be three snippets that must be copied and placed in the destination file.
12. Copy **start_session.js** from **.\patches\CA_Service_Management_Integration_Components\CA_ServiceDesk_FrontEnd_Code\site\mods\www\wwwroot\scripts**.
13. Copy **Bomgar.png** from **.\patches\CA_Service_Management_Integration_Components\CA_ServiceDesk_FrontEnd_Code\site\mods\www\wwwroot\img** to **.\site\mods\www\wwwroot\img**.
14. Open **.\ns.env** in a text editor and add the following line: **@NX_bomgar_HOST=<BeyondTrust_Host>** where **<BeyondTrust_Host>** is the hostname of your BeyondTrust site (e.g., support.example.com).
15. Start the CA Service Desk Manager services.
16. Open an administraive command prompt window, change directories to **.\patches\CA_Service_Management_Integration_Components\CA_ServiceDesk_FrontEnd_Code**, and run the command to load data into the **zbgr_connection_type** table: **Pdm_load -i f zbgr_connection_type.txt**.
17. Verify that all files copied in this section have been copied to each primary and secondary server. Log into each primary and secondary CA Service Desk server and verify that the web changes in this section have been replicated in the following files in these locations:

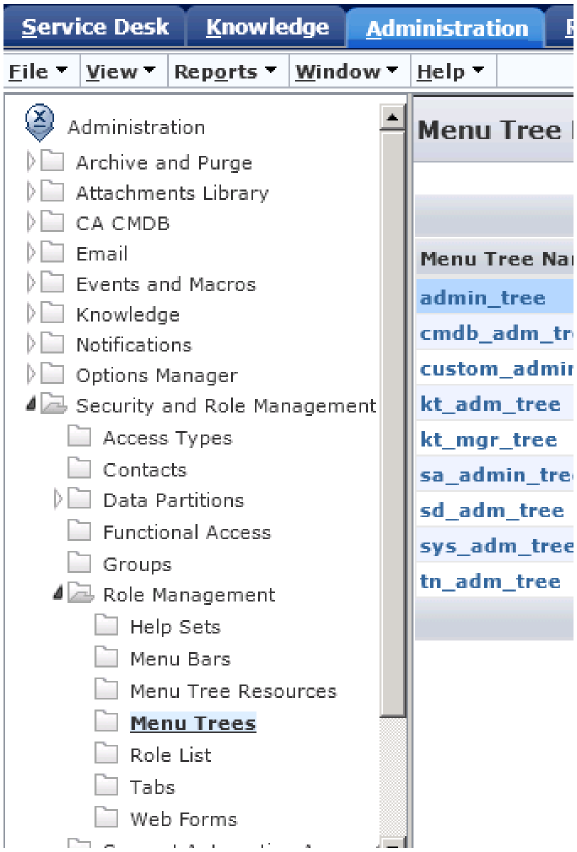
    - **.\site\mods\www\htmpl\web\analyst**
        - **detail_in.htmpl**
        - **detail_z_bomgar_session.htmpl**
        - **detail_zbgr_connection_type.htmpl**
        - **list_z_bomgar_session.htmpl**
        - **list_zbgr_connection_type.htmpl**
    - **.\site\mods\www\htmpl\web\employee**
        - **detail_in.htmpl**
    - **.\site\mods\www\wwwroot\scripts**
        - **start_session.js**
    - **.\site\mods\www\wwwroot\img**
        - **Bomgar.png**

> ***Note:*** *If any file does not exist in these locations on each primary and secondary server, copy the files from the server you made changes on to the primary/secondary servers in the above locations.*

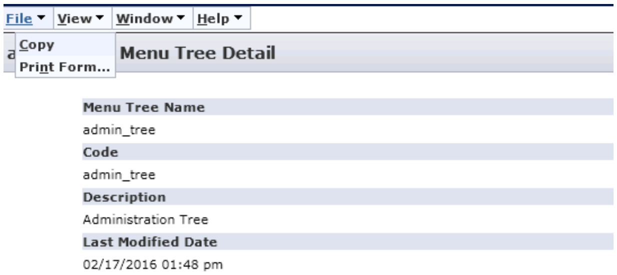
Add Web UI Elements

1. Log into CA Service Desk as an administrator.
2. Go to **Administration > Security and Role Management > Role Management > Menu Trees**.
3. Within the **Menu Trees** list, select **admin_tree**.

