

Foglight<sup>™</sup> for Hyper-V 6.1.0 **Installation Guide** 

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#### Legend

- **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.
- CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.
- i IMPORTANT NOTE, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.

Foglight<sup>™</sup> for Hyper-V Installation Guide Updated - April 2022 Foglight Version - 6.1.0 Cartrdige Version - 6.1.0

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# Installing and configuring Foglight for Hyper-V

Foglight<sup>™</sup> for Hyper-V monitors the health of your virtual system by tracking resource consumption such as CPU, network, and memory consumption for individual servers and virtual machines in your integrated environment. This chapter contains information about the system requirements and takes you through the installation procedure, step by step.

- IMPORTANT: See the Foglight for Hyper-V Release Notes for important additional information about this version of the cartridge.
  - Requirements and compatibility
  - Installation and setup
- · Upgrading Foglight for Hyper-V

## Requirements and compatibility

The following components are required to successfully integrate Foglight<sup>™</sup> for Hyper-V into Foglight for Hyper-V.

## Foglight for Hyper-V Management Server

The cartridge can be used on a Foglight for Hyper-V<sup>™</sup> platform to gain in-depth insight into the health of the virtual machine, the server, and the virtual environment as a whole.

Before installing the cartridge, ensure that your Foglight Management Server is properly installed and configured. For information on how to install and configure the Foglight Management Server, please refer to the *Installation* and Setup Guide set and the Administration and Configuration Help.

## Foglight for Hyper-V Agent Manager

The Agent Manager component collects data from monitored hosts and sends it to the Management Server. Foglight<sup>™</sup> for Hyper-V monitors host machines remotely using the WinRM or WMI service. For that reason, the Agent Manager does not need to be installed on each individual host that you want to monitor. The Management Server includes an embedded Agent Manager instance that starts and stops with the server.

One Agent Manager installation per Management Server is often enough, unless additional installations are required to balance the collection load onto other machines. The cartridge is compatible with the Agent Manager version 5.8.1 or later.

### **Monitored hosts**

Each monitored server must be running Microsoft<sup>®</sup> Windows Server<sup>®</sup> 2008 R2 or later, Windows Server 2012, or Windows Server 2012 R2.

## Installation and setup

Installing Foglight<sup>™</sup> for Hyper-V involves several tasks.

First, install Foglight for Hyper-V, and the Agent Manager (if multiple instances are required). Next, install Foglight for Hyper-V on the Management Server and deploy the agent package. As the final step, you create agent instances, configure their properties, activate them, and start their data collection. For details, see the following sections:

- Installing the Foglight for Hyper-V Management Server on page 6
- Installing the Foglight for Hyper-V Agent Manager on page 6
- Installing and enabling Foglight for Hyper-V on page 6
- · Deploying agent packages to monitored hosts on page 7
- Configuring monitoring agents for data collection on page 9
- Using an alternative method to create and activate agent Instances, and to start their data collection on page 18

## Installing the Foglight for Hyper-V Management Server

Install Foglight for Hyper-V™ using the installer for your platform. For complete information, see the Foglight for Hyper-V *Installation and Setup Guide* set.

## Installing the Foglight for Hyper-V Agent Manager

The Management Server includes an Agent Manager which can be used to remotely monitor hosts. To balance the collection load, you can choose to install the Agent Manager on additional hosts. For complete information, refer to the *Agent Manager Guide*.

## Installing and enabling Foglight for Hyper-V

Foglight <sup>™</sup> for Hyper-V is distributed in a CAR file, *Virtual-HyperV-5\_7\_3.car*. While most of Foglight for Hyper-V components are defined in this file, some of its browser interface elements are defined in two additional CAR files, *DRP-5\_7\_3.car* and *Virtual-Hyper-V-Admin-5\_7\_3.car*. The cartridge included in the *Virtual-Hyper-V-Admin-5\_7\_3.car* file provides access to Hyper-V administrative actions through the Hyper-V Explorer's **Administration** tab, when your user account is granted the Hyper-V Automation User role. To enable the **Administration** tab, install this cartridge on the Management Server. For more information about the Hyper-V Explorer, see the *Foglight for Hyper-V User and Reference Guide*.

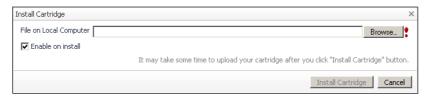
Installing and enabling these cartridges on the Management Server adds the Hyper-V capabilities to your Foglight environment and makes their components available for use. When a cartridge is installed and enabled, all of its components become part of the Management Server.

The following procedure describes the process of installing and enabling the available cartridges using the browser interface. Another way to install and enable cartridges is through the fglcmd command-line interface. For more information about the available fglcmd commands, see the *Command-Line Reference Guide*.

#### To install and enable a Foglight for Hyper-V cartridge:

- 1 On the navigation panel, under Dashboards, choose Administration > Cartridges > Cartridge Inventory.
- 2 On the Cartridge Inventory dashboard, click Install Cartridge.

The Install Cartridge dialog box appