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Genesys Mobile Services Deployment Guide

[Create an Application Object](#)

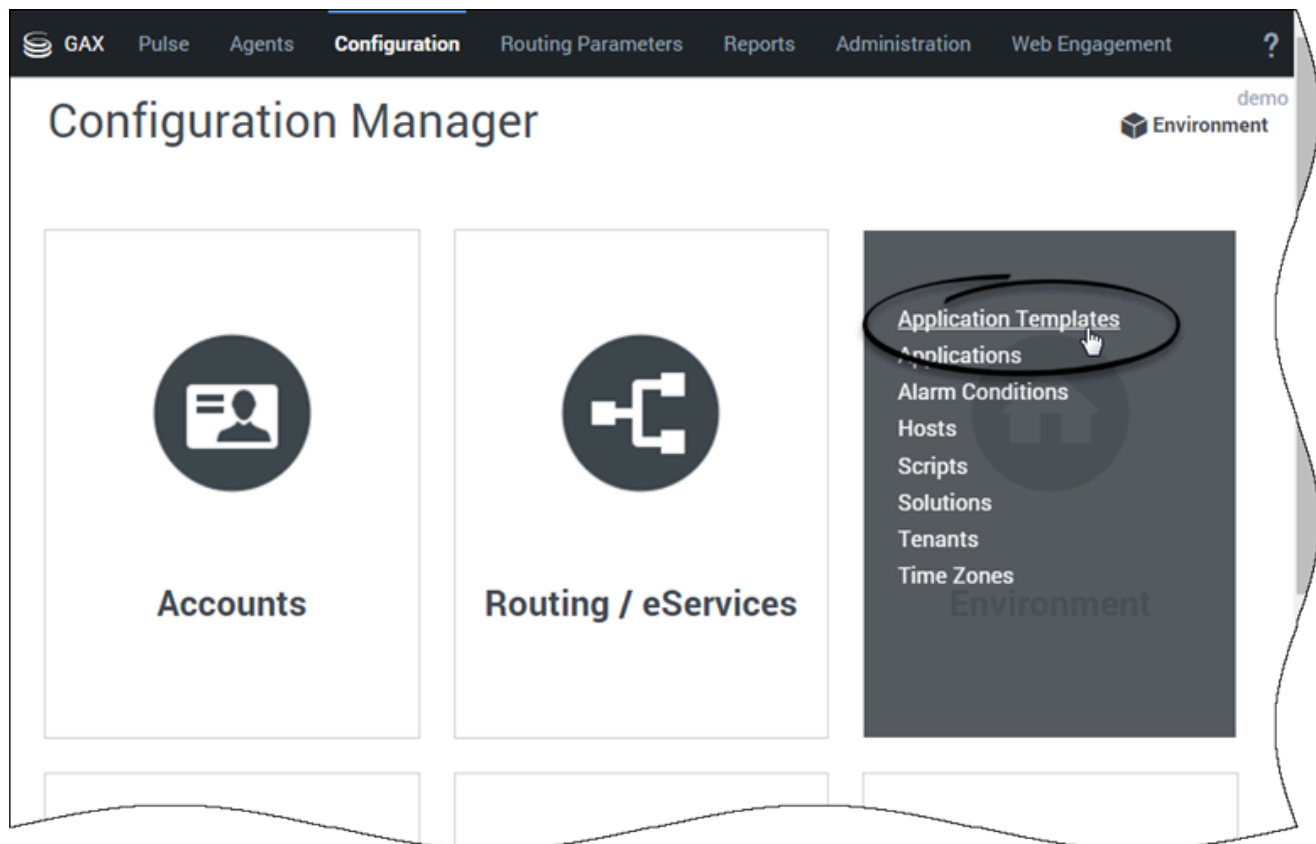
12/14/2025

Create an Application Object

Important

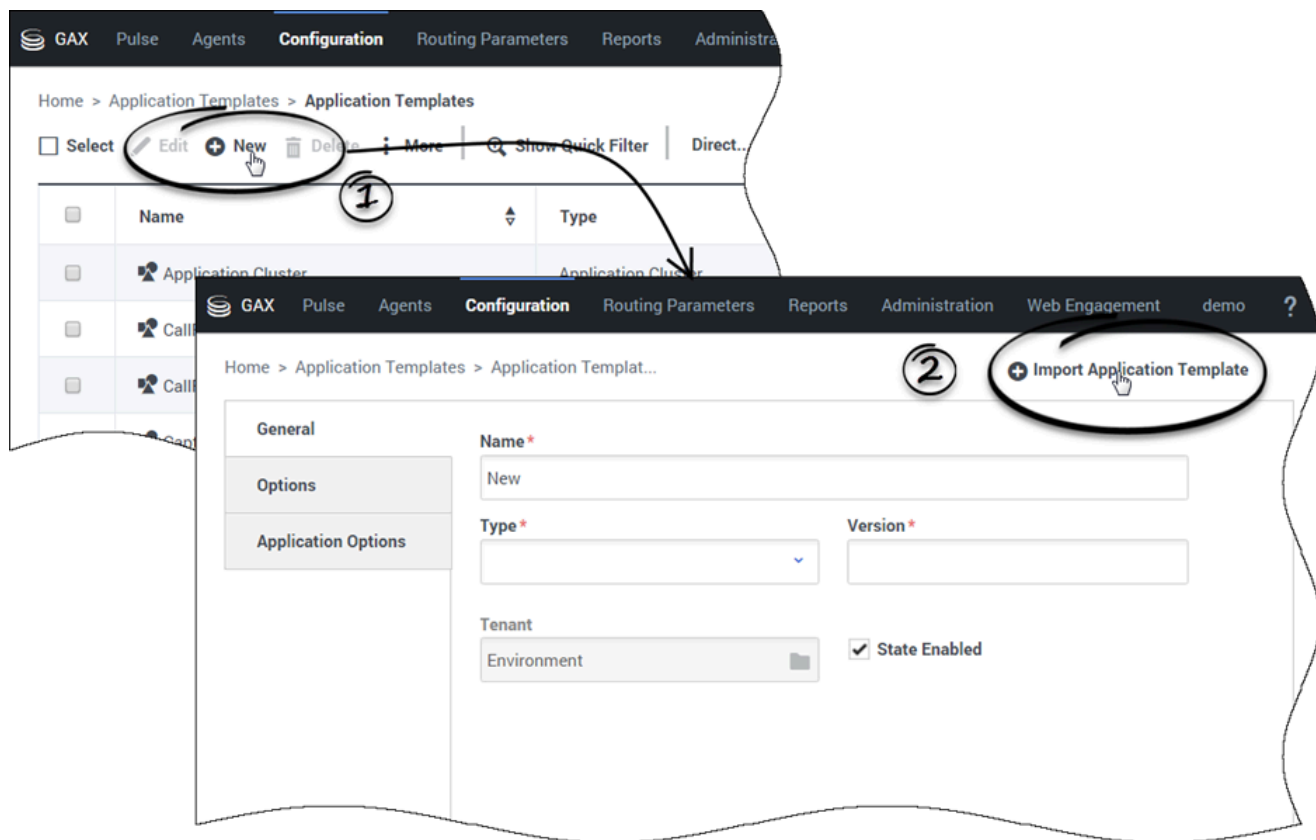
Configuration objects can be created and configured in Genesys Administrator and Configuration Manager. To learn how to start Genesys Administrator, refer to the [Genesys Administrator Help](#).

Import the GMS Application Templates



In Genesys Administrator Extension, find the **Configuration Manager > Environment** menu and click **Application Templates**.

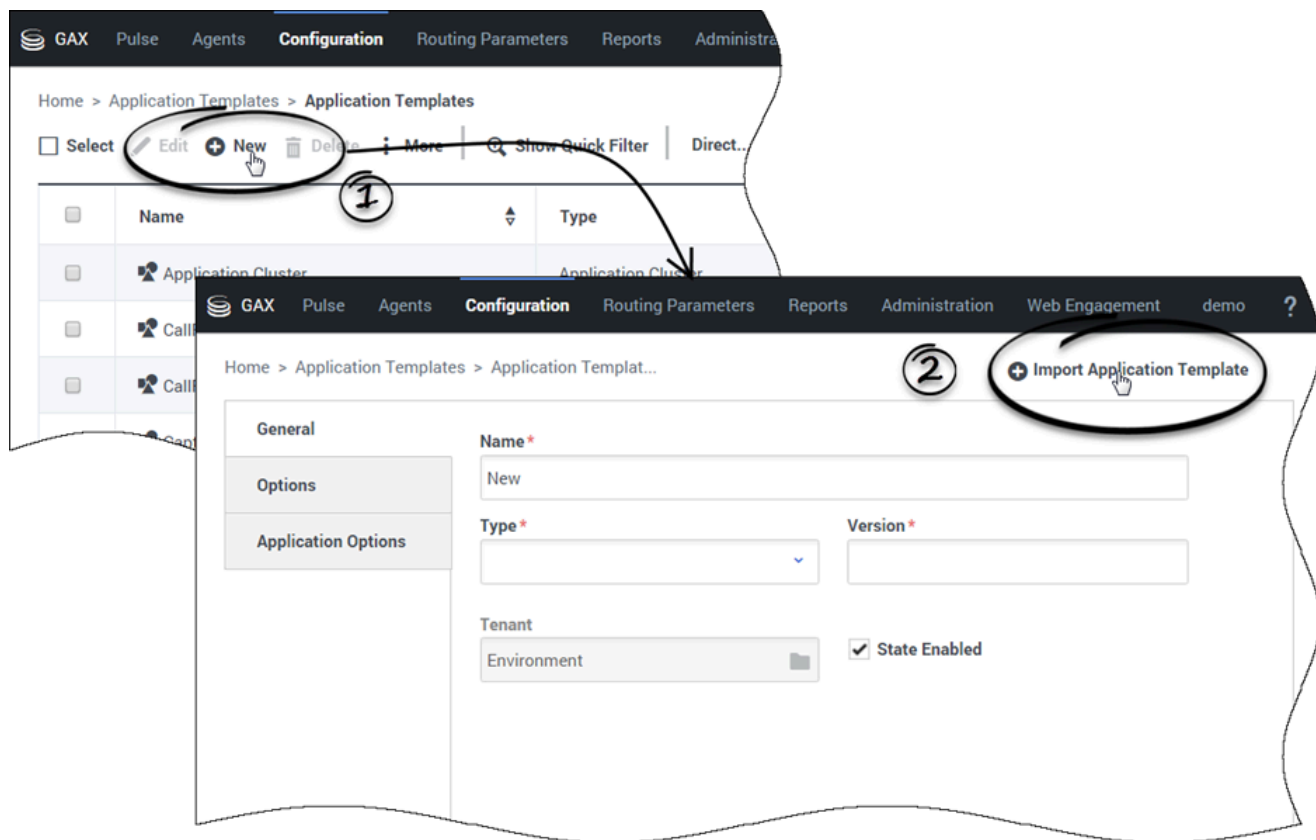
Create an Application Object



Click **+New**, then click **Import Application Template**. Navigate to the *Templates* directory of your Installation Package (IP) and add the following files:

- **GMS_851.apd** - This template is used to deploy GMS with default options.
- **ApplicationCluster_851.apd** - You do not need this template for a single node deployment. This template is used for deploying all GMS's into the same cluster. The Cluster Application will contain shared configuration for GMS nodes.

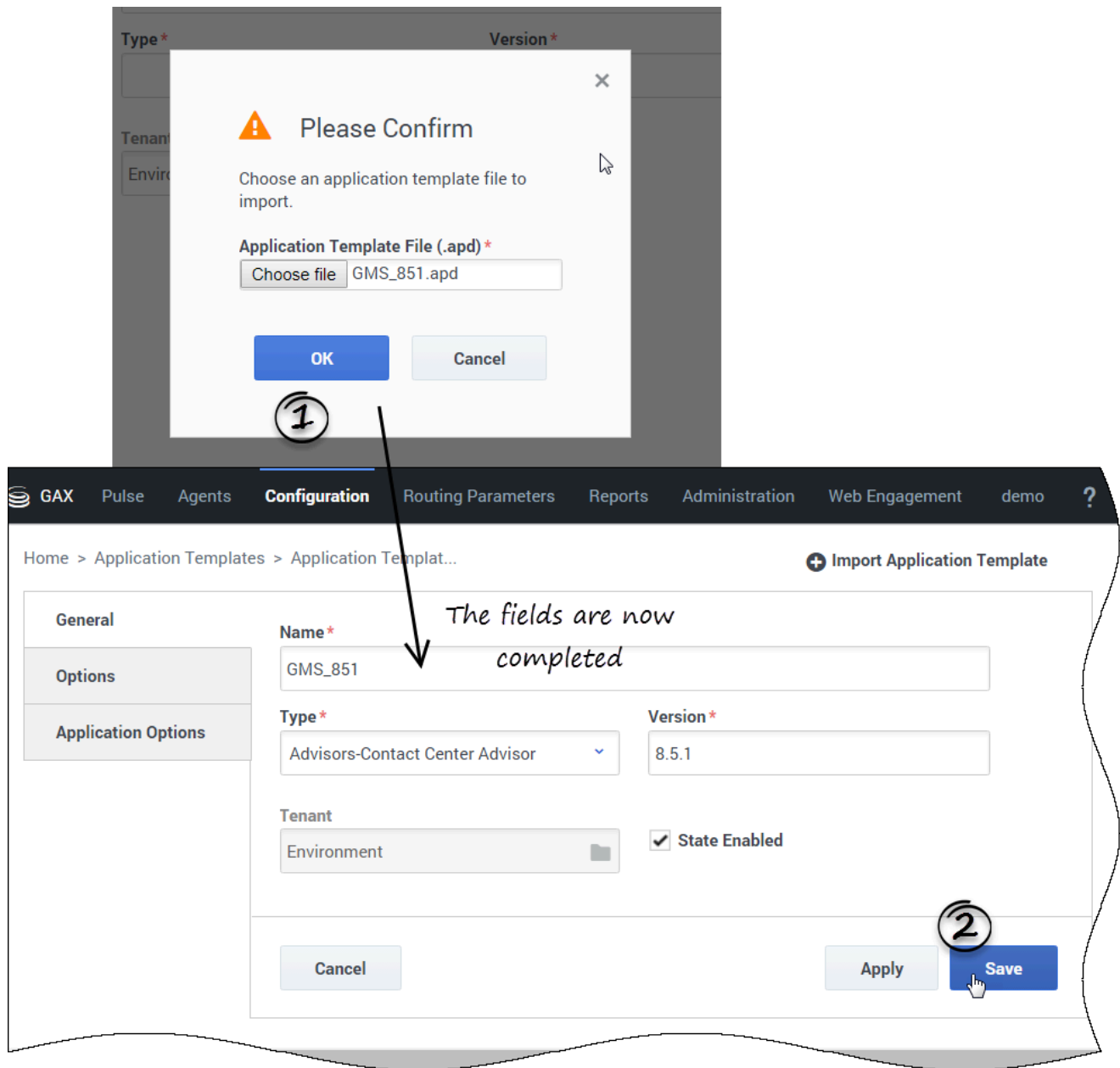
Create an Application Object



Click **+New**, then click **Import Application Template**. Navigate to the *Templates* directory of your Installation Package (IP) and add the following files:

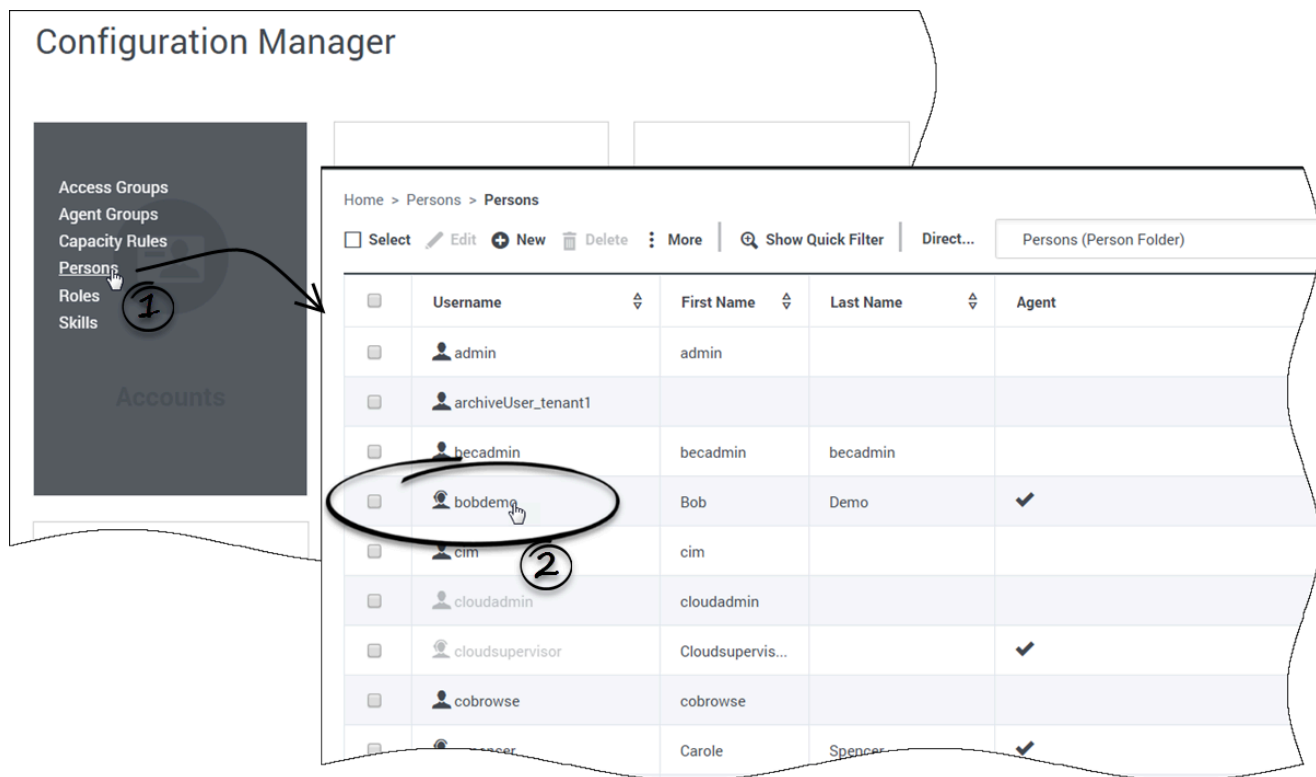
- **GMS_851.apd** - This template is used to deploy GMS with default options.
- **ApplicationCluster_851.apd** - You do not need this template for a single node deployment. This template is used for deploying all GMS's into the same cluster. The Cluster Application will contain shared configuration for GMS nodes.

Create an Application Object



Confirm the Import action, then **Save** the template.

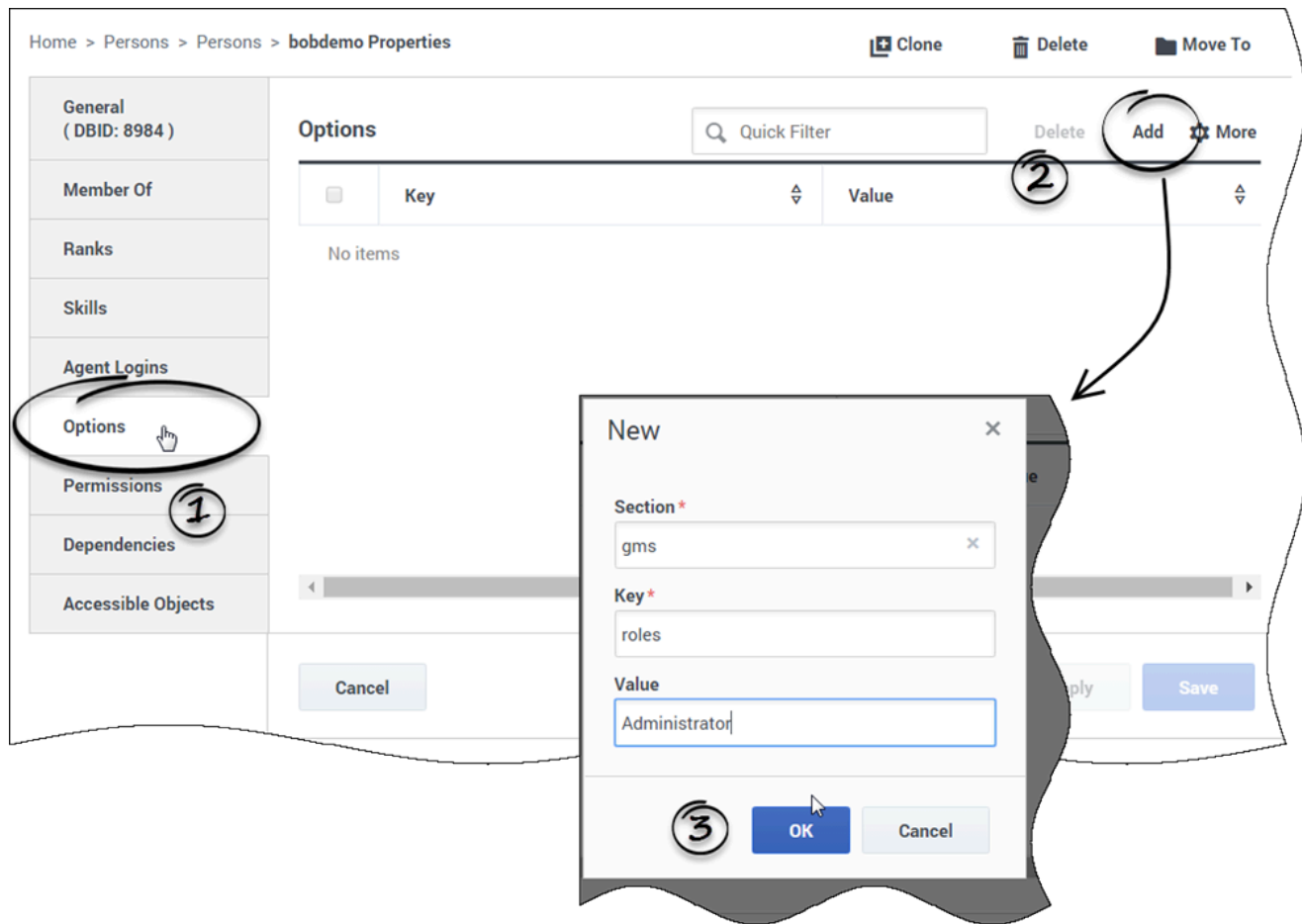
Create a GMS Administrator



Open GAX and select the **Configuration Manager** section. In the **Accounts** menu, select **Persons** to get the list of configured users.

Edit the person who will be logging into the Service Management UI. You are going to give this user the permissions to read/write data into Callback related configuration objects (for example, GMS Application, Business Attributes, Transaction Lists for Resources/Patterns, and so on).

Create an Application Object



In the **Options** tab, click **Add** to set the following options:

1. Add the gms/roles option:

- Enter gms for **Section**,
- Enter roles for **Key**,
- Enter one of the following values:
 - Supervisor: Role used to monitor and configure Callbacks only.
 - Administrator: Role used to administer the creation of Callback Services. This role provides access to all panels and includes the **Supervisor** role.
 - CallbackReadOnly: Role used to provide read-only access. The user can see the Callback panel without Create, Update, or Delete capabilities. This role was introduced in 8.5.226.03.

2. (Optional) Add the gms/services option:

- Enter gms for **Section**,
- Enter services for **Key**,
- For the value, you can enter:

- **Exact matching names**—Enter the comma-separated list of services that the administrator is allowed to monitor. For example, "callback-support, callback-sales, callback-blackfriday-support".
- **A virtual service group name**—Enter a virtual service group name. For example, 'support'. To add services to a given virtual group, add the **_service_groups** option to your services and enter a comma-separated list of group names.

For example, if you add the **_service_groups** = 'support' to the callback-support and callback-blackfriday-support services, these services will be displayed to the agent.

Note that if you defined several virtual groups for your service, you need to add only one virtual group name to your user permissions.

Important

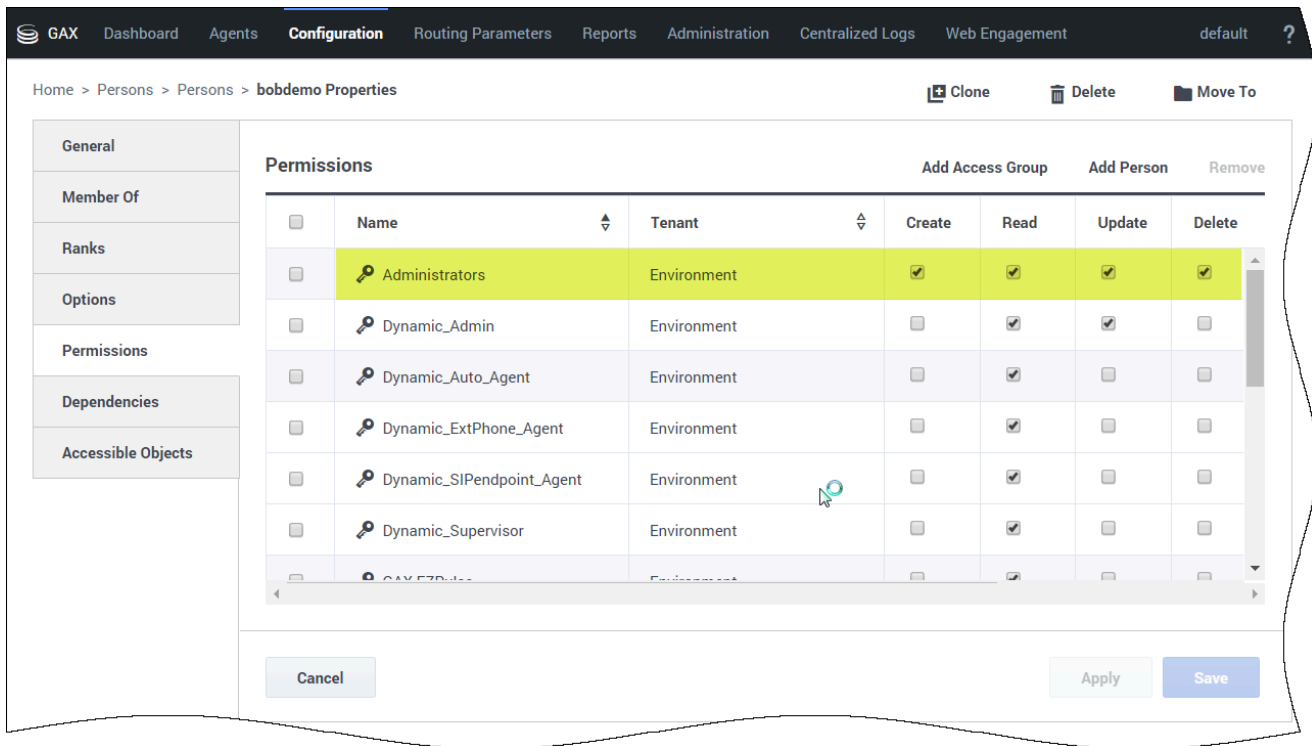
If an Administrator changes a user's role during a Service Management UI session, the user will have to disconnect/reconnect for the new role to go into effect.

Set Administrator Permissions

Warning

This step is required only for versions older than 8.5.102.11.

Create an Application Object



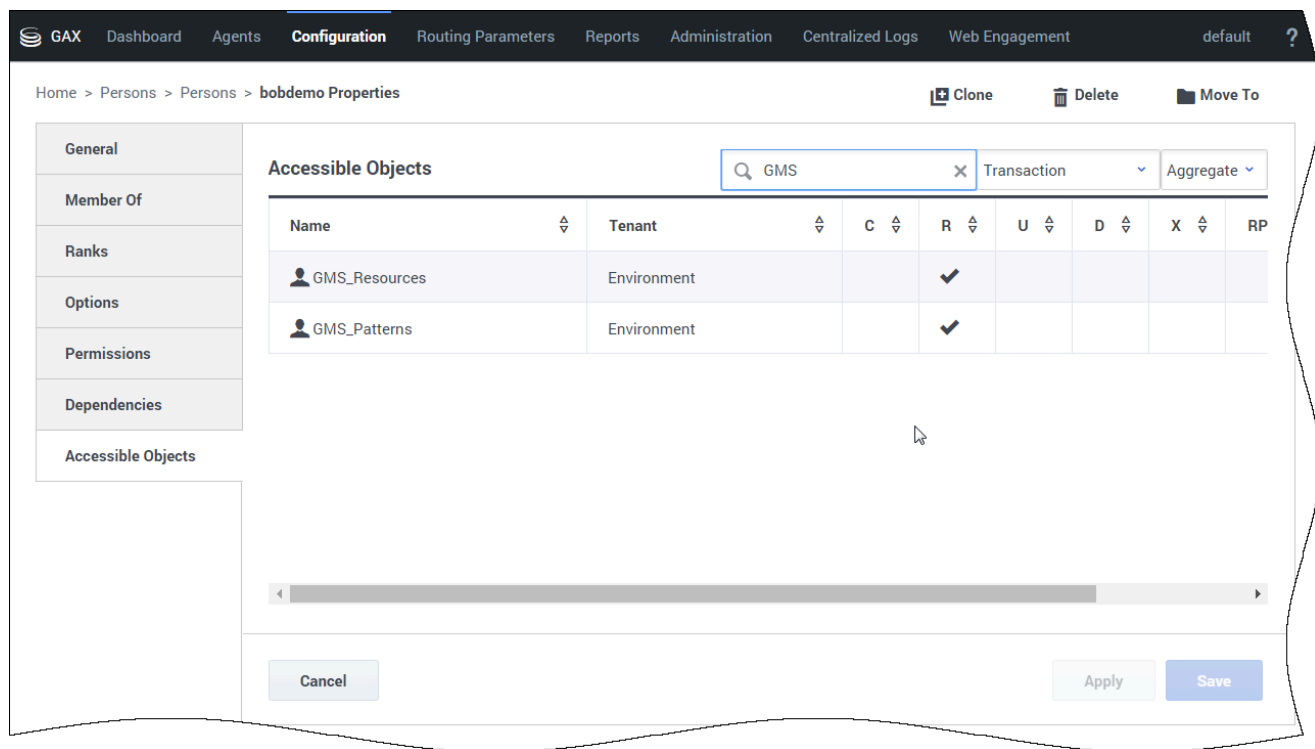
The screenshot shows the GAX Configuration page for the 'bobdemo Properties' object. The 'Permissions' tab is active, displaying a table of roles and their permissions. The 'Administrators' role is highlighted in yellow and has all permissions (Create, Read, Update, Delete) checked. Other roles like 'Dynamic_Admin' and 'Dynamic_Auto_Agent' have 'Read' and 'Update' permissions checked. The 'Cancel', 'Apply', and 'Save' buttons are at the bottom.

	Name	Tenant	Create	Read	Update	Delete
<input checked="" type="checkbox"/>	Administrators	Environment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Dynamic_Admin	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Dynamic_Auto_Agent	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Dynamic_ExtPhone_Agent	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Dynamic_SIPendpoint_Agent	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Dynamic_Supervisor	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	GAX_FZD-1-1	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In the **Permissions** tab, make sure to add *Environment\Administrators*.

This step enables your GMS administrator to manage configuration objects that GMS reads and writes.

Create an Application Object



Select the **Accessible Objects** tab. For other GMS objects, you need to set the following permissions:

- Application (GMS/GMS Cluster): Read, Change
- Transactions: Read, Change
- Hosts: Read
- Persons: Read

Next Steps:

- For a GMS cluster deployment, go to [Cluster Deployment](#).
- For a single node deployment, go to [Single Node Deployment](#).

Single Node Deployment

Purpose: To create and configure a GMS Application object for a single GMS node (no cluster).

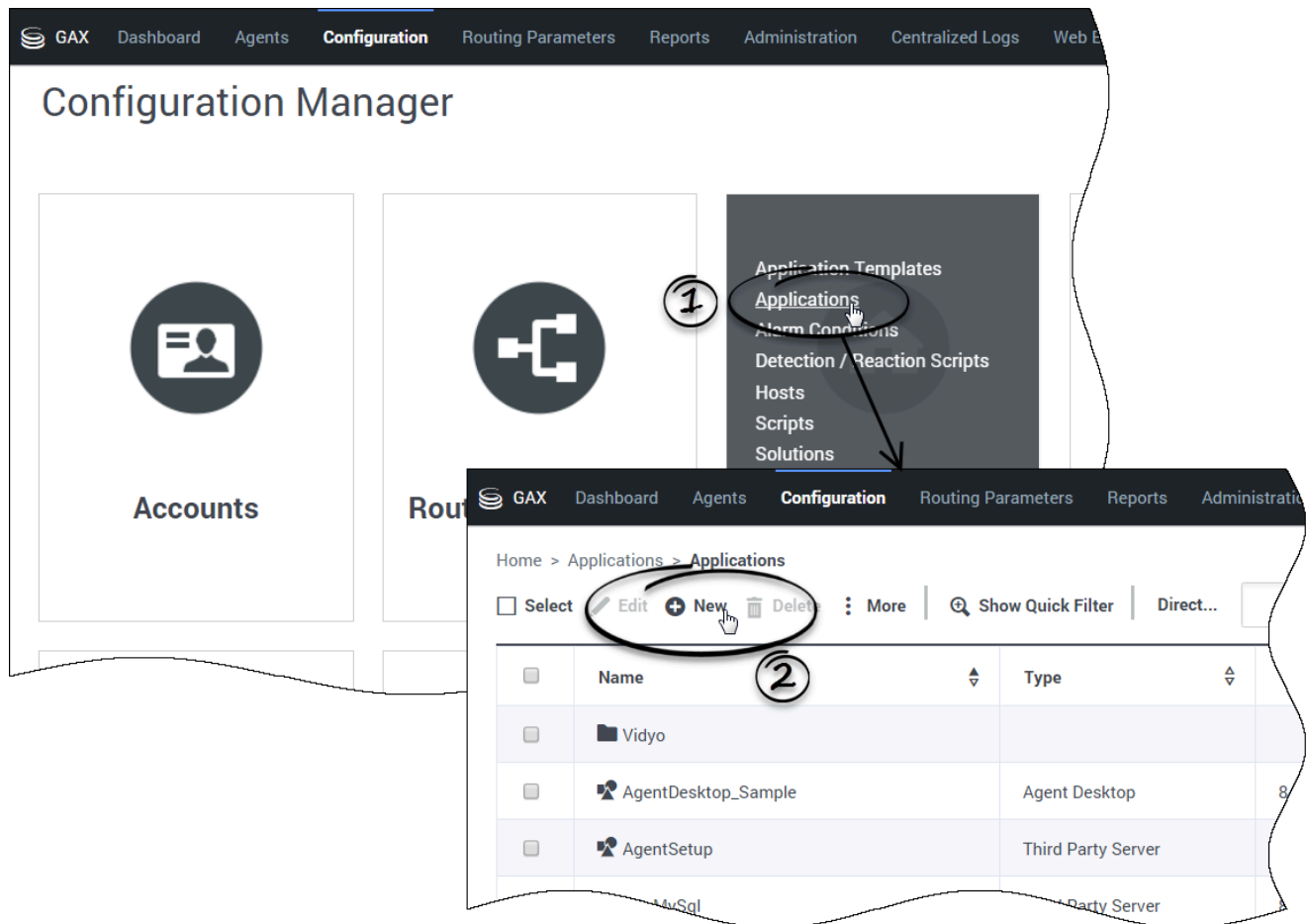
Prerequisites:

- [Import the Application Templates](#)

Create an Application Object

- Create a GMS Administrator

Create the GMS Application Object (Single Node)



In the Configuration Manager tab, click the *Applications* link in the Environment menu; then, click + **New** .

Create an Application Object

Browse your template

The screenshot shows the GAX Configuration page with the 'New Properties' form. The 'Name' field is set to 'GMS_851_Single'. The 'Template' field is empty, and a hand icon is shown clicking the dropdown arrow. A circled '1' is next to the dropdown arrow. Below the form, the 'Select Application Template' dialog is open. It has a search bar with 'GMS' entered. The dialog shows a table with two rows: 'GMS_851' (Type: Genesys Generic Server, Version: 8.5.1) and 'GMS_ApplicationCluster_851' (Type: Application Cluster, Version: 8.5.1). A circled '2' is next to the 'GMS_851' row. A tip at the top right of the dialog says 'Tip: Use the filter to browse the templates'.

Home > Applications > Applications > New Properties

General

Name * GMS_851_Single

Template * Type

Version

Is Application Server ☐

Tenant

Environment

State Enabled ☒

Select Application Template *Tip: Use the filter to browse the templates*

Search: GMS

Name	Type	Version
GMS_851	Genesys Generic Server	8.5.1
GMS_ApplicationCluster_851	Application Cluster	8.5.1

Enter a name for your GMS application (with no space). Click to browse the GMS template. In **Select Application Templates**, click **Application Templates** and select the GMS_851 application template that you imported previously.

General Settings

Home > Applications > Applications > New Properties

General

Component type
Component

Version
8.5.1

☒ Is Application Server

Working Directory *

Command Line *

Command Line Arguments
dummy

Startup Timeout *
90

Shutdown Timeout *
90

Scroll down

Cancel Apply Save

- Select Component for **Component Type**.
- In the **Command Line Arguments** text box, enter a dummy value. It will be overwritten when Genesys Mobile Services is installed; however, having values in these fields is required to save the Application object.

Create an Application Object

The screenshot shows the 'New Properties' configuration page for an application object. The page has a dark navigation bar at the top with links: GAX, Dashboard, Agents, Configuration (selected), Routing Parameters, Reports, Administration, Centralized Logs, Web Engagement, default, and a help icon. Below the navigation bar is a breadcrumb trail: Home > Applications > Applications > New Properties. On the left is a sidebar with tabs: General (selected), Connections, Ports, Tenants, Options, and Application Options. The main content area contains the following fields and options:

- Startup Timeout***: Input field with value 90.
- Shutdown Timeout***: Input field with value 90.
- Auto-Restart**: ☐ (unchecked).
- Primary**: ☒ (checked).
- Host***: Input field with value 135.39.45.125 and a browse icon.
- Certificate**: Input field.
- Certificate Description**: Input field.
- Certificate Key**: Input field.
- Trusted CA**: Input field.
- Tenant**: A section with a dropdown menu showing 'Environment' and a checkbox labeled **State Enabled** which is checked. This checkbox is circled in red.

At the bottom of the form are three buttons: Cancel, Apply, and Save.

Check that the **State** is enabled, and browse your hostname for this application.
Click **Apply** or **Save**.
Your application is created.

Configure the GMS Application Object for Single Node

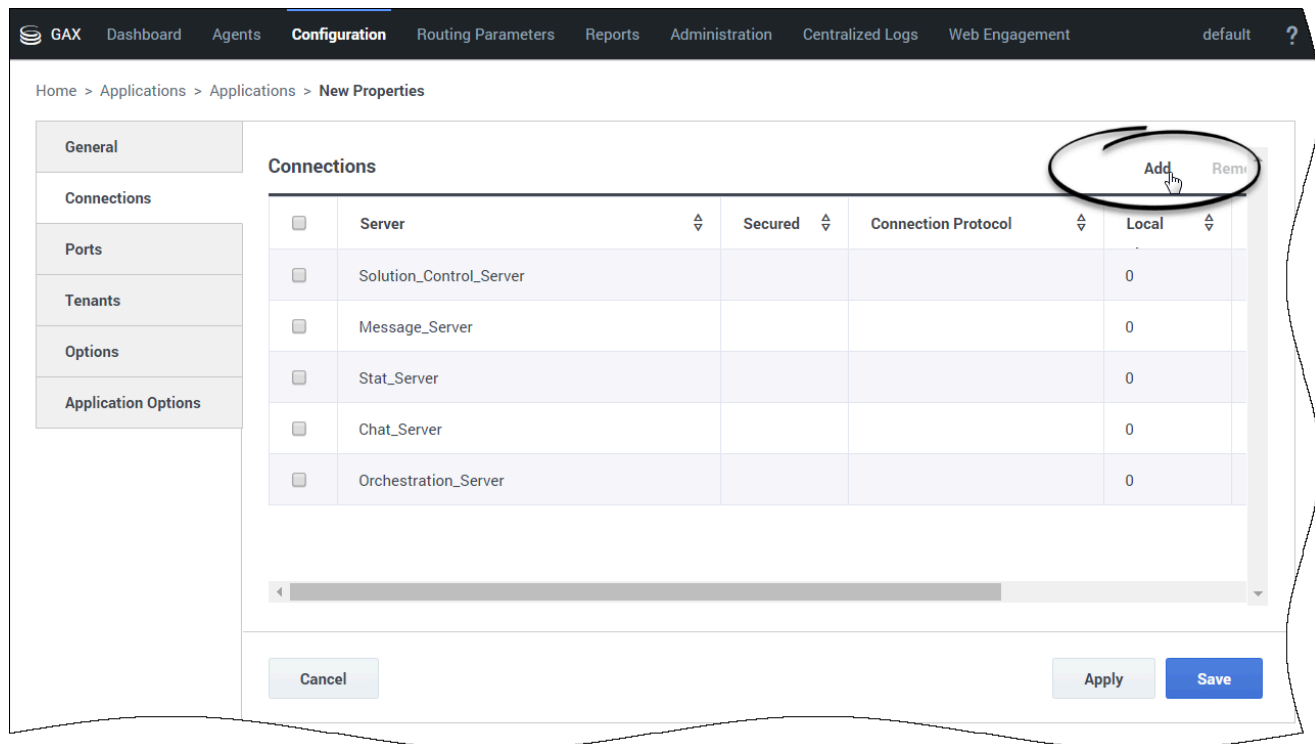
The screenshot shows the 'GMS_851_Single Properties' configuration page in the GAX dashboard. The page has a sidebar with tabs: General, Connections, Ports, Tenants, Options, Permissions, Dependencies, and Application Options. The 'General' tab is selected. The main content area contains the following fields and options:

- Timeout ***: 10. Handwritten note: *Must not be checked!*
- Attempts ***: 1
- Login As System**: ☐ (unchecked). Handwritten note: *Must not be checked!*
- Login As Account ***: bobdemo. Handwritten note: *Browse the GMS admin*
- Certificate**: (empty field)
- Certificate Description**: (empty field)
- Certificate Key**: (empty field)
- Trusted CA**: (empty field)
- Tenant**: Environment
- State Enabled**: ☒ (checked)

At the bottom of the page, there are three buttons: Cancel, Apply, and Save.

In the General tab, uncheck **Log On As System** option and browse your GMS Admin account to set up **Log On Account**. If you do not set up **Log On Account**, the GMS Admin UI will throw permission errors when you will try to create GMS Built-in services.

Set up your Connections



In the **Connections** tab, click **Add** to add the following connections:

- Orchestration Server (ORS) - optional: Add this connection (using HTTP) if you plan to use GMS Callback features.
- Solution Control Server - optional: Add this connection if you plan to use GMS Chat features.
- Chat Server - optional: Add this connection if you plan to use GMS Chat features.
- Stat Server - optional: Add this connection if you plan to use GMS Reporting features.
- Message Server - optional: Add this Connection if you plan to use Log features.
- URS Server - optional: Add this Connection if you plan to use EWT features.

In the **Ports** tab, check that a default dummy port is created.

Important

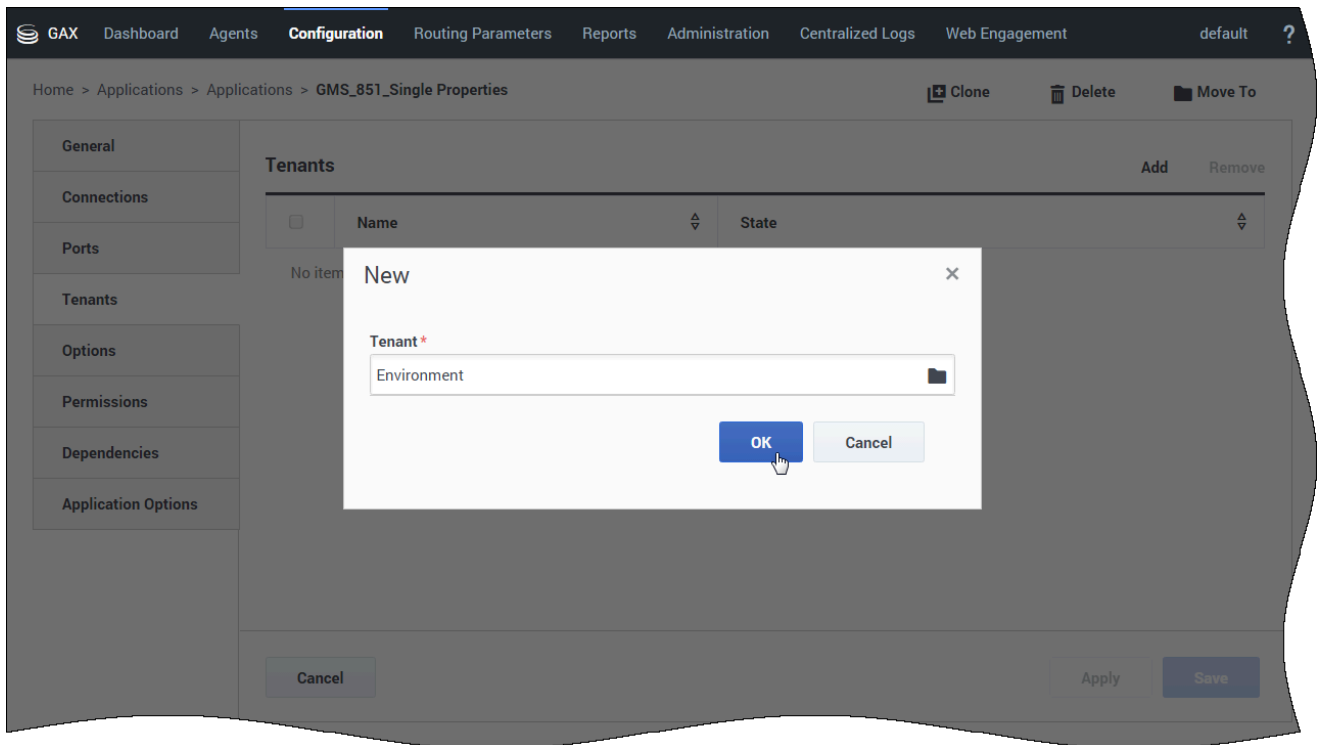
If you do not plan to use GMS configuration defaults at startup or if you plan to use a Configuration Server proxy, refer to the following documentation:

- [Using the Management Layer](#)

Create an Application Object

- [How to Use Startup Files](#)
- [Configuration Server Proxy](#)

Set up Server Information



In the *Tenants* tab, click **Add** to set up the list of tenants that use your Genesys Mobile Services application.

Create an Application Object

Verify your Metadata

The screenshot shows the GAX Configuration page for 'GMS_851_Single Properties'. The left sidebar contains a menu with 'General', 'Connections', 'Ports', 'Tenants', 'Options', 'Permissions', 'Dependencies', and 'Application Options'. The main area displays the 'Options' table with columns 'Key' and 'Value'. The table contains three rows: 'Key', 'metadata', and 'app-template'. The 'app-template' row has a value 'GMS_851_83e970e2-4376-4482-9aea-e2cd8fc4...'. Above the table is a 'Quick Filter' search bar. To the right of the table are buttons for 'Delete', 'Add', and 'More'. The 'More' button is highlighted, and a dropdown menu is open showing 'Import' and 'Export' options. A hand icon is pointing to the 'Import' button. A handwritten note 'You can import' with an arrow points to the 'Import' button. At the bottom of the page are 'Cancel', 'Apply', and 'Save' buttons.

Key	Value
Key	
metadata	
app-template	GMS_851_83e970e2-4376-4482-9aea-e2cd8fc4...

You may need to these metadata, for instance, if you are installing a Context Services application.

Create an Application Object

Set up Permissions for GMS Users

The screenshot shows the GAX Configuration page for 'GMS_851_Single Properties'. The left sidebar contains a menu with options: General, Connections, Ports, Tenants, Options, Permissions (selected), Dependencies, and Application Options. The main area displays the 'Permissions' tab with a table listing users and their permissions. The table has columns for Name, Tenant, Create, and Read. The 'bobdemo' user is highlighted in yellow. Below the table are 'Cancel', 'Apply', and 'Save' buttons. The top navigation bar includes links to Dashboard, Agents, Configuration, Routing Parameters, Reports, Administration, Centralized Logs, and Web Engagement.

Name	Tenant	Create	Read
Super Administrators	Environment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SYSTEM	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Users	Environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
bobdemo	Environment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
default	Environment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

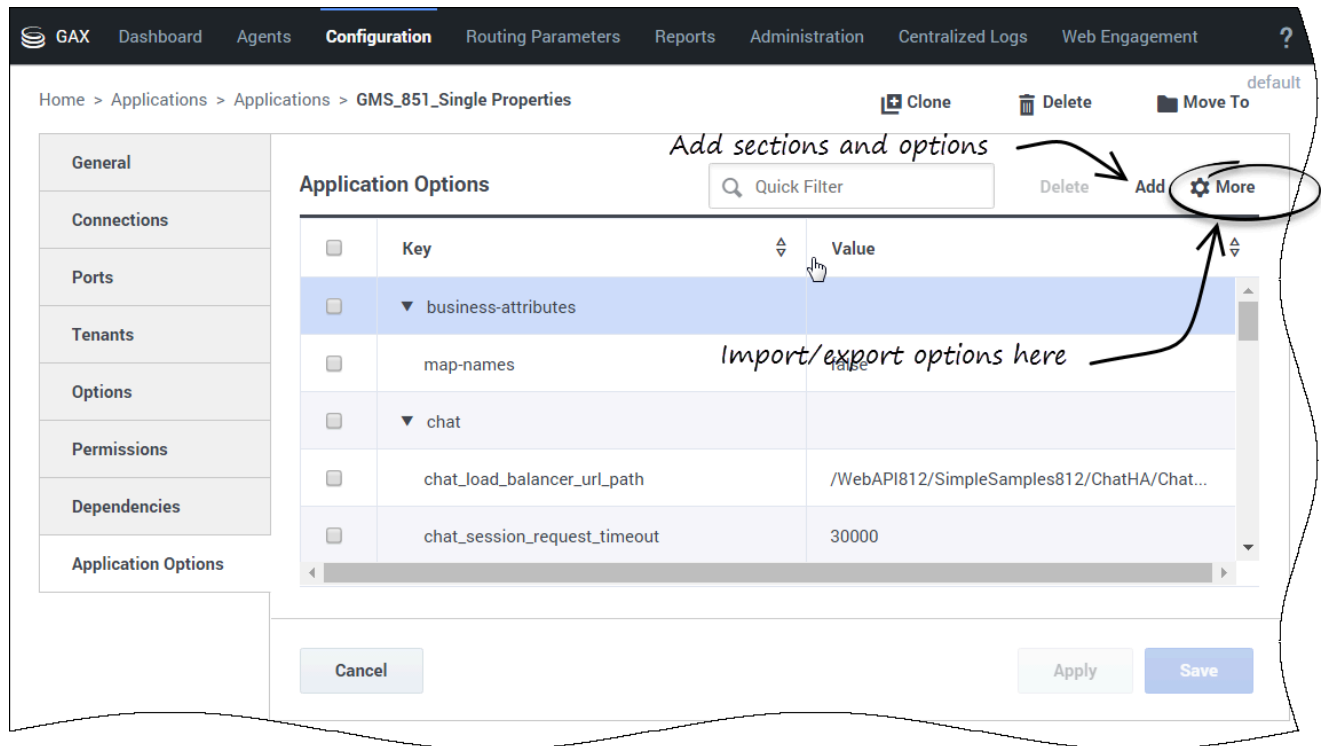
In the *Permissions* tab, you must add a user that is allowed to read/write data into GMS related configuration objects (for example, GMS Application, Transaction Lists for Resources/Patterns, and so on).

To do this, either click **Add Access Group** to browse the **Environment\Administrators** or **Add User** to browse the GMS Administrator set up previously.

Alternatively, you can simply use the *Default* user, which is already part of the Administrator Group.

Create an Application Object

Set up GMS options



In the **Application Options** tab, you can set up all your GMS options. Refer to the [Options reference](#) for details and check further chapters of this book. For Digital Channels API configuration options, refer to [Configuring the Digital Channels API](#).

You can now save and close your GMS application object.

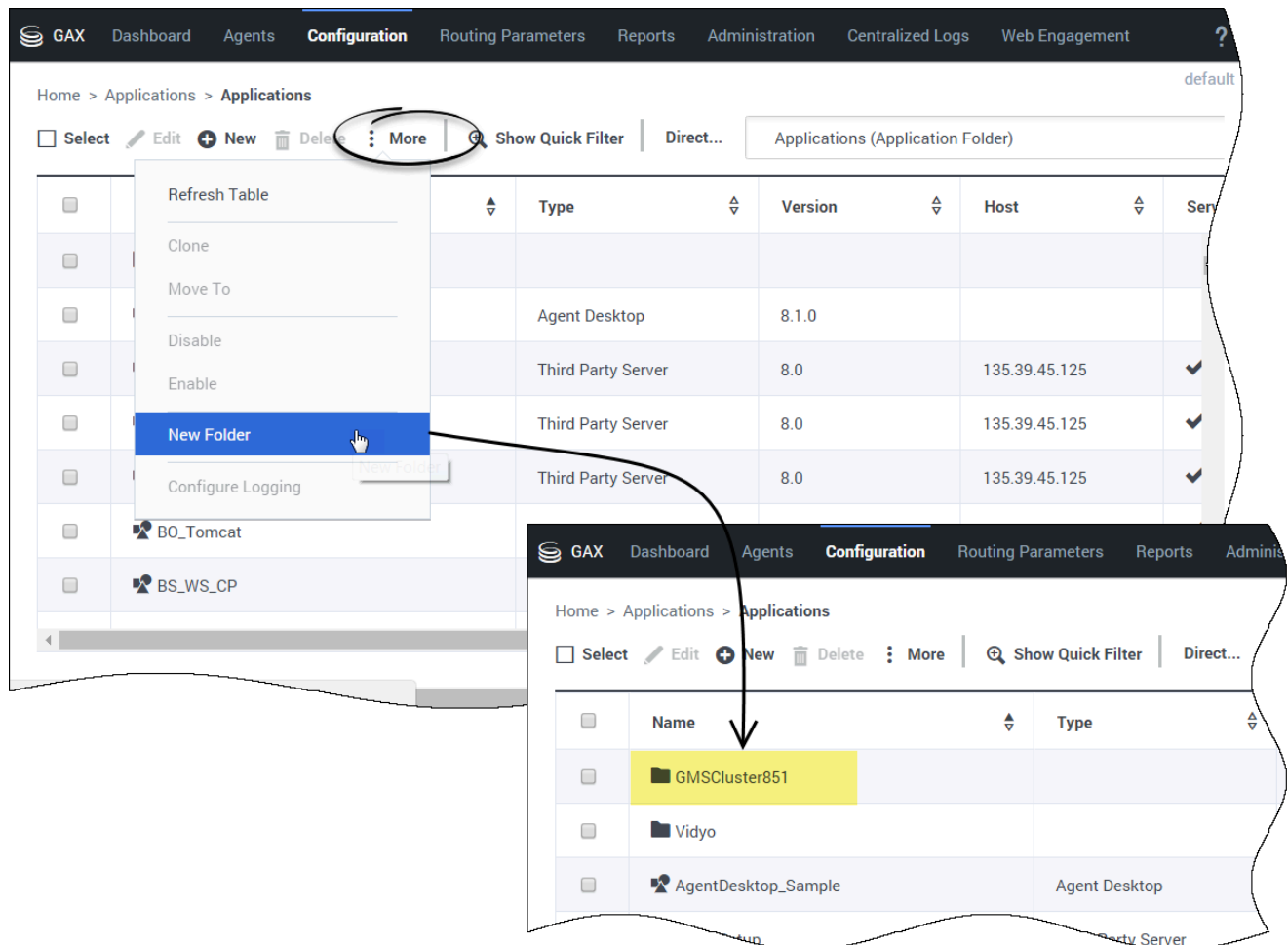
Next Steps: [Install Genesys Mobile Services](#).

Cluster Deployment

Purpose: To create and configure a GMS Application Cluster object for Genesys Mobile Services.

Prerequisites: [Import the Application Templates](#).

Create a folder for the GMS cluster (Best practice)



In the Configuration Manager tab, click the Applications link in the Environment menu; then, click More > New Folder to create a folder that will contain all of your application nodes. Set the new folder to a meaningful name, such as *GMScluster851*.

Important

Do not use spaces in the folder name.

Create a GMS cluster application

The screenshot shows the GAX Configuration page with the 'New Properties' dialog open. The dialog has a sidebar with tabs: General, Connections, Ports, Tenants, Options, and Application Options. The 'General' tab is selected. The form fields are as follows:

- Name ***: GMSApplicationCluster_851
- Template ***: ApplicationCluster_851
- Type**: Application Cluster
- Component type**: Unknown Component Type
- Version**: 8.5.1
- Is Application Server**: ☒

At the bottom of the dialog are three buttons: Cancel, Apply, and Save.

Create a new application with the wizard (as detailed for a single node), but use the **ApplicationCluster_851.apd** template instead of the regular template.

- Select **Unknown Component Type** in Component type.

Important

Do not use spaces in the application cluster name.

Set the Cluster General Settings

Create an Application Object

The screenshot shows the GAX Configuration interface. The top navigation bar includes links for GAX, Dashboard, Agents, Configuration (highlighted), Routing Parameters, Reports, Administration, and Centralized Logs. Below the navigation bar, the breadcrumb trail reads: Home > Applications > Applications > GMSCluster851 > New Properties. The main content area is titled 'Web Engagement' and 'default'. On the left, a sidebar contains a list of configuration options: General (selected), Connections, Ports, Tenants, Options, and Application Options. The 'General' tab is active, displaying several input fields: 'Working Directory *' (empty), 'Command Line *' (empty), 'Command Line Arguments' (containing 'dummy'), 'Startup Timeout *' (90), 'Shutdown Timeout *' (90), 'Auto-Restart' (unchecked), 'Primary' (checked), and 'Host *' (135.39.45.125). At the bottom of the form are three buttons: 'Cancel', 'Apply', and 'Save'.

- Type dummy values in *Working Directory* field; this option will be overwritten when Genesys Mobile Services is installed; however, having values in these fields is required to save the Application object.
- Uncheck **Log On As System** option and browse to your GMS Admin account to set up **Log On Account**. If you do not set up **Log On Account**, the GMS Admin UI will throw permission errors when you will try to create GMS Built-in services.
- Check that the State is enabled, and browse a dummy hostname for this application (mandatory to be able to save the application).

Click **Apply** or **Save**. Your application is created.

Create an Application Object

The screenshot shows the GAX Configuration page for GMSApplicationCluster_851... The left sidebar contains a menu with the following items: General, Connections, Ports, Tenants, Options, Permissions, Dependencies, and Application Options. The main content area is titled 'Connections' and features a table with columns: Server, Secured, Connection Protocol, and Local. The table lists five servers: Solution_Control_Server, Stat_Server, Chat_Server, and Orchestration_Server. Each server has a checkbox in the 'Server' column and a value of '0' in the 'Local' column. The 'Secured' and 'Connection Protocol' columns are empty. At the top right of the table are 'Add' and 'Remove' buttons. At the bottom of the page are 'Cancel', 'Apply', and 'Save' buttons.

Server	Secured	Connection Protocol	Local
<input type="checkbox"/> Solution_Control_Server			0
<input type="checkbox"/> Stat_Server			0
<input type="checkbox"/> Chat_Server			0
<input type="checkbox"/> Orchestration_Server			0

Set the *Connections* list and specify all of the servers to which Genesys Mobile Services must connect:

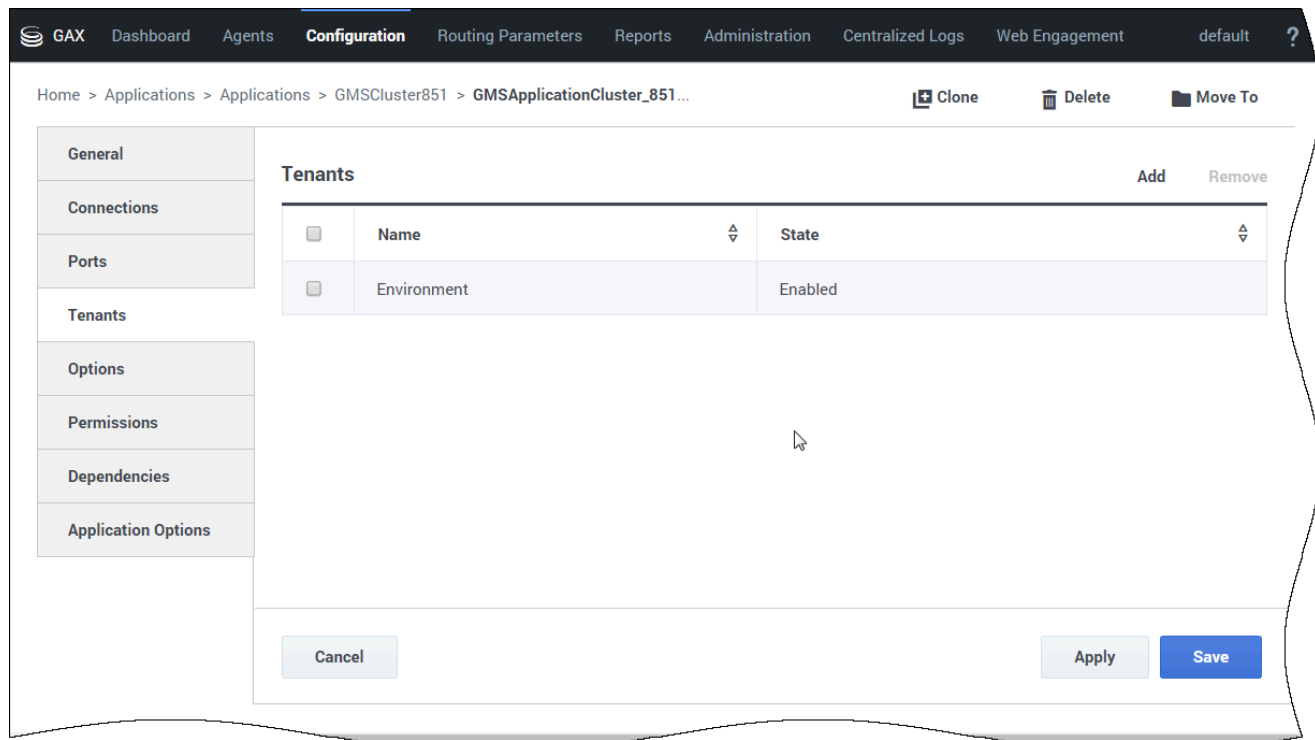
- Orchestration Server (ORS) - optional: Add this connection (using HTTP) if you plan to use GMS Callback features.
- Solution Control Server - optional: Add this connection if you plan to use GMS Chat features.
- Chat Server - optional: Add this connection if you plan to use GMS Chat features.
- Stat Server - optional: Add this connection if you plan to use GMS Reporting features.
- Message Server - optional: Add this Connection if you plan to use Log features.
- URS Server - optional: Add this Connection if you plan to use EWT features.