> ***Note:*** *If your admin tree is already customized, skip steps 4-6 and select your custom admin tree.*

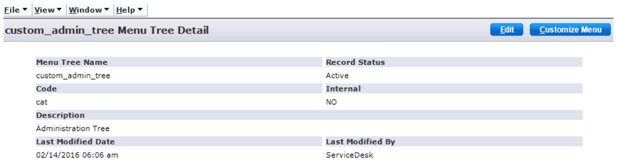


4. Select **File > Copy**.
5. Fill in the following values:
   a. **Menu Tree Name:** custom_admin_tree
   b. **Code:** cat
   c. **Internal:** No
   d. **Description:** Administration Tree
6. Fill in the following values:
   a. **Menu Tree Name:** custom_admin_tree
   b. **Code:** cat
   c. **Internal:** No
   d. **Description:** Administration Tree



Menu Tree Name
admin_tree
Code
admin_tree
Description
Administration Tree
Last Modified Date
02/17/2016 01:48 pm

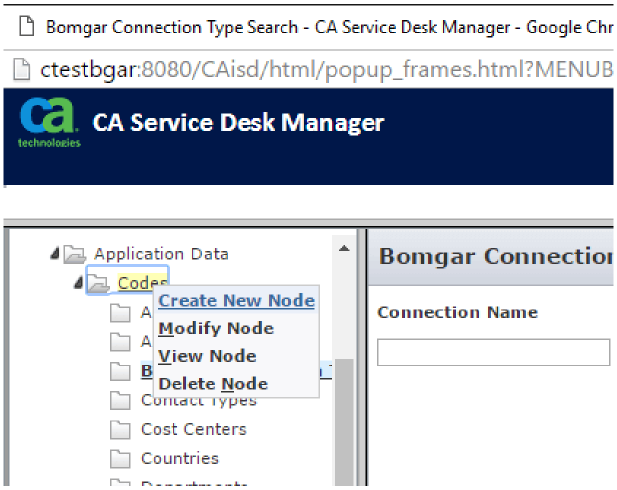
7. Click **Save**.
8. Select **Customize Menu**.



custom_admin_tree Menu Tree Detail

Menu Tree Name: custom_admin_tree
Record Status: Active
Code: cat
Internal: NO
Description: Administration Tree
Last Modified Date: 02/14/2016 06:06 am
Last Modified By: ServiceDesk

9. Within **ServiceDesk > Application Data > Codes**, right-click **Codes** and click **Create New Node**.

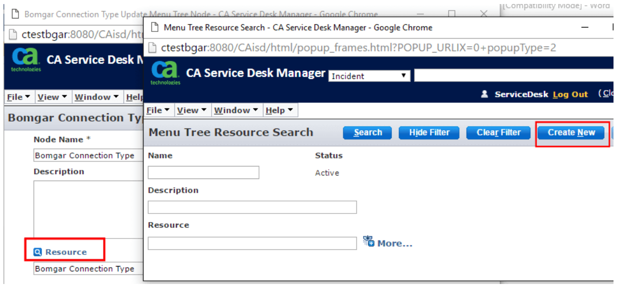


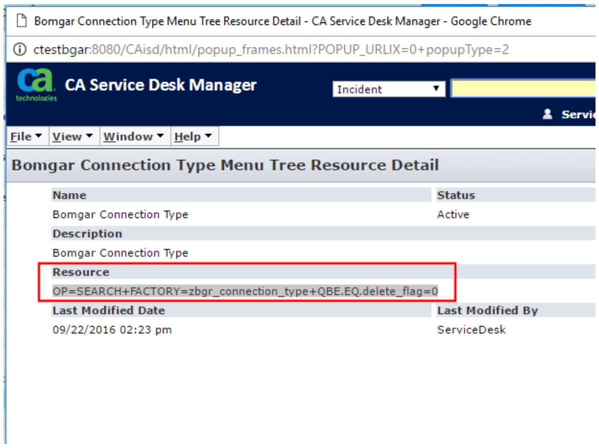
10. Create a new node with the following information:
    a. **Node Name:** BeyondTrust Connection Type
    b. **Resource:** BeyondTrust Connection Type

> ***Note:*** *If you do not have a BeyondTrust Connection Type resource, follow step 11 to create one. Otherwise, skip to step 12 once you have saved the record.*

11. Click **Save**.

12. Click **Save**.



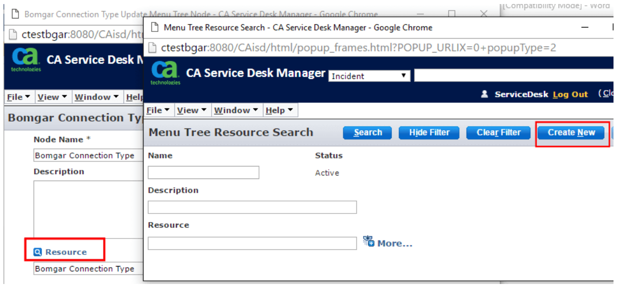

Bomgar Connection Type Menu Tree Resource Detail - CA Service Desk Manager - Google Chrome
ctestbgar:8080/CAisd/html/popup_frames.html?POPUP_URLIX=0+popupType=2
CA Service Desk Manager
Incident
File View Window Help

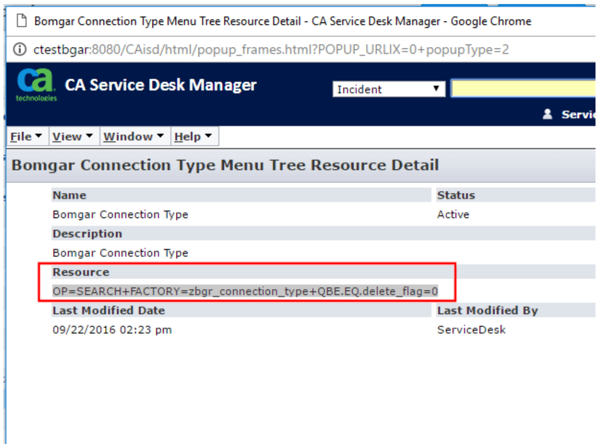
Bomgar Connection Type Menu Tree Resource Detail

Name: Bomgar Connection Type
Status: Active
Description: Bomgar Connection Type
Resource: OP=SEARCH+FACTORY=zbgr_connection_type+QBE.EQ.delete_flag=0
Last Modified Date: 09/22/2016 02:23 pm
Last Modified By: ServiceDesk

13. To create a new resource, click the blue **Resource** link, and select the **Create New** button from the displayed screen. Fill in the following information to create the BeyondTrust Connection Type resource:

- **Name:** BeyondTrust Connection Type
- **Description:** BeyondTrust Connection Type
- **Resource:** OP=SEARCH+FACTORY=zbgr_connection_type+QBE.EQ.delete_flag=0

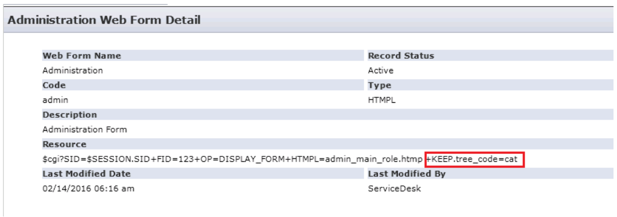



Bomgar Connection Type Menu Tree Resource Detail - CA Service Desk Manager - Google Chrome
ctestbgar:8080/CAisd/html/popup_frames.html?POPUP_URLIX=0+popupType=2
CA Service Desk Manager
Incident
File View Window Help

Bomgar Connection Type Menu Tree Resource Detail

Name: Bomgar Connection Type
Status: Active
Description: Bomgar Connection Type
Resource: OP=SEARCH+FACTORY=zbgr_connection_type+QBE.EQ.delete_flag=0
Last Modified Date: 09/22/2016 02:23 pm
Last Modified By: ServiceDesk

14. Go to **Administrator > Security and Role Management > Role Management > Tabs**.
15. Click on **Administration tab with full menu**.
16. Select the **Administration** link from the starting page and edit the **Administration Web Form**.
17. Modify the **Resource** section to add the following to the end of the existing value: **+KEEP.tree_code=cat**.
18. Restart the CA Service Desk services.



Administration Web Form Detail

Web Form Name	**Record Status**
Administration	Active
Code	**Type**
admin	HTMPL
Description	
Administration Form	
Resource	
$cgi?SID=$SESSION.SID+FID=123+OP=DISPLAY_FORM+HTMPL=admin_main_role.htmp +KEEP.tree_code=cat	
Last Modified Date	**Last Modified By**
02/14/2016 06:16 am	ServiceDesk

Configure BeyondTrust for the CA Service Desk Integration

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

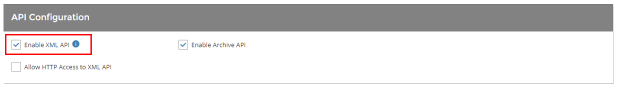
All of the steps in this section take place in the BeyondTrust **/login** administrative interface. Access your Remote Support interface by going to the hostname of your B Series Appliance followed by **/login** (e.g., https://support.example.com/login).

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.



