Genesys Mobile Services Deployment Guide
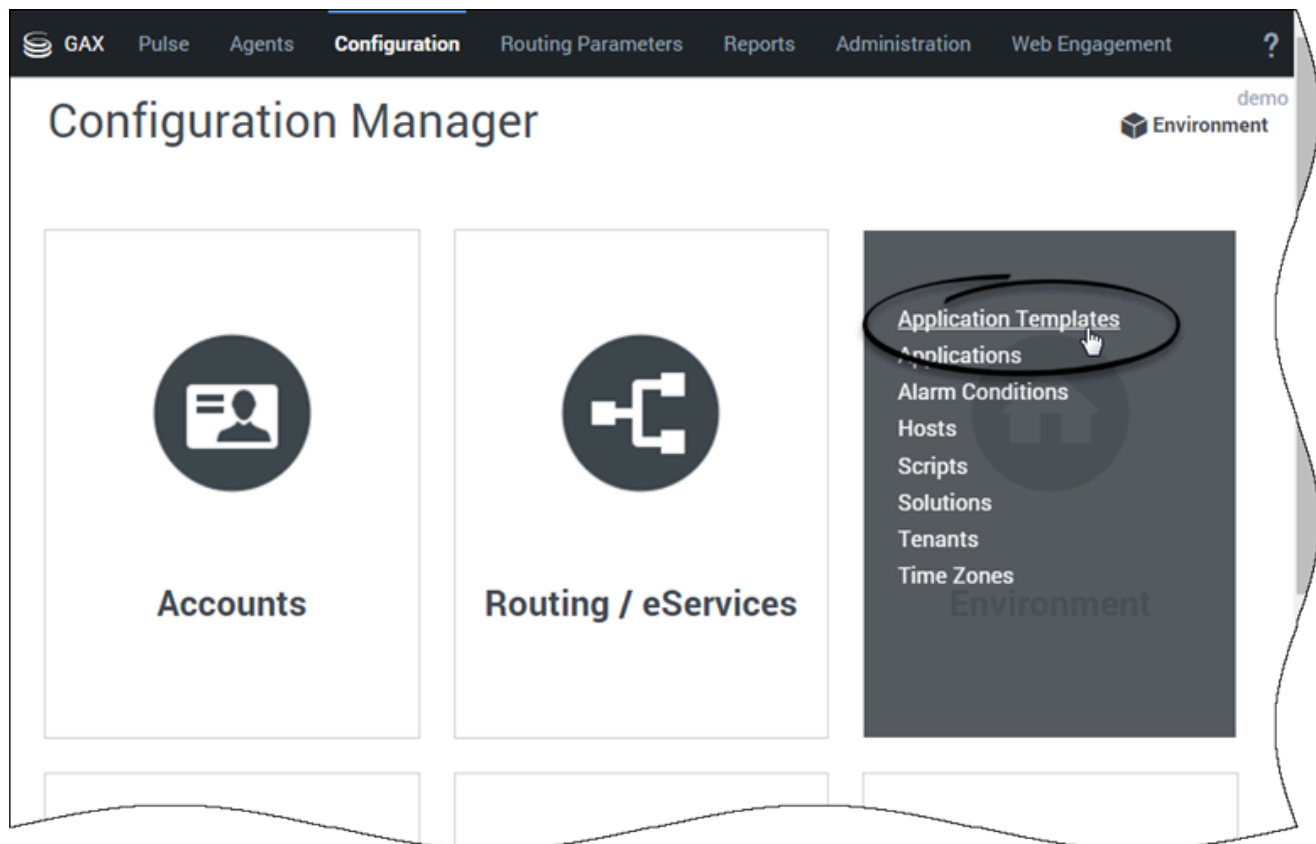
Create an Application Object

12/14/2025

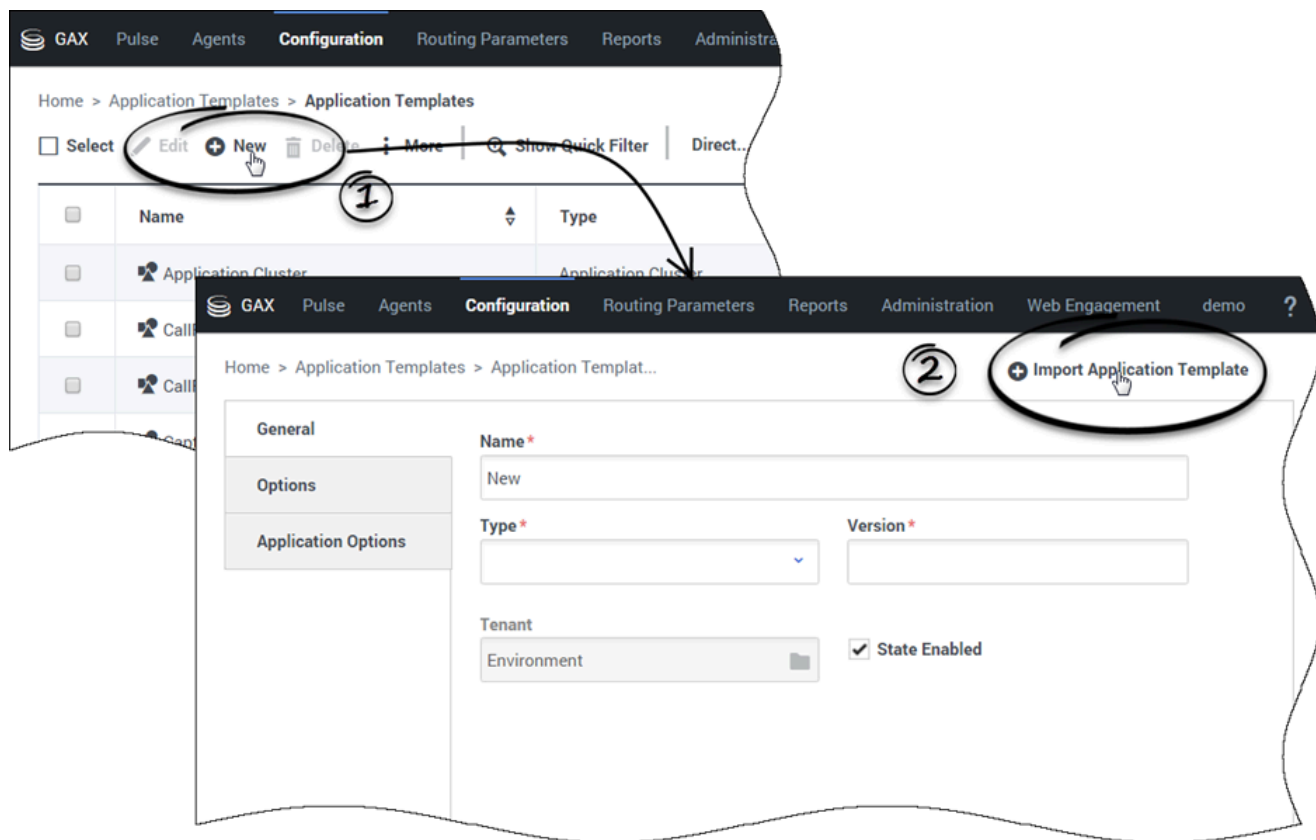# Create an Application Object

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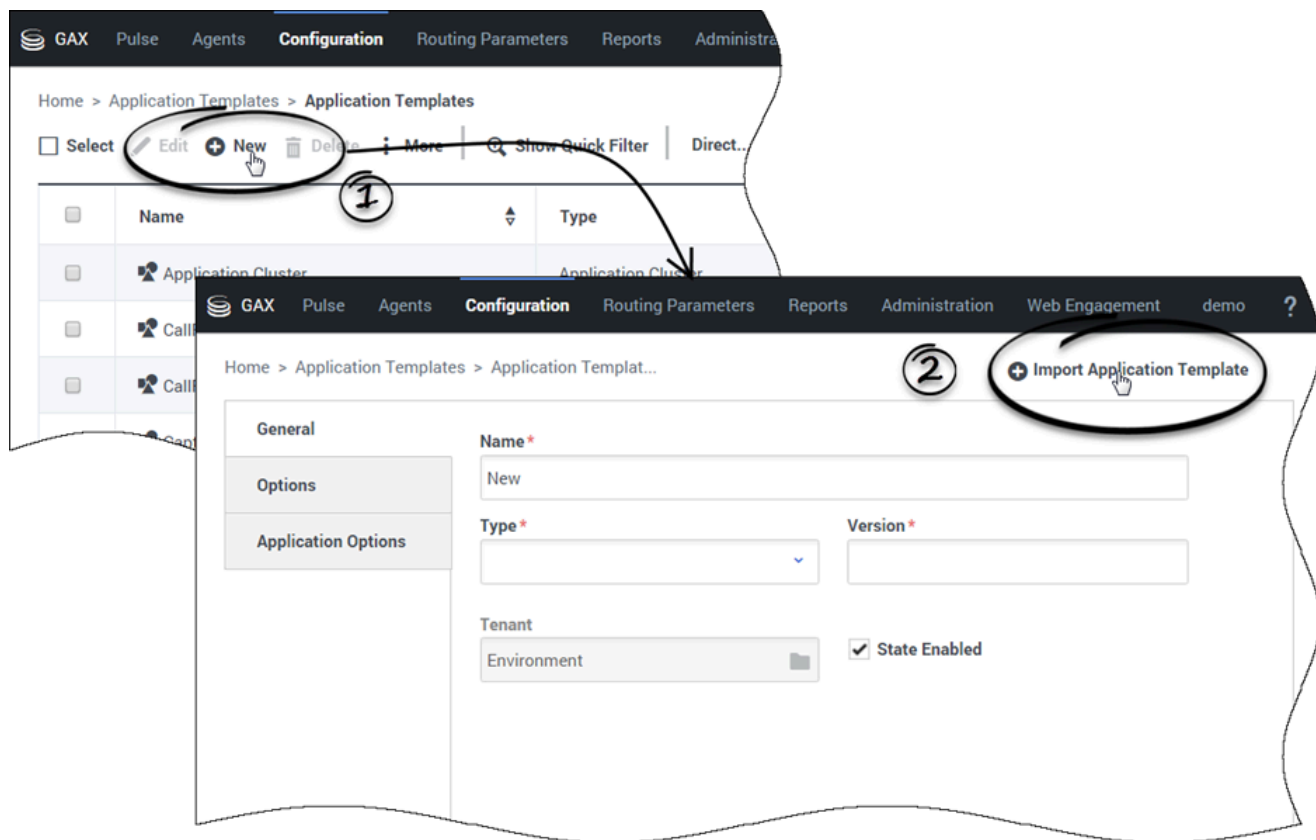
Click **+New**, then click **Import Application Template**. Navigate to the *Templates* directory of your Installation Package (IP) and add the following files:

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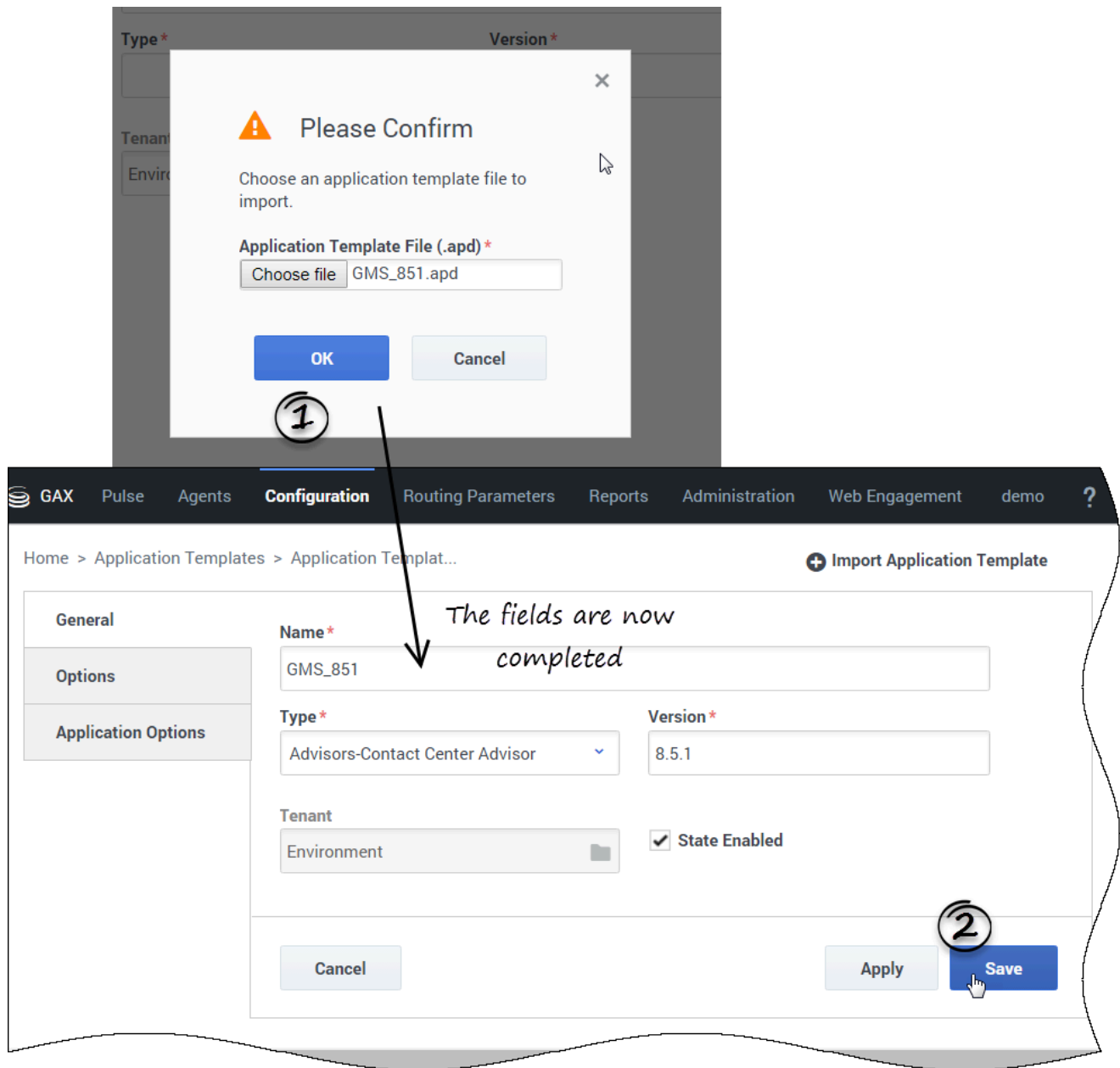
Click **+New**, then click **Import Application Template**. Navigate to the *Templates* directory of your Installation Package (IP) and add the following files:

- **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.

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

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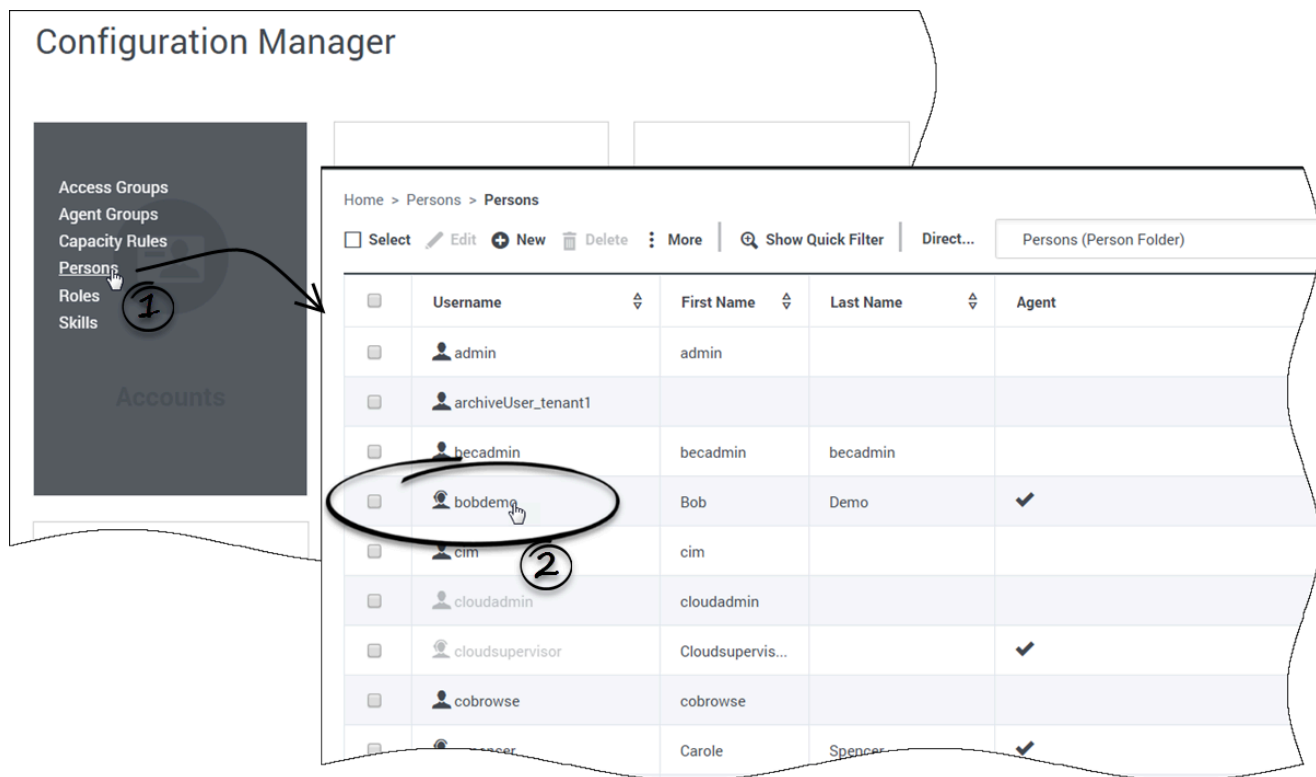
Open GAX and select the **Configuration Manager** section. In the **Accounts** menu, select **Persons** to get the list of configured users.

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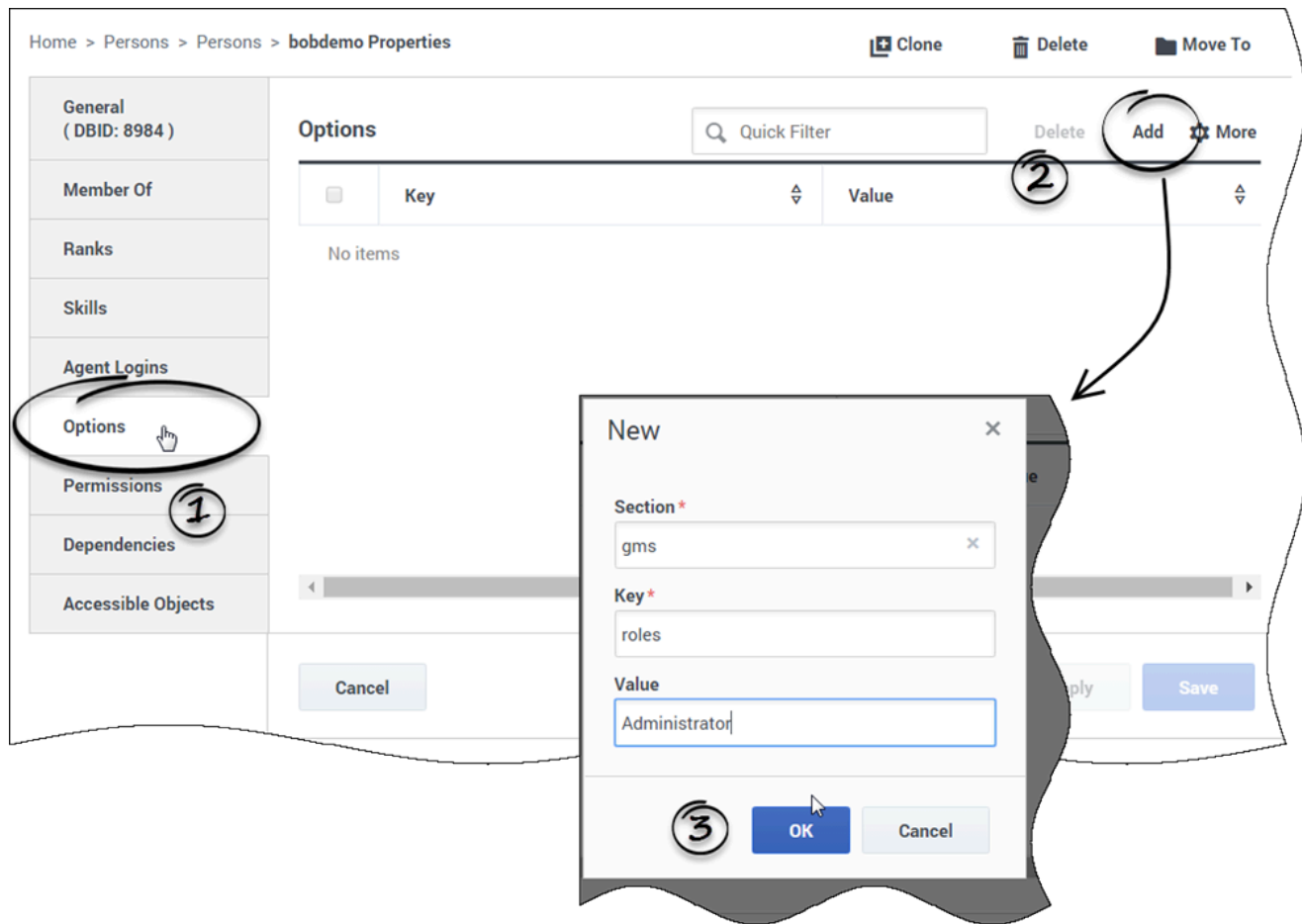
In the **Options** tab, click **Add** to set the following options:

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 groupe name to your user permissions.

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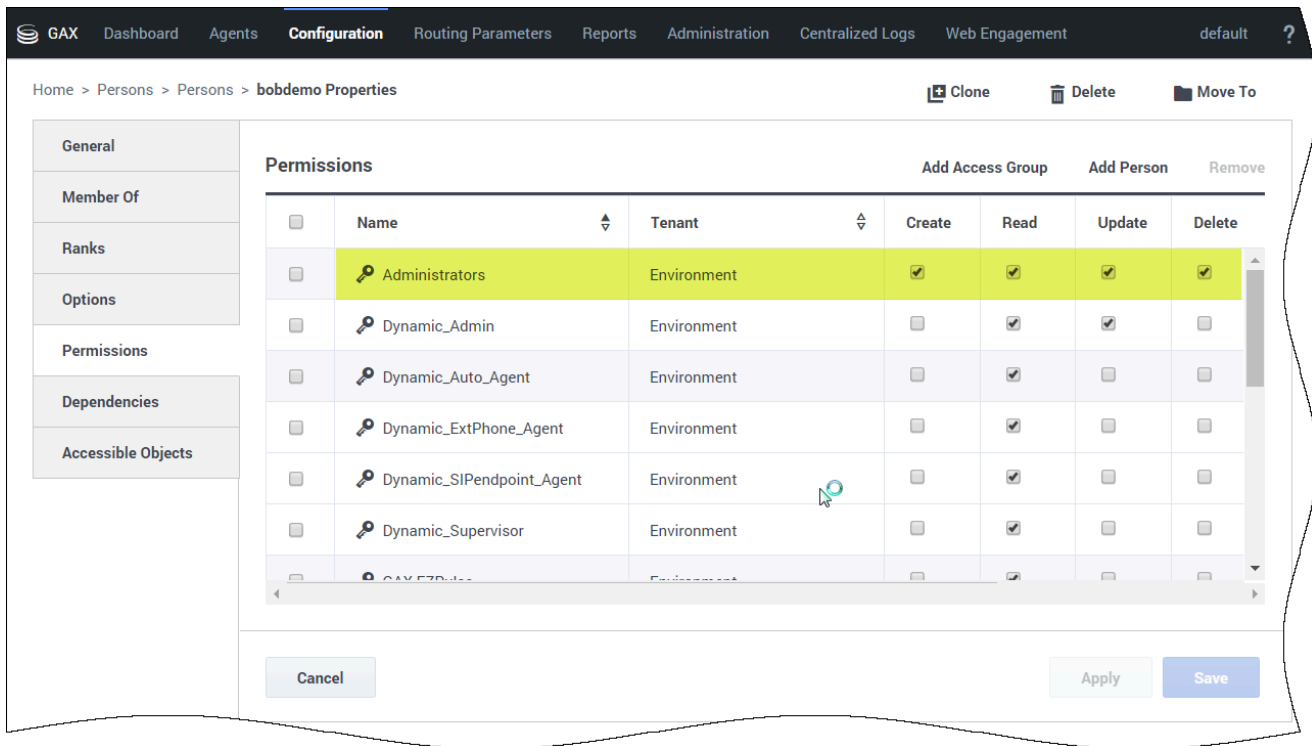
If an Administrator changes a user's role during a Service Management UI session, the user will have to disconnect/reconnect for the new role to go into effect.

Set Administrator Permissions

Warning

This step is required only for versions older than 8.5.102.11.

Create an Application Object

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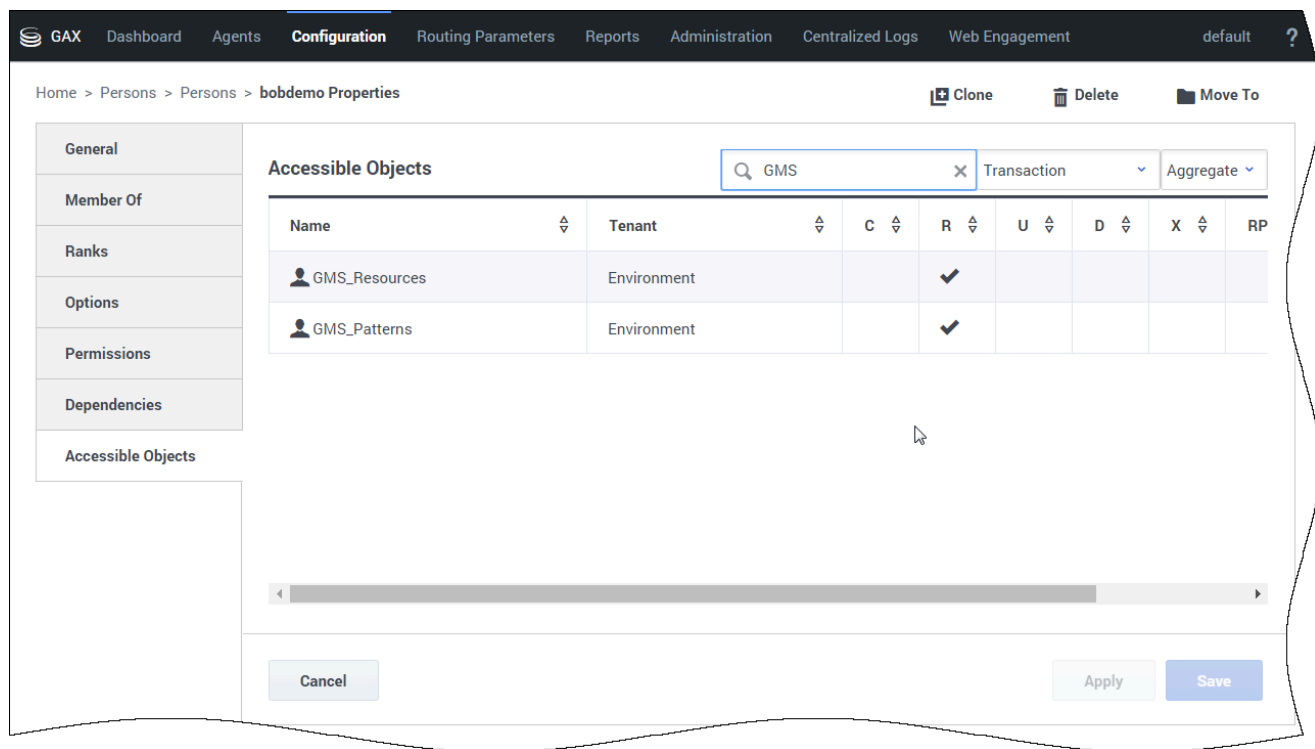
Select the **Accessible Objects** tab. For other GMS objects, you need to set the following permissions:

- 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

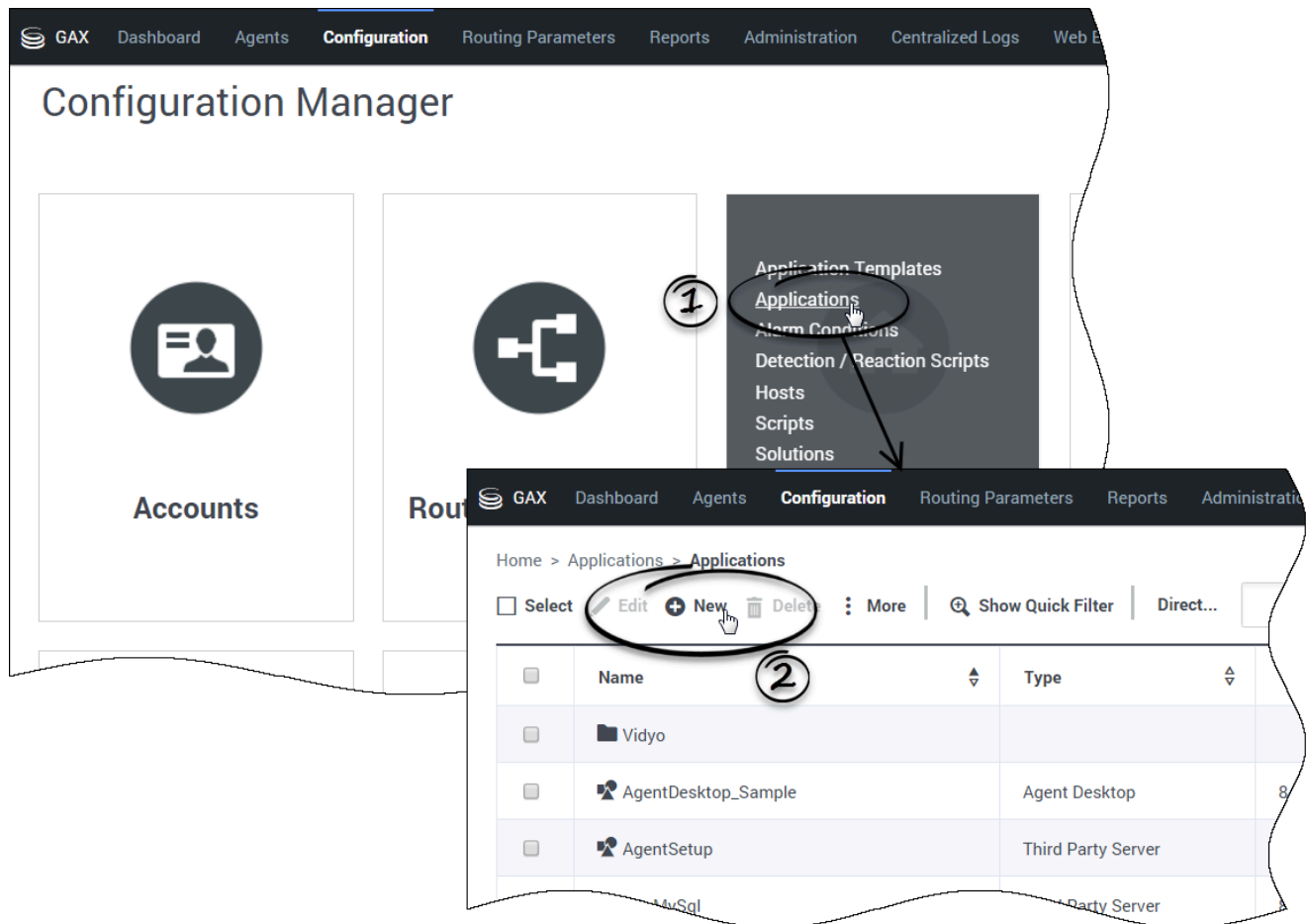Purpose: To create and configure a GMS Application object for a single GMS node (no cluster).

Prerequisites:

- Import the Application Templates

- Create 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** .

Browse your template

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

Create an Application Object

General Settings

- 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

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

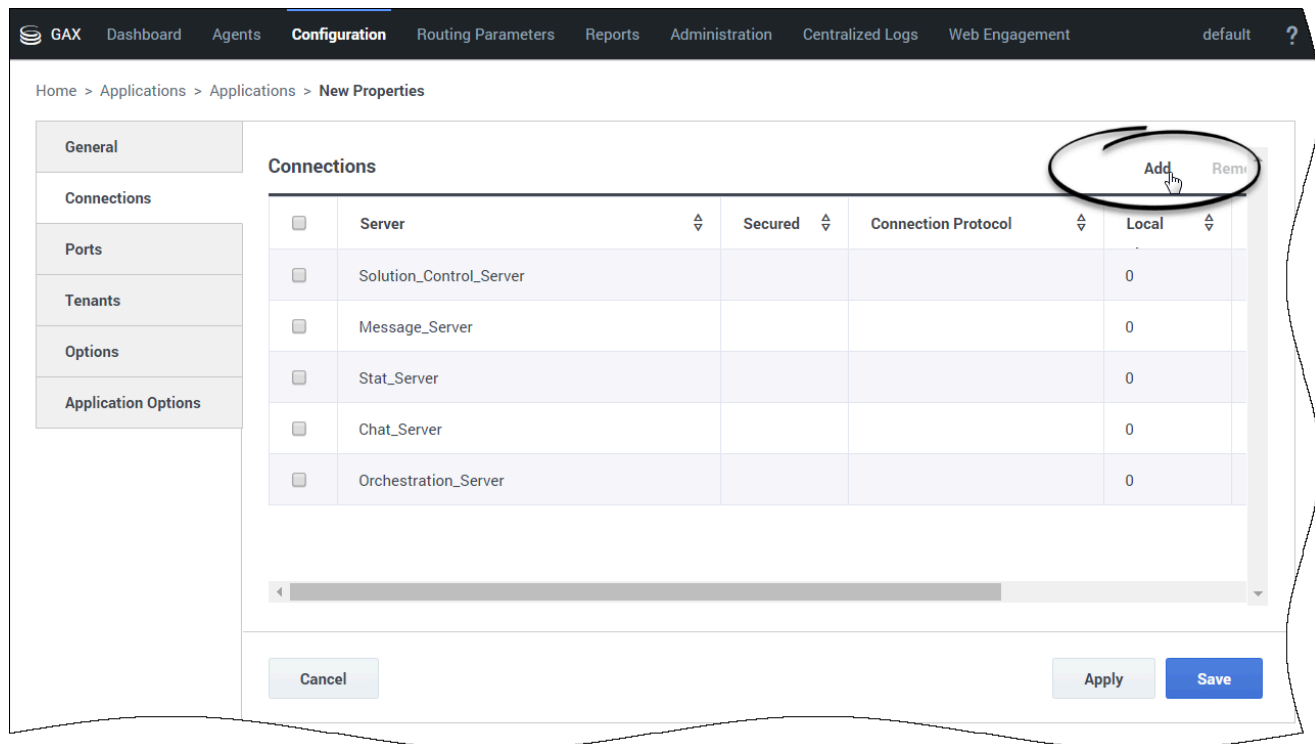## Configure the GMS Application Object for Single Node

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.

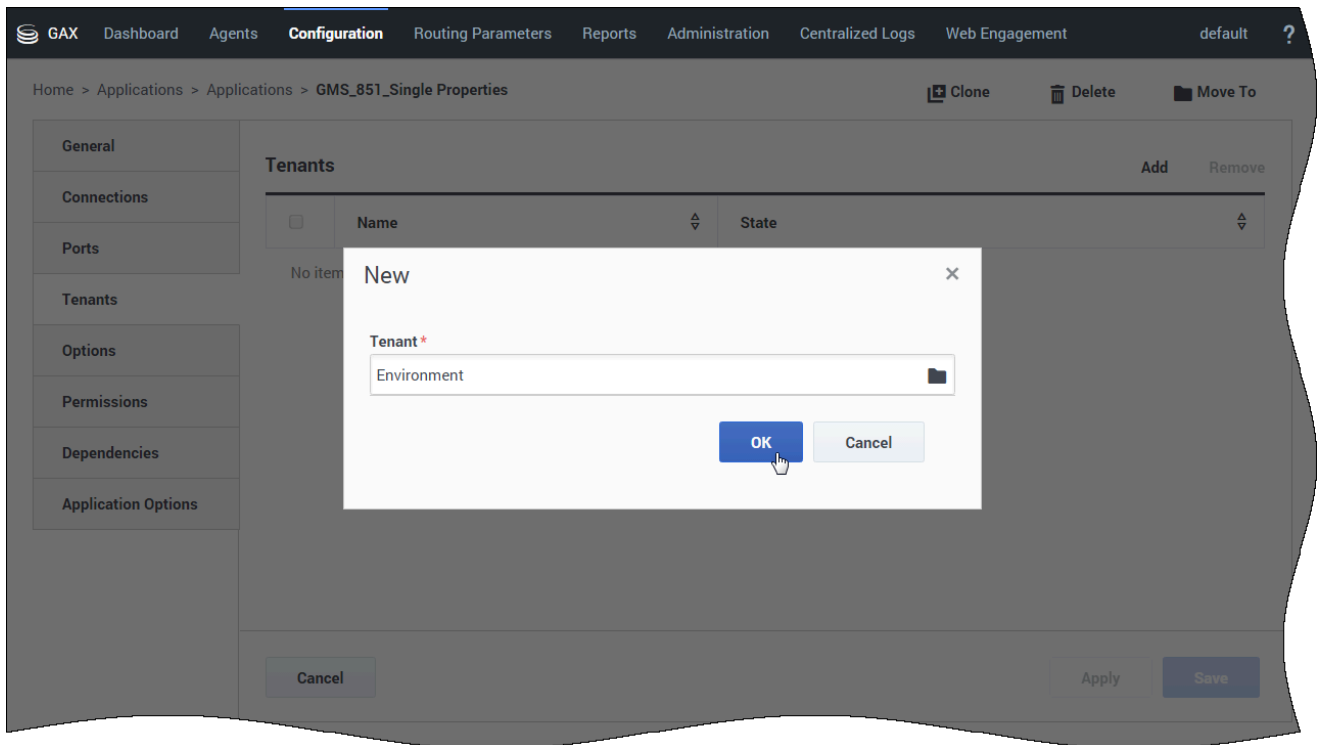In the **Ports** tab, check that a default dummy port is created.

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

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

Set up Permissions for GMS Users

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.
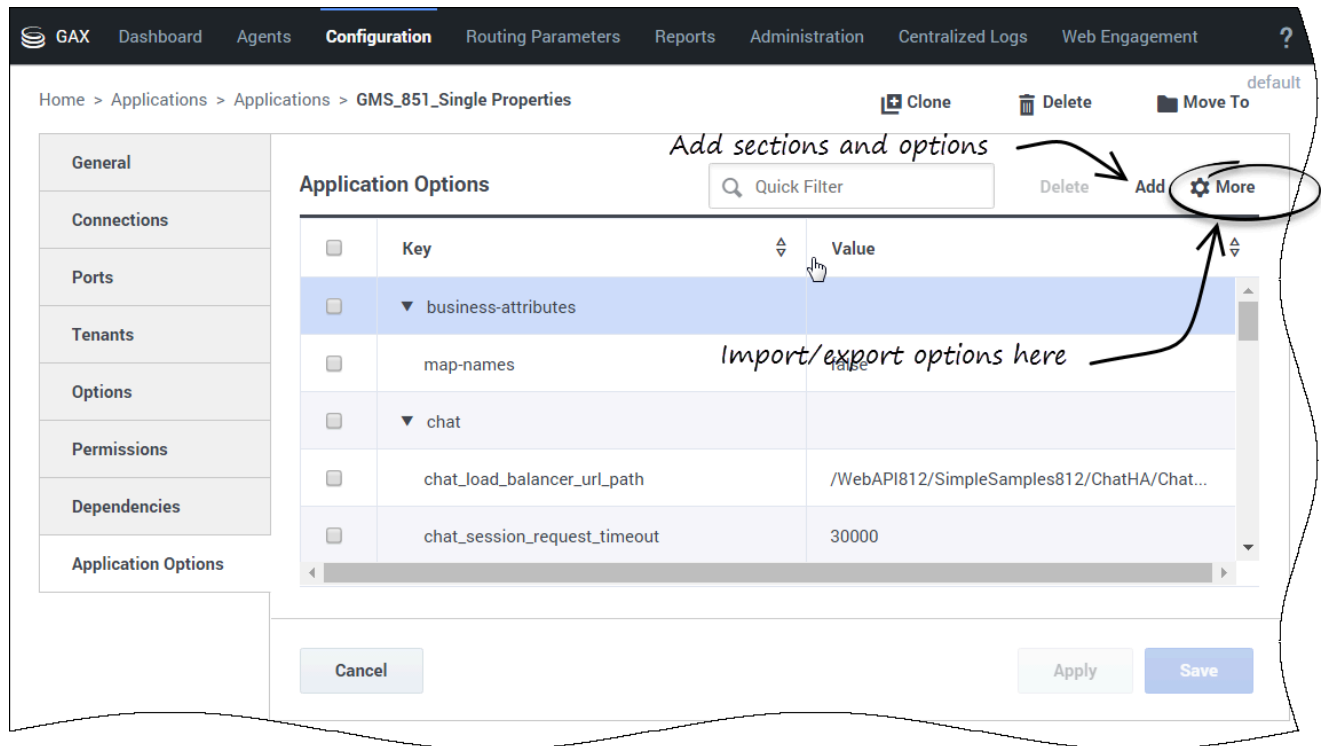
Set up GMS options

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)
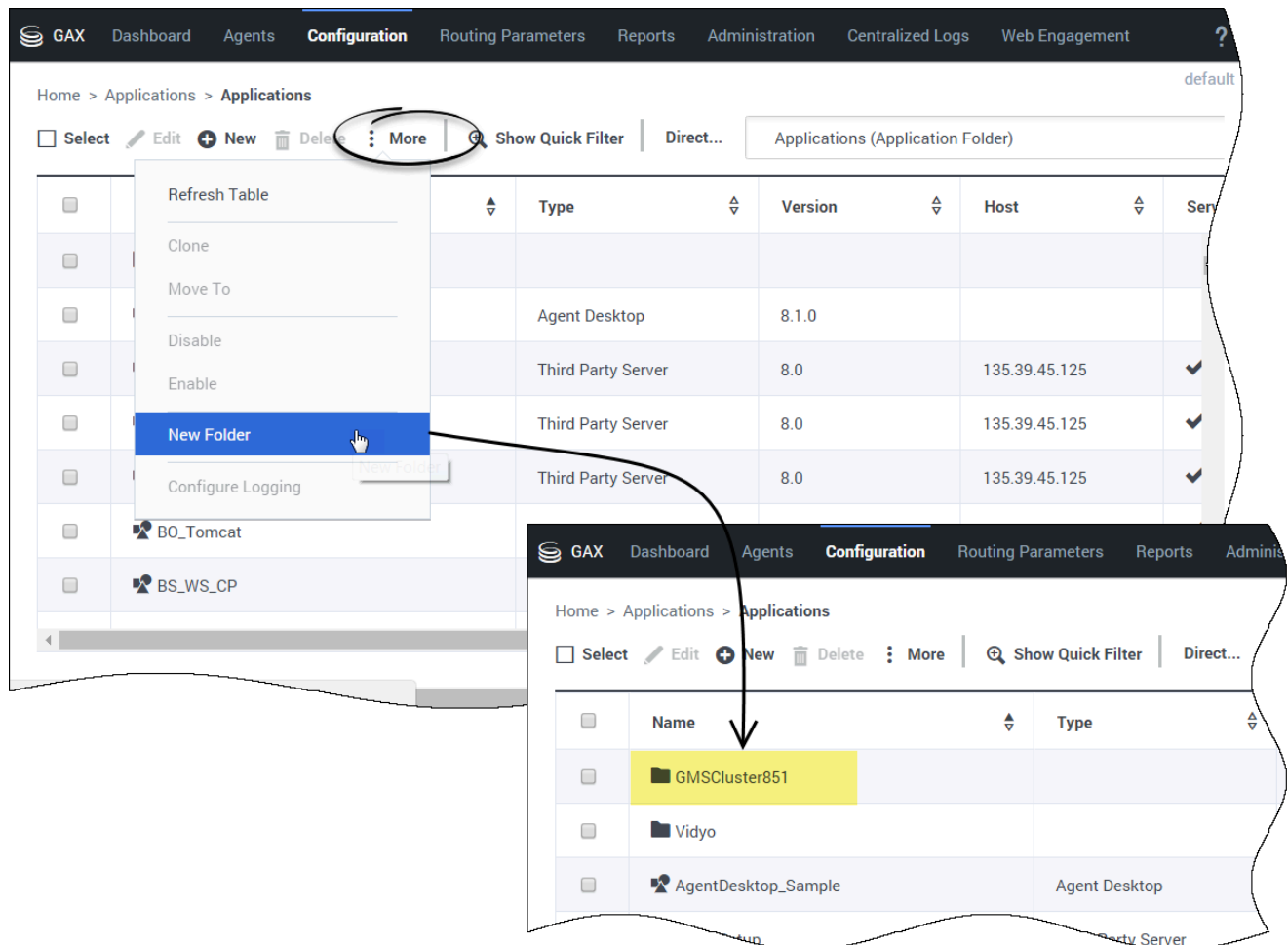
In the Configuration Manager tab, click the Applications link in the Environment menu; then, click More > New Folder to create a folder that will contain all of your application nodes. Set the new folder to a meaningful name, such as *GMSCluster851*.

Important

Do not use spaces in the folder name.

Create a GMS cluster application

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

- 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.

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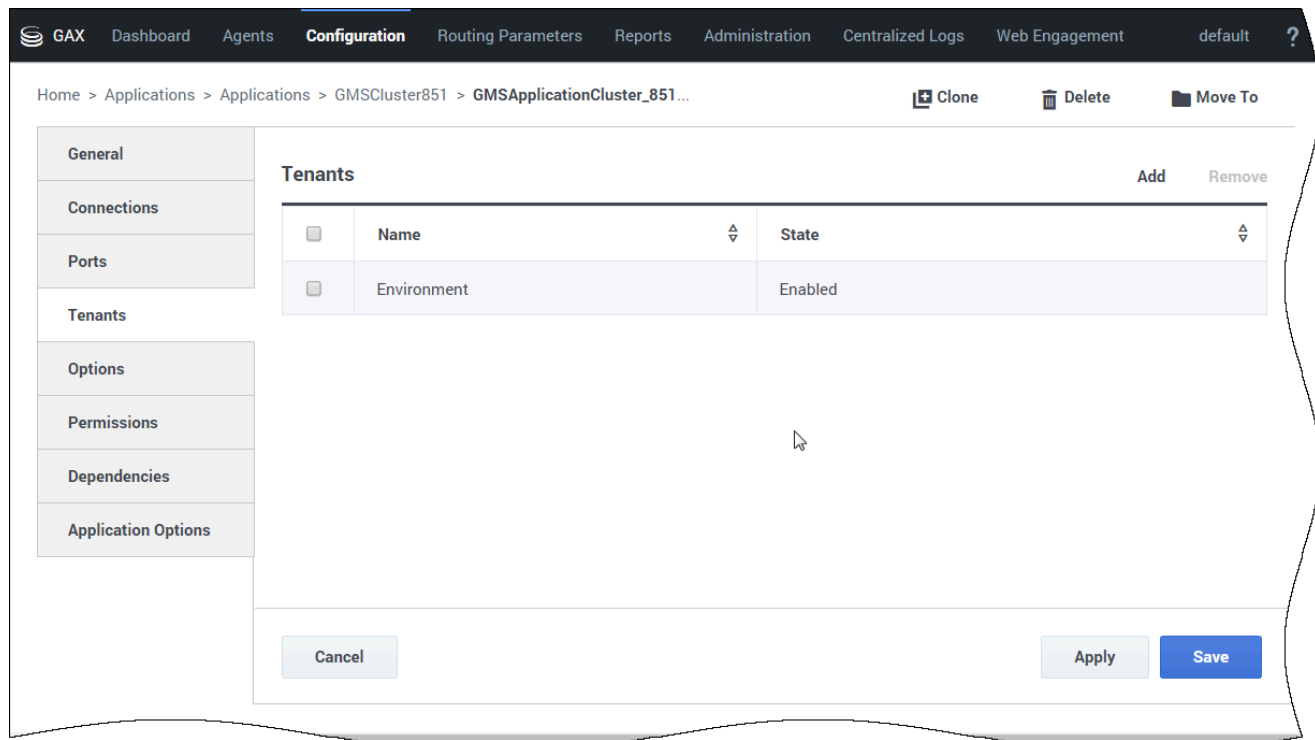
- In the Tenants section, click **Add** to set up the list of tenants that use your Genesys Mobile Services applications (one or more in a multi-tenant environment).

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 your nodes

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.

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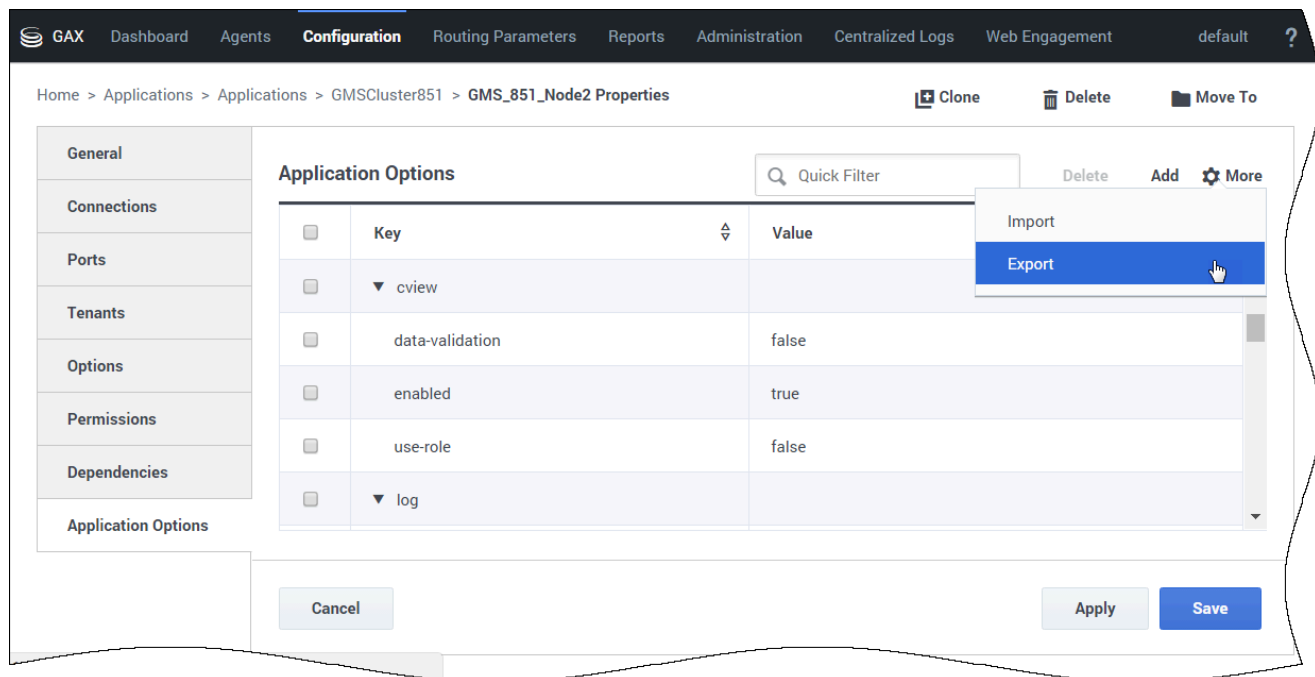
Set up additional configuration options in one of your nodes (as detailed in further chapters), and then click **Export** to save these options to a file.

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

`[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`
		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.

		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.

Enable Load Balancing in your Cluster Application

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.