Important

If you do not plan to use GMS configuration defaults at startup or if you plan to use a Configuration Server proxy, refer to the following documentation:

- [Using the Management Layer](#)
- [How to Use Startup Files](#)
- [Configuration Server Proxy](#)

Create an Application Object



- In the Tenants section, click **Add** to set up the list of tenants that use your Genesys Mobile Services applications (one or more in a multi-tenant environment).

Create and Configure a GMS Application Node (Cluster)

Purpose: To create and configure a GMS Application object for a GMS node that is part of a cluster.

Prerequisites:

- [Import the Application Templates](#)
- [Create a GMS Administrator](#)
- [Create the GMS Application Cluster Object](#)

Create an Application Object

Create your nodes

The screenshot shows the GAX Configuration page for 'GMS_851_Node1 Properties'. The left sidebar contains a menu with 'General' selected, and other options like 'Connections', 'Ports', 'Tenants', 'Options', 'Permissions', 'Dependencies', and 'Application Options'. The main content area is titled 'Connections' and features a table with columns: 'Server', 'Secured', 'Connection Protocol', and 'Local'. The table has two rows: the first row is for 'Server' with 'Secured' set to 'Secured', 'Connection Protocol' set to 'Local', and 'Local' set to '0'; the second row is for 'GMSApplicationCluster_851' with 'Secured' set to 'Secured', 'Connection Protocol' set to 'Local', and 'Local' set to '0'. There are 'Add' and 'Remove' buttons at the top right of the table. At the bottom of the page, there are 'Cancel', 'Apply', and 'Save' buttons.

Server	Secured	Connection Protocol	Local
<input type="checkbox"/>	Secured	Local	0
<input type="checkbox"/>	Secured	Local	0

To create a GMS Node, you must create a **GMS application** in your newly created Application Cluster folder.

Important

Make sure to **set up permissions** for all nodes.

When setting your node connections, add the GMS Application Cluster that you just created previously.

Create an Application Object

Home > Applications > Applications > GMSCluster851 > **GMS_851_Node2** Properties

Clone Delete Move To

General
Connections
Ports
Tenants
Options
Permissions
Dependencies
Application Options

Application Options Quick Filter Delete Add More

<input type="checkbox"/>	Key	Value
<input type="checkbox"/>	server	
<input type="checkbox"/>	external_url_base	http://127.0.0.1:8080/
<input type="checkbox"/>	node_id	2
<input type="checkbox"/>	web_port	8080
<input type="checkbox"/>	web_scheme	http
<input type="checkbox"/>	web_host	myhostname

Cancel Apply Save

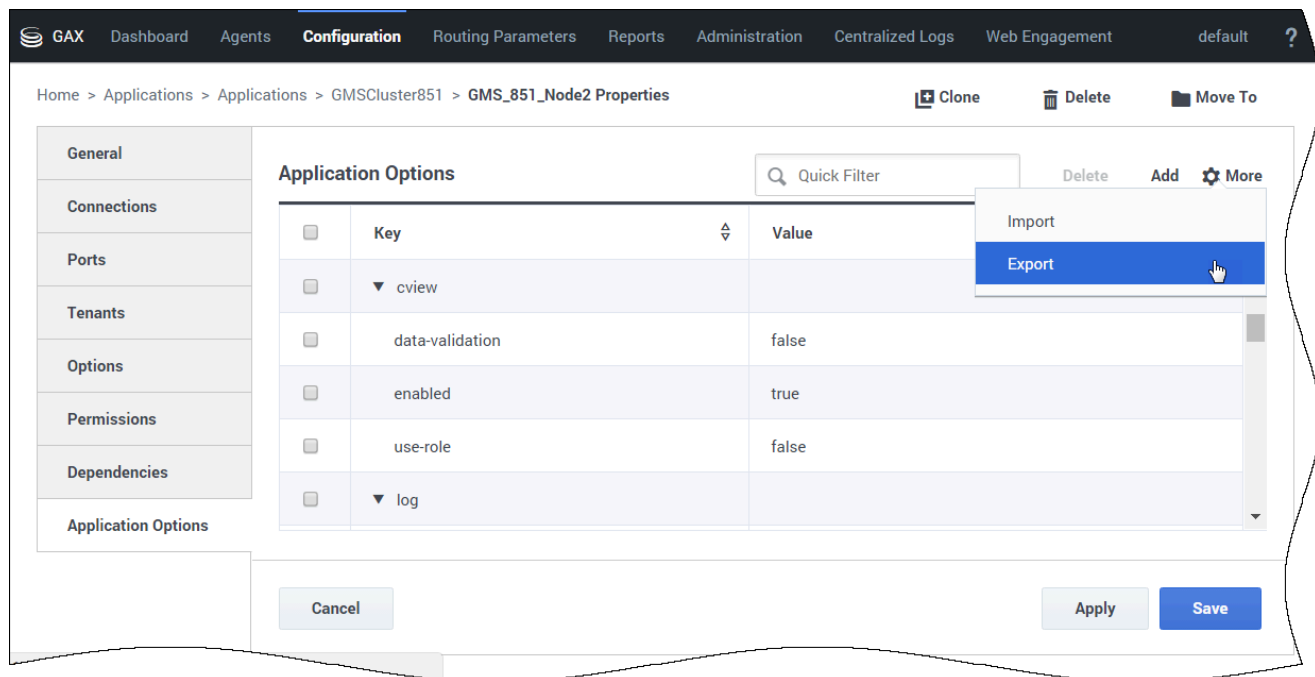
For each node, select the **Application Options** tab and configure `node_id` in the **server** section. The node ID is used to identify each GMS node and will be used for resource allocation, access code, and more. `node_id` must be unique and must be defined in each GMS application, and not at Cluster level.

Configure the following optional parameters in the **server** section if you need to force GMS to discover your nodes:

- `web_host`
- `web_port`
- `web_scheme`

`web_host` is used for GMS communications between other GMS nodes and other servers like ORS and URS. You can use `web_port` and `web_scheme` with `web_host` to build the GMS address for other servers that need to communicate with GMS.

Share Options Across the GMS Cluster



Set up additional configuration options in one of your nodes (as detailed in further chapters), and then click **Export** to save these options to a file.

Then:

1. Remove all these options from your node, and save.
2. Edit the GMS Application Cluster and click **Import** in the **Options** tab to load the options file.
3. Make sure to remove the `node_id` setting from your cluster's configuration.

Tip

You can set up options in your GMS node, but these options will not be shared. This is useful to set specific settings for Cassandra storage, logs, and more.

If your GMS version is lower than 8.5.202, and if you configure a section in one of the GMS Nodes, its content overwrites the same section defined in your cluster application object. Starting in 8.5.202, only the options that you define in your GMS node supersede those configured in the same section of your cluster. This means that the options that are defined in your cluster apply to your node even if they are not configured in this node.

GMS Cluster	GMS Node	Result
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Create an Application Object

[cview] allow-custom-ids=true data-validation=true enabled=true use-role=false expiration=45s	[cview] allow-custom-ids=true data-validation=true enabled=true use-role=false	<p>Prior to 8.5.202, the expiration parameter does not apply to the GMS node, because the cview section of the GMS node overwrites the one defined in the GMS Cluster.</p> <p>Starting in 8.5.202, the expiration parameter applies to the GMS node, because it is configured in the cluster and not overwritten in the node's section.</p>
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Enable Load Balancing in your Cluster Application

Home > Applications > Applications > GMSCluster851 > GMSApplicationCluster_851 ...

Clone Delete Move To

General
Connections
Ports
Tenants
Options
Permissions
Dependencies
Application Options

Application Options

Quick Filter Delete Add More

<input type="checkbox"/>	Key	Value
<input type="checkbox"/>	resources_list_name	GMS_Resources
<input type="checkbox"/>	▼ server	
<input type="checkbox"/>	external_url_base	http://135.39.XX.XXX:8080/
<input type="checkbox"/>	node_id	
<input type="checkbox"/>	web_port	8080

Cancel Apply Save

In the Options tab of your GMS Cluster application, section server, select external_url_base.

Set this option to the external URL of your cluster's load balancer, which will receive the requests submitted by your client applications.

Important

This step ensures that all GMS Nodes will share the same load balancer. See [the Options reference for more details](#).

You can now save and close your GMS application cluster object.

Next Steps: You must now install Genesys Mobile Services for each node of the cluster.