API Configuration

☑ Enable XML API ☑ Enable Archive API

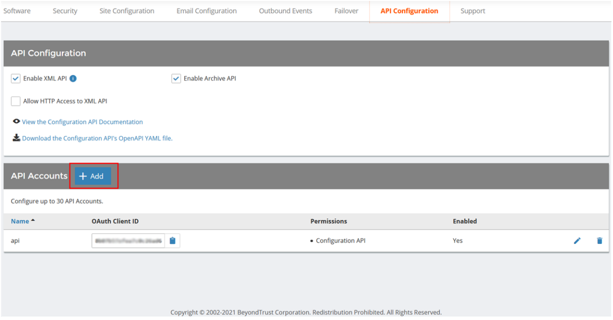
□ Allow HTTP Access to XML API

Create an OAuth API Account

Management | API CONFIGURATION

The CA Service Desk API account is used from within CA Service Desk to make Remote Support Command API calls to Remote Support.

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



API Configuration

☑ Enable XML API ☑ Enable Archive API

□ Allow HTTP Access to XML API

View the Configuration API Documentation

Download the Configuration API's OpenAPI YAML file.

API Accounts

Configure up to 30 API Accounts.

Name	OAuth Client ID	Permissions	Enabled
api	[redacted]	• Configuration API	Yes

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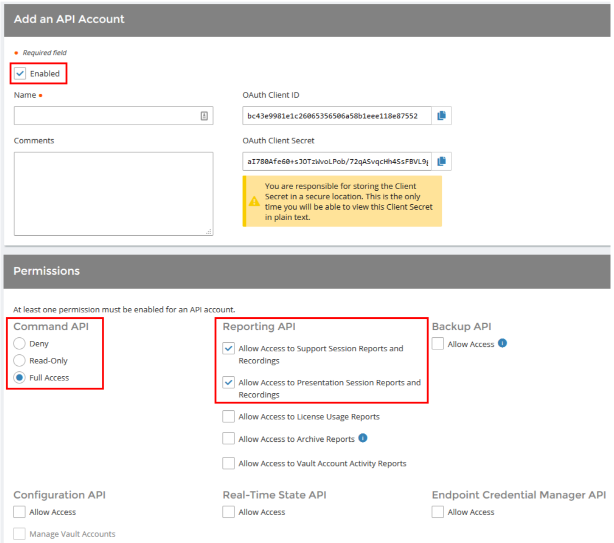
3. Check **Enabled**.
4. Enter a name for the account.
5. **OAuth Client ID** and **OAuth Client Secret** is used during the OAuth configuration step in CA Service Desk.
6. Under **Permissions**, check the following:
   - Command API: **Full Access**.
   - Reporting API: **Allow Access to Support Session 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 API Account

• *Required field*

☑ Enabled

Name •

OAuth Client ID

bc43e9981e1c26065356506a58b1eee118e87552

Comments

OAuth Client Secret

aI780Afe60+sJOTzWvoLPob/72qASvqcHh4SsFBVL9ę

You are responsible for storing the Client Secret in a secure location. This is the only time you will be able to view this Client Secret in plain text.

Permissions

At least one permission must be enabled for an API account.

Command API

○ Deny

○ Read-Only

● Full Access

Reporting API

☑ Allow Access to Support Session Reports and Recordings

☑ Allow Access to Presentation Session Reports and Recordings

□ Allow Access to License Usage Reports

□ Allow Access to Archive Reports

□ Allow Access to Vault Account Activity Reports

Backup API

□ Allow Access

Configuration API

□ Allow Access

□ Manage Vault Accounts

Real-Time State API

□ Allow Access

Endpoint Credential Manager API

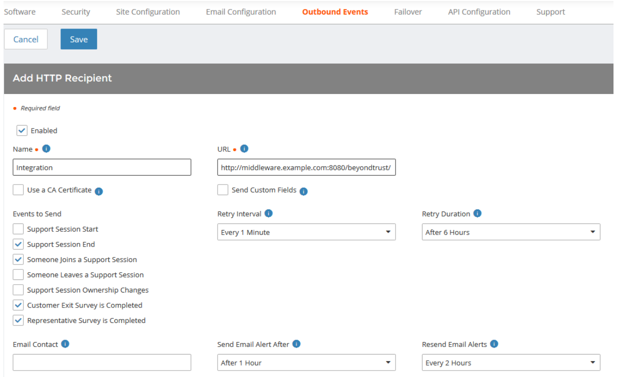
□ Allow Access

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.



Add HTTP Recipient

• *Required field*

☑ Enabled

Name •

Integration

URL •

http://middleware.example.com:8080/beyondtrust/

□ Use a CA Certificate

□ Send Custom Fields

Events to Send

□ Support Session Start

☑ Support Session End

☑ Someone Joins a Support Session

□ Someone Leaves a Support Session

□ Support Session Ownership Changes

☑ Customer Exit Survey is Completed

☑ Representative Survey is Completed

Retry Interval

Every 1 Minute

Retry Duration

After 6 Hours

Email Contact

Send Email Alert After

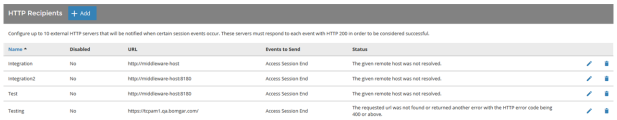
After 1 Hour

Resend Email Alerts

Every 2 Hours

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.



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.	✎	🗑
Integration2	No	http://middleware-host:8180	Access Session End	The given remote host was not resolved.	✎	🗑
Test	No	http://middleware-host:8180	Access Session End	The given remote host was not resolved.	✎	🗑
Testing	No	https://tcpam1.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 CA Service Desk Plugin for Integration with BeyondTrust Remote Support

Now that you have configured CA Service Desk and the BeyondTrust Appliance B Series, deploy and configure the CA Service Desk plugin.

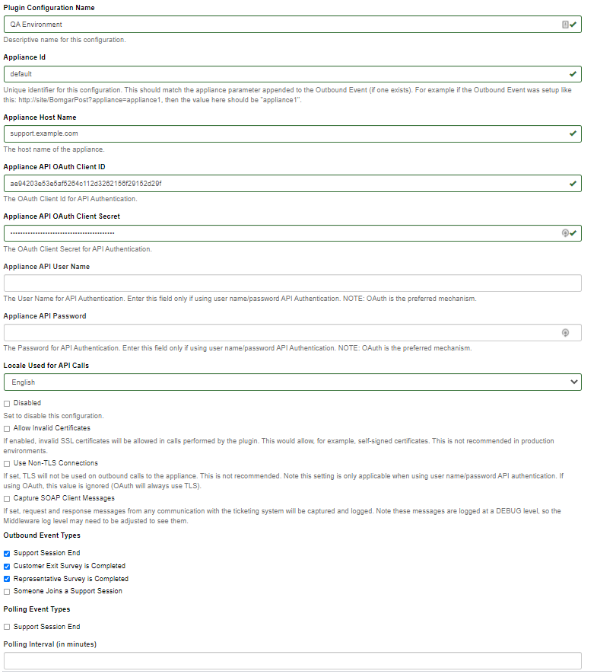
1. Copy the provided plugin ZIP file to the server hosting the BeyondTrust Middleware Engine.
2. Extract the plugin ZIP file to the **Plugins** folder in the directory where the BeyondTrust Middleware Engine is installed.
3. Restart the BeyondTrust Middleware Engine Windows service.
4. From the server,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

> *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.*

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.



Plugin Configuration Name
QA Environment
Descriptive name for this configuration.

Appliance Id
default
Unique identifier for this configuration. This should match the appliance parameter appended to the Outbound Event (if one exists). For example if the Outbound Event was setup like this: http://site/BomgarPost?appliance=appliance1, then the value here should be "appliance1".

Appliance Host Name
support.example.com
The host name of the appliance.

Appliance API OAuth Client ID
ae94203e53e5af5264c112d3262156f29152d29f
The OAuth Client Id for API Authentication.

Appliance API OAuth Client Secret
••
The OAuth Client Secret for API Authentication.

Appliance API User Name
The User Name for API Authentication. Enter this field only if using user name/password API Authentication. NOTE: OAuth is the preferred mechanism.

Appliance API Password
The Password for API Authentication. Enter this field only if using user name/password API Authentication. NOTE: OAuth is the preferred mechanism.

Locale Used for API Calls
English

☐ Disabled
Set to disable this configuration.

☐ Allow Invalid Certificates
If enabled, invalid SSL certificates will be allowed in calls performed by the plugin. This would allow, for example, self-signed certificates. This is not recommended in production environments.

☐ Use Non-TLS Connections
If set, TLS will not be used on outbound calls to the appliance. This is not recommended. Note this setting is only applicable when using user name/password API authentication. If using OAuth, this value is ignored (OAuth will always use TLS).

☐ Capture SOAP Client Messages
If set, request and response messages from any communication with the ticketing system will be captured and logged. Note these messages are logged at a DEBUG level, so the Middleware log level may need to be adjusted to see them.

Outbound Event Types

☑ Support Session End
☑ Customer Exit Survey is Completed
☑ Representative Survey is Completed
☐ Someone Joins a Support Session

Polling Event Types

☐ Support Session End

Polling Interval (in minutes)

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.*

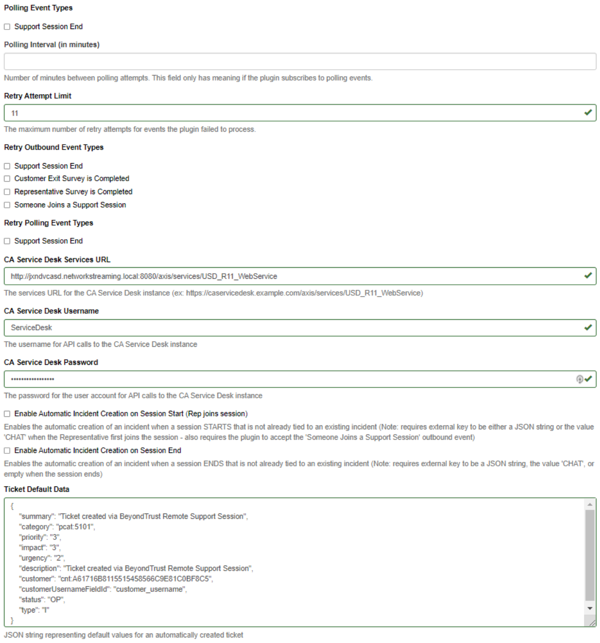
10. **Outbound Events Types:** Specify which events the plugin processes when received by the middleware engine. Keep in mind that any event types selected here must also be configured to be sent in BeyondTrust. The Middleware Engine receives any events configured to be sent in BeyondTrust but passes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

CA Service Desk Instance

The remainder of the plugin configuration provides the necessary settings for communication between the plugin and the CA Service Desk instance. The configuration settings include:



Polling Event Types

□ Support Session End

Polling Interval (in minutes)

Number of minutes between polling attempts. This field only has meaning if the plugin subscribes to polling events.

Retry Attempt Limit

11 ✓

The maximum number of retry attempts for events the plugin failed to process.

Retry Outbound Event Types

□ Support Session End
□ Customer Exit Survey is Completed
□ Representative Survey is Completed
□ Someone Joins a Support Session

Retry Polling Event Types

□ Support Session End

CA Service Desk Services URL

http://jxndvcasd.networkstreaming.local:8080/axis/services/USD_R11_WebService ✓

The services URL for the CA Service Desk instance (ex: https://caservicedesk.example.com/axis/services/USD_R11_WebService)

CA Service Desk Username

ServiceDesk ✓

The username for API calls to the CA Service Desk instance

CA Service Desk Password

•••••••••••••••• ✓

The password for the user account for API calls to the CA Service Desk instance

□ Enable Automatic Incident Creation on Session Start (Rep joins session)

Enables the automatic creation of an incident when a session STARTS that is not already tied to an existing incident (Note: requires external key to be either a JSON string or the value 'CHAT' when the Representative first joins the session - also requires the plugin to accept the 'Someone Joins a Support Session' outbound event)

□ Enable Automatic Incident Creation on Session End

Enables the automatic creation of an incident when a session ENDS that is not already tied to an existing incident (Note: requires external key to be a JSON string, the value 'CHAT', or empty when the session ends)

Ticket Default Data

```
{
   "summary": "Ticket created via BeyondTrust Remote Support Session",
   "category": "pcat:5101",
   "priority": "3",
   "impact": "3",
   "urgency": "2",
   "description": "Ticket created via BeyondTrust Remote Support Session",
   "customer": "cnt:A61716B8115515458566C9E81C0BF8C5",
   "customerUsernameFieldId": "customer_username",
   "status": "OP",
   "type": "I"
}
```

JSON string representing default values for an automatically created ticket

1. **CA Service Desk Services URL:** The services URL for the CA Service Desk instance (e.g., **https://caservicedesk.example.com/axis/services/USD_R11_WebService**)
2. **CA Service Desk Username:** The username of the API account.
3. **CA Service Desk Password:** The password of the above user.
4. **Enable Automatic Incident Creation on Session Start (Rep joins session):** If checked, the plugin processes **support_conference_member_added** events and the external key to determine whether to create a ticket within CA Service Desk or not. The plugin attempts to create the ticket only if this setting enabled, if the conference member joining the conference is a representative, and if the external key is either a JSON string or the literal value **CHAT**.
5. **Enable Automatic Incident Creation on Session End:** If checked, the plugin processes **support_conference_end** events as usual but also examines the external key to determine whether to create a ticket within CA Service Desk or not. The plugin attempts to create the ticket only if this setting is enabled and if the external key is empty, is a JSON string, or is the literal value **CHAT**. If the external key is any other value, it is assumed to be a valid ticket ID, and the session is processed as usual (i.e., no ticket is created).
6. **Ticket Default Data:** A JSON string containing values that can be used to prepopulate certain fields on the newly created ticket.

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.

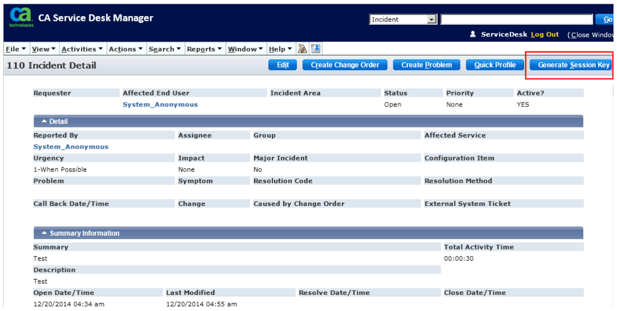
> ***Note:** If you are editing a template, we recommend copying and saving the original in case the changes need to be reverted.*

> *For more information on Handlebars templates, please see the Handlebars website at handlebarsjs.com.*

Use Cases for the CA Service Desk 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.



110 Incident Detail

Requester	Affected End User	Incident Area	Status	Priority	Active?
	System_Anonymous		Open	None	YES

Reported By	Assignee	Group	Affected Service
System_Anonymous			
Urgency	Impact	Major Incident	Configuration Item
1-When Possible	None	No	
Problem	Symptom	Resolution Code	Resolution Method
Call Back Date/Time	Change	Caused by Change Order	External System Ticket

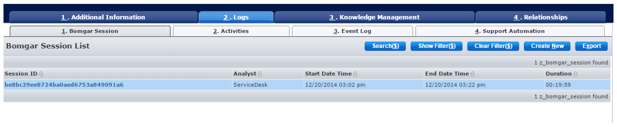
Summary	Total Activity Time
Test	00:00:30
Description	
Test	

Open Date/Time	Last Modified	Resolve Date/Time	Close Date/Time
12/20/2014 04:34 am	12/20/2014 04:55 am		

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)

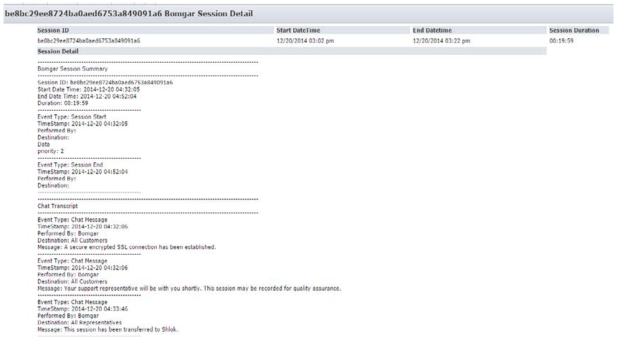


Bomgar Session List

1 z_bomgar_session found

Session ID	Analyst	Start Date Time	End Date Time	Duration
be8bc29ee8724ba0aed6753a849091a6	ServiceDesk	12/20/2014 03:02 pm	12/20/2014 03:22 pm	00:19:59

1 z_bomgar_session found



be8bc29ee8724ba0aed6753a849091a6 Bomgar Session Detail

Session ID	Start DateTime	End Datetime	Session Duration
be8bc29ee8724ba0aed6753a849091a6	12/20/2014 03:02 pm	12/20/2014 03:22 pm	00:19:59

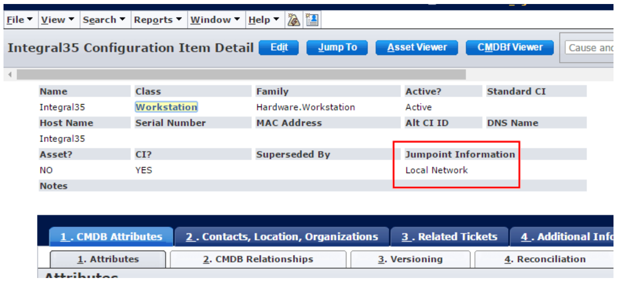
Session Detail

```
---------------------------------------------------------------------------------
Bomgar Session Summary
---------------------------------------------------------------------------------
Session ID: be8bc29ee8724ba0aed6753a849091a6
Start Date Time: 2014-12-20 04:32:05
End Date Time: 2014-12-20 04:52:04
Duration: 00:19:59
---------------------------------------
Event Type: Session Start
TimeStamp: 2014-12-20 04:32:05
Performed By:
Destination:
Data
priority: 2
---------------------------------------
Event Type: Session End
TimeStamp: 2014-12-20 04:52:04
Performed By:
Destination:
---------------------------------------
---------------------------------------------------------------------------------
Chat Transcript
---------------------------------------------------------------------------------
Event Type: Chat Message
TimeStamp: 2014-12-20 04:32:06
Performed By: Bomgar
Destination: All Customers
Message: A secure encrypted SSL connection has been established.
---------------------------------------
Event Type: Chat Message
TimeStamp: 2014-12-20 04:32:06
Performed By: Bomgar
Destination: All Customers
Message: Your support representative will be with you shortly. This session may be recorded for quality assurance.
---------------------------------------
Event Type: Chat Message
TimeStamp: 2014-12-20 04:33:46
Performed By: Bomgar
Destination: All Representatives
Message: This session has been transferred to Shlok.
---------------------------------------
```

