

Agent Task - Backup and Restore

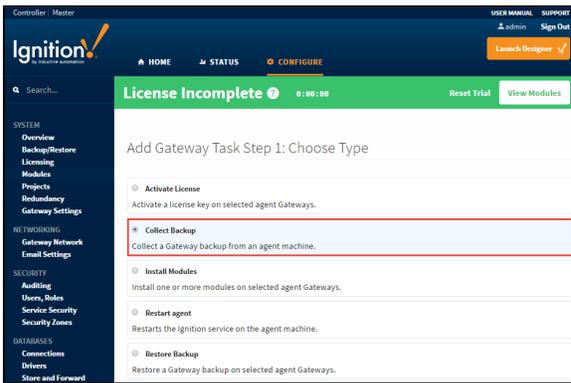
The Backup and Restore tasks are an extremely important part of the Enterprise Administration Module. Performing a Collect Backup is required if you want to do an Agent recovery.

The Gateway Tasks discussed in this section are the [Collect Backup](#), [Restore Backup](#), [Install Modules](#) and [Restart Agent](#).

Collect Backup

Collect Backup is a Gateway Task that performs a Gateway backup on the selected Agent's machine. Additionally, this task will archive copies of the Agent's modules. This modules may be used in the [Install Modules](#) task.

1. On the **Controller**, navigate to **Configure > Enterprise Administration > Agent Tasks**, and click on the blue link, **Create new Gateway Task** at the bottom of the page.
2. Collect Backup is one of the several Gateway tasks you can perform. Select **Collect Backup**, and press **Next**. The EAM Task Wizard will walk you through each step of the Collect Backup process.



3. There are several different task scheduling options available. For this Collect Backup example, choose to **Execute Immediately**, and press **Next**. If you need more information on other scheduling options, refer to [Task Scheduling](#).

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Agent Task - Backup and Restore

[Watch the Video](#)

Collect Backup

Task Scheduling

Task Name: Collect Backup

Execute Immediately

Execute On Demand

Execute Once, Scheduled

10/19/16 2 : 05 PM

Execute Once, Delayed

SECONDS

Execute On Schedule

Common Settings: Once Per Hour (0****)

Minutes: 0 :00 (0)

Hours: * Every hour (*)

Days: * Every Day (*)

Months: * Every Month (*)

Weekdays: * Every Day (*)

Expression Descriptor: Every hour (0****)

- Select the Agent you want to perform the Collect Backup on, and press **Next**.

Collect Backup

Agent Selection

Default Group

Agent133

Ignition-ubuntu

Remote

No Gateway Agents found in group

< Previous **Next >** Finish

- The EAM Task Wizard will prompt you if you want to do a Force Backup even if nothing changed since the last backup. This step is optional, but it is useful when your backups are performed on a regular schedule. It captures the changes between the time the last backup was performed and the unscheduled backup. To be safe, check the **Force Backup** box, and press **Next**.

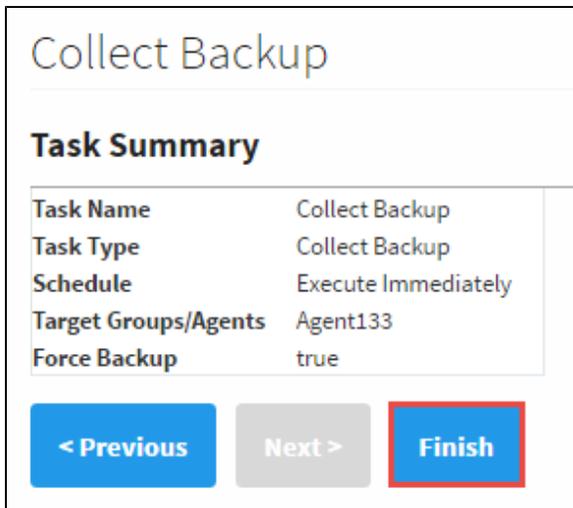
Collect Backup

Settings

Force Backup The controller will not take a scheduled backup if the agent's internal database has not changed since the last backup was taken. Set to true to override this behavior.

< Previous **Next >** Finish

- Review the **Collect Backup Task Summary** information, and press **Finish**.



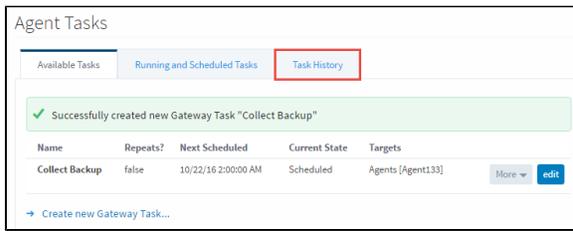
Collect Backup

Task Summary

Task Name	Collect Backup
Task Type	Collect Backup
Schedule	Execute Immediately
Target Groups/Agents	Agent133
Force Backup	true

< Previous Next > **Finish**

- Once the Collect Backup task is complete, a successful message will be displayed. You can even check the Task History which will provide a list of all previously run tasks.



Agent Tasks

Available Tasks Running and Scheduled Tasks **Task History**

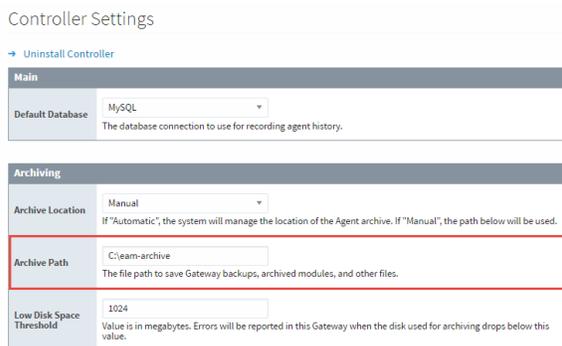
✓ Successfully created new Gateway Task "Collect Backup"

Name	Repeats?	Next Scheduled	Current State	Targets
Collect Backup	false	10/22/16 2:00:00 AM	Scheduled	Agents [Agent133]

More edit

→ Create new Gateway Task...

Your new Gateway backup will be stored wherever your Controller settings are pointing to when the Controller was initially created. To check, go to the **Controller**, and navigate to **Configure > Enterprise Administration > Controller Settings**. You can have your Archive Path set to Automatic or Manual. If you have it set to Automatic, you can find your backups inside the directory for Ignition, otherwise, it will be the folder location that is specified in the Controller Settings. To learn more about controller settings, refer to [Creating a Controller](#).



Controller Settings

→ Uninstall Controller

Main

Default Database: MySQL
The database connection to use for recording agent history.

Archiving

Archive Location: Manual
If "Automatic", the system will manage the location of the Agent archive. If "Manual", the path below will be used.

Archive Path: C:\team-archive
The file path to save Gateway backups, archived modules, and other files.

Low Disk Space Threshold: 1024
Value is in megabytes. Errors will be reported in this Gateway when the disk used for archiving drops below this value.

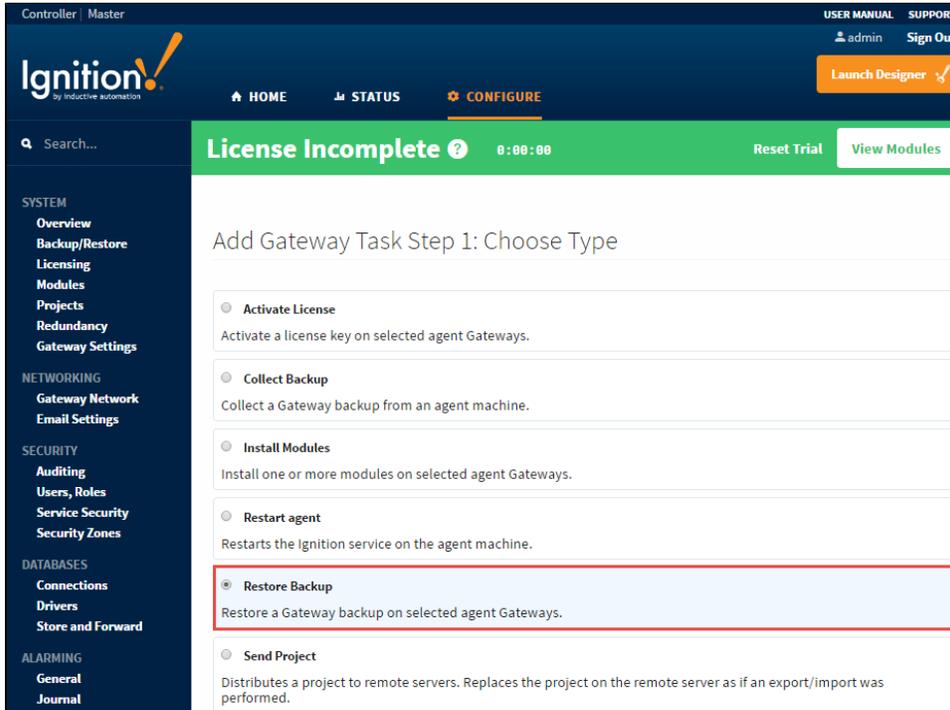
Restore Backup

Now, let's restore a Gateway backup on the selected Agent.

Agent Name and Restoring

When restoring from a backup using this task, the newly restored agent will retain its previous name.

1. On the **Controller**, navigate to **Configure > Enterprise Administration > Agent Tasks**, and click on the **Create new Gateway Task** link. Select the **Restore Backup**, and press **Next**.



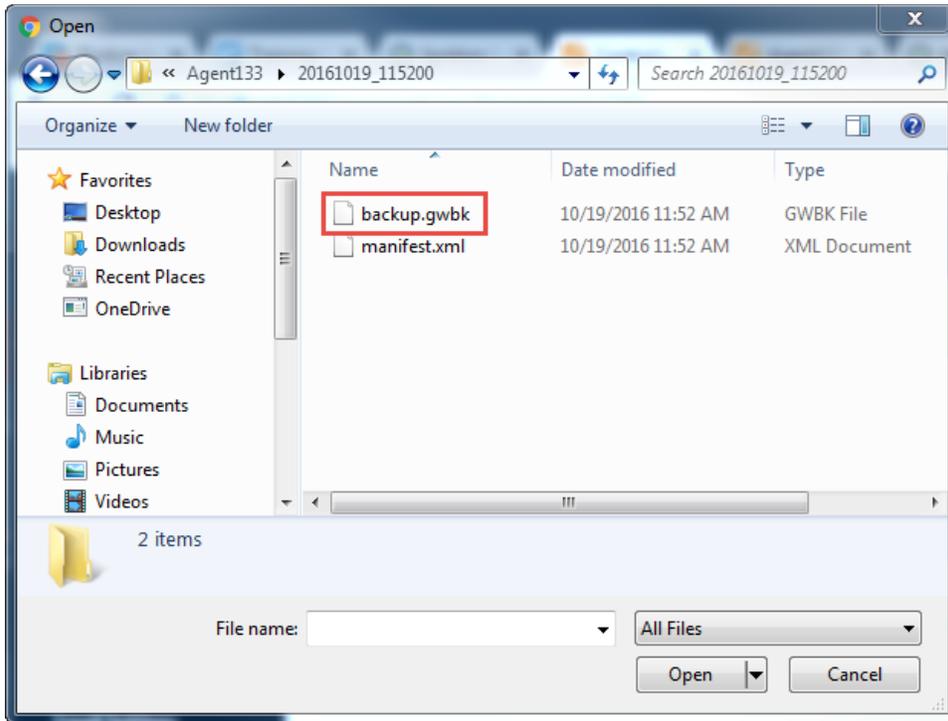
Screenshots

Some screenshots will not be duplicated. You can refer to the screenshots in the Collect Backup section as you work your way through each topic.

2. Schedule the **Restore Backup** task from any of the listed scheduling options. This example uses **Execute Immediately**, and press **Next**.
3. Select the **Agent**, and press **Next**.
4. If your Archive Path was set to Manual when you created your Controller, you will have to select the **Choose File** button, and navigate to the folder on your computer to locate the Gateway Backup file. If you are unsure about your Archive Path, refer to your **Controller Settings**.



Navigate to the folder on your computer to locate the Gateway Backup file. Select the **backup.gwbk**, and click **Open**. Press **Next** on the Restore Backup task.



5. Review the **Restore Backup Task Summary**, and press **Finish**. Once the Restore Backup task completes, you will receive a successful message from the Gateway Task.
6. Now go to your **Agent**, and click **Home**. It takes a few moments to bring up the Gateway. You will see a progress bar while the Gateway is starting up. Once it's complete, you will see all your projects uploaded and ready to go.

This feature is new in Ignition version **7.9.13**
[Click here](#) to check out the other new features

Restoring an Agent Backup with the Option to Install Modules

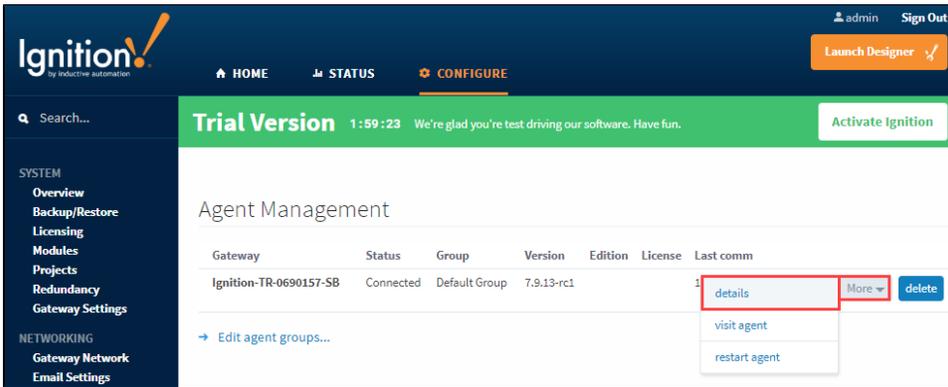
You can also restore a Gateway backup on a selected Agent with the option to install modules, giving you the opportunity to install modules while, at the same time, restoring from an Agent backup.



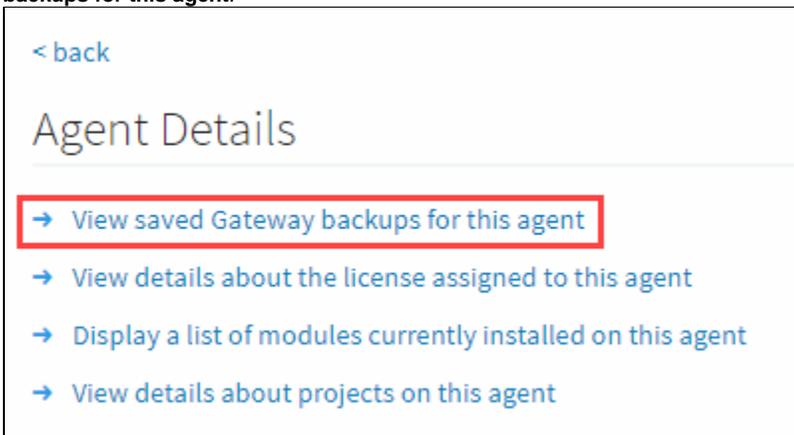
The Installing Modules option is not backwards compatible in prior versions of Ignition

Restoring an Agent backup with the option to install modules works where the Controller and the Agent(s) are on versions 7.9.13 or newer. This functionality is not backward compatible.

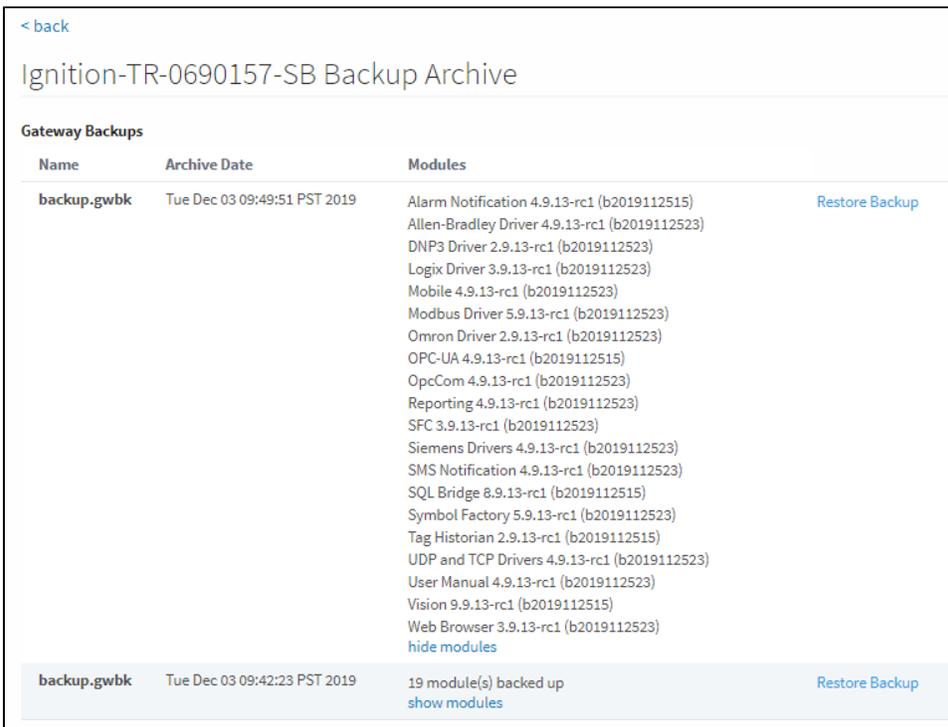
1. From the **Controller**, go to **Configure > Enterprise Administration > Agent Management**. You'll see a list of all your Agents and their status.
2. Click the **More** button and select **details** for the Agent that you want to restore the backup for.



3. This opens the **Agent Details** screen with a list of options for the selected Agent. Click the link for the **View saved Gateway backups for this agent**.



4. Here you'll see a list of Gateway Backups for the selected Agent. Under the **Modules** column, you'll see the number of modules included in each backup. Click the **show modules** link to see all the modules that are included in the Agent backup, then click **hide modules** to close the module list.



5. To restore the Agent backup, click the **Restore Backup** link to the right of the Module column.

- The **Confirm Gateway Restoration** screen will popup and ask you to confirm restoring the backup on your Agent. Be sure to check the **Install Modules** box if you want to install all the modules that were running on your Gateway at the time this specific backup was taken. Click **Confirm**.

Confirm Gateway Restoration

Are you sure that you want to restore this Gateway backup on agent 'Ignition-TR-0690157-SB'?

Settings	
Selected Backup	Backup taken on 2019-12-03 at 09:49:51
Restore Disabled	<input type="checkbox"/> If checked, all projects, database connections, OPC connections, etc will be disabled upon agent restart.
Install Modules	<input checked="" type="checkbox"/> If checked, modules that were installed at the time the backup was taken will be re-installed during the restoration. This action may result in newer versions of modules being replaced with older versions after restoration. Modules that are installed on the agent but are not archived will not be modified.

[Cancel](#) Confirm

- After the backup is complete, go back to the **Agent Details** screen to see the list of modules installed. Click on the **Display a list of modules currently installed on this agent** link.

[< back](#)

Ignition-TR-0690157-SB Installed Modules

Name	Version	Description	License	State
Alarm Notification	4.9.13-rc1 (b2019112515)	Provides alarm notifications via email	Trial	RUNNING
Allen-Bradley Driver	4.9.13-rc1 (b2019112523)	Allen-Bradley driver suite for the OPC-UA module.	Trial	RUNNING
DNP3 Driver	2.9.13-rc1 (b2019112523)	A driver supporting DNP3 (Distributed Network Protocol) device.	Trial	RUNNING
Enterprise Administration	2.9.13-rc1 (b2019112523)	A remote Gateway administration system, allowing you to manage Gateways and automate tasks from a single controller.	Trial	RUNNING
Logix Driver	3.9.13-rc1 (b2019112523)	A driver for communicating with Allen-Bradley Logix5000 series PLCs, and includes firmware version 21 support	Trial	RUNNING

Install Modules

This task allows you to install one or more modules on an Agent. You may pass in the modules to install while creating the task, or choose from the archived modules. Modules are archived in the [Collect Backup task](#).

As an example, suppose you accidentally uninstalled the Alarm Notification and OPC-UA Modules from your Agent. Let's go ahead and reinstall them using the Install Modules task.

- Go to the **Controller**, and navigate to **Configure > Enterprise Administration > Agent Tasks**. Click the **Create new Gateway Task** link. Select the **Install Module** task, and press **Next**.

The screenshot shows the Ignition web interface. At the top left is the Ignition logo with the tagline 'by Inductive Automation'. The top navigation bar includes 'HOME', 'STATUS', and 'CONFIGURE' (which is active). A 'Launch Designer' button is in the top right. A green banner at the top indicates 'License Incomplete' with a timer at '0:00:00' and buttons for 'Reset Trial' and 'View Modules'. The left sidebar contains a search bar and a menu with categories: SYSTEM (Overview, Backup/Restore, Licensing, Modules, Projects, Redundancy, Gateway Settings), NETWORKING (Gateway Network, Email Settings), SECURITY (Auditing, Users, Roles, Service Security, Security Zones), and DATABASES (Connections, Drivers, Store and Forward). The main content area is titled 'Add Gateway Task Step 1: Choose Type' and lists five radio button options: 'Activate License', 'Collect Backup', 'Install Modules' (which is selected and highlighted with a red border), 'Restart agent', and 'Restore Backup'. Each option has a brief description of its function.

2. Schedule the **Install Modules** task from any of the listed scheduling options. This example uses **Execute Immediately**, and press **N ext**.
3. Select the **Agent**, and press **Next**.
4. From the list of **Archived Modules**, click the **Add** buttons for **Alarm Notification** and the **OPC-UA** modules. You will notice, that once you click the **Add** button next to a module, it will show up in the **Selected Modules** box at the bottom of the screen. You can choose as many modules as you need, and when you're finished, press **Next**.

Install Modules

[Choose Files](#) No file chosen

Archived Modules

Module Name	Module Version	
Alarm Notification	4.9.0.2016101208	add
Alarm Notification	3.8.2.2016030813	add
Allen-Bradley Driver	4.9.0.2016101215	add
Allen-Bradley Drivers	3.8.2.2016030813	add
DNP3 Driver	2.9.0.2016101215	add
DNP3-Driver	1.8.2.2016030813	add
Logix Driver	3.9.0.2016101215	add
Logix Driver	2.8.2.2016030813	add
Mobile	4.9.0.2016101208	add
Mobile	3.8.2.2016030813	add
Modbus Driver	5.9.0.2016101215	add
Modbus Driver v2	4.8.2.2016030813	add
OPC-UA	4.9.0.2016101215	add
OPC-UA	3.8.2.2016030813	add
Omron Driver	2.9.0.2016101215	add

Selected Files

Alarm Notification 4.9.0.2016101208	remove
OPC-UA 4.9.0.2016101215	remove

[< Previous](#)
[Next >](#)
[Finish](#)

5. Review the **Install Modules Task Summary**, and press **Finish**. Once the Install Module task completes, you will get a successful message from the Gateway Task.
6. Go back to your **Agent**, and navigate to **Status > Modules** to verify that both the Alarm Notification and OPC-UA modules were installed and are running successfully.

The screenshot shows the Ignition software interface. At the top, there's a navigation bar with 'HOME', 'STATUS', and 'CONFIGURE' tabs. A search bar is on the left. The main content area is titled 'License Incomplete' with a timer at 0:00:00. Below this, there are two large boxes: 'Running Modules' showing '21 / 21' and 'Licensed Modules' showing '19 / 21'. To the right, there's a 'License Details' table with fields for License Key, Version, developer, and edition. Below that, a table lists modules under 'Inductive Automation, LLC' with columns for Name, Version, License, and Status. Several rows in this table are highlighted with red boxes.

Name	Version	License	Status
Alarm Notification	4.9.0 (b2016101208)	Activated	✓ RUNNING
Allen-Bradley Driver	4.9.0 (b2016101215)	Activated	✓ RUNNING
DNP3 Driver	2.9.0 (b2016101215)	Activated	✓ RUNNING
Enterprise Administration	2.9.0 (b2016101215)	Activated	✓ RUNNING
Logix Driver	3.9.0 (b2016101215)	Activated	✓ RUNNING
Mobile	4.9.0 (b2016101208)	Activated	✓ RUNNING
Modbus Driver	5.9.0 (b2016101215)	Activated	✓ RUNNING
OPC-UA	4.9.0 (b2016101215)	Activated	✓ RUNNING
Omron Driver	2.9.0 (b2016101215)	Activated	✓ RUNNING
OpcCom	4.9.0 (b2016101215)	Activated	✓ RUNNING
Reporting	4.9.0 (b2016101208)	Activated	✓ RUNNING
SFC	3.9.0 (b2016101215)	Activated	✓ RUNNING
SMS Notification	4.9.0 (b2016101208)	Trial	✓ RUNNING
SQL Bridge	8.9.0 (b2016101208)	Trial	✓ RUNNING
Siemens Drivers	4.9.0 (b2016101215)	Activated	✓ RUNNING

Restart Agent

On the **Controller**, lets create another Gateway Task to restart the agent. This task will stop the Ignition service on the Agent and start it back up again.

1. Go to the **Controller**, and navigate to **Configure > Enterprise Administration > Agent Tasks**. Click on the **Create new Gateway Task** link.
Select the **Restart Agent**, and press **Next**.

The screenshot shows the Ignition web interface. At the top, there is a navigation bar with 'Controller Master' on the left, 'USER MANUAL' and 'SUPPORT' on the right, and a user profile 'admin' with a 'Sign Out' button. Below this is a secondary navigation bar with 'HOME', 'STATUS', and 'CONFIGURE' (the active tab). A search bar is on the left, and a 'License Incomplete' warning banner is at the top right, showing a timer at '0:00:00' and buttons for 'Reset Trial' and 'View Modules'. A 'Launch Designer' button is also present. The left sidebar contains a menu with categories: SYSTEM (Overview, Backup/Restore, Licensing, Modules, Projects, Redundancy, Gateway Settings), NETWORKING (Gateway Network, Email Settings), SECURITY (Auditing, Users, Roles, Service Security, Security Zones), and DATABASES (Connections, Drivers, Store and Forward). The main content area is titled 'Add Gateway Task Step 1: Choose Type' and lists five radio button options: 'Activate License', 'Collect Backup', 'Install Modules', 'Restart agent' (highlighted with a red box), and 'Restore Backup'. Each option has a brief description of its function.

2. Schedule the **Restart Agent** task to **Execute Immediately**, and press **Next**.
3. Select the **Agent**, and press **Next**.
4. Review the **Restart Agent Task Summary**, and press **Finish**. Once the Restart Agent task completes, you will receive a successful message from the Gateway Task.
5. Go to your **Agent** and refresh your page. You will see a progress bar while the Gateway is starting up. This will take a few moments, and once this task completes, your Agent will be up and running.

Related Topics ...

- [Agent Task - Send Project](#)