Jump to Configuration Item

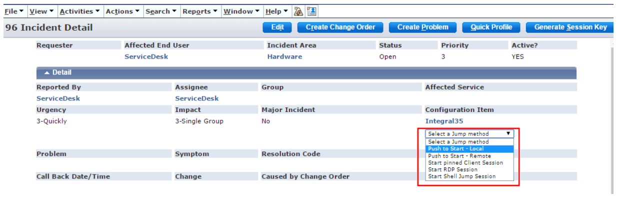
Support staff can leverage BeyondTrust Jump Technology to access a configuration item associated with a ticket directly from the Service Desk ticket. The following Jump types are available:

- **Jump Client** (Pinned Client)
- **Local Jump** (Push and Start Local)
- **Remote Jump** (Push and Start Remote)
- **Remote Desktop Protocol** (RDP)
- **Shell Jump** (Remote Console)



Integral35 Configuration Item Detail

Name	Class	Family	Active?	Standard CI
Integral35	Workstation	Hardware.Workstation	Active	
Host Name	**Serial Number**	**MAC Address**	**Alt CI ID**	**DNS Name**
Integral35				
Asset?	**CI?**	**Superseded By**	**Jumpoint Information**	
NO	YES		Local Network	
Notes				



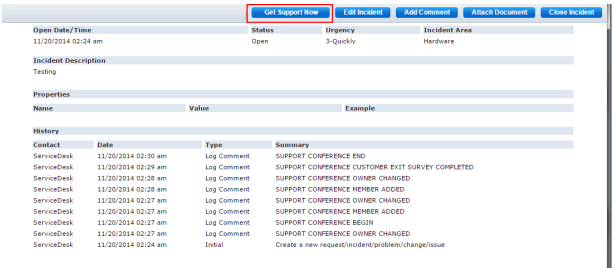
96 Incident Detail

Requester	Affected End User	Incident Area	Status	Priority	Active?
	ServiceDesk	Hardware	Open	3	YES

Reported By	Assignee	Group	Affected Service
ServiceDesk	ServiceDesk		
Urgency	**Impact**	**Major Incident**	**Configuration Item**
3-Quickly	3-Single Group	No	Integral35
Problem	**Symptom**	**Resolution Code**	
Call Back Date/Time	**Change**	**Caused by Change Order**	

Click-to-Chat for Self Service Users

Self Service users can open their submitted tickets and start a chat support session directly from the Service Desk 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.



Open Date/Time	Status	Urgency	Incident Area
11/20/2014 02:24 am	Open	3-Quickly	Hardware

Incident Description

Testing

Properties

Name	Value	Example

History

Contact	Date	Type	Summary
ServiceDesk	11/20/2014 02:30 am	Log Comment	SUPPORT CONFERENCE END
ServiceDesk	11/20/2014 02:29 am	Log Comment	SUPPORT CONFERENCE CUSTOMER EXIT SURVEY COMPLETED
ServiceDesk	11/20/2014 02:28 am	Log Comment	SUPPORT CONFERENCE OWNER CHANGED
ServiceDesk	11/20/2014 02:28 am	Log Comment	SUPPORT CONFERENCE MEMBER ADDED
ServiceDesk	11/20/2014 02:27 am	Log Comment	SUPPORT CONFERENCE OWNER CHANGED
ServiceDesk	11/20/2014 02:27 am	Log Comment	SUPPORT CONFERENCE MEMBER ADDED
ServiceDesk	11/20/2014 02:27 am	Log Comment	SUPPORT CONFERENCE BEGIN
ServiceDesk	11/20/2014 02:27 am	Log Comment	SUPPORT CONFERENCE OWNER CHANGED
ServiceDesk	11/20/2014 02:24 am	Initial	Create a new request/incident/problem/change/issue

Auto-Ticket Creation

For previously unreported issues or questions, the end user can submit some basic information and immediately begin a support session. Meanwhile, the integration takes the submitted information from the session and creates a new Service Desk ticket. This saves time and unnecessary steps for the end user and support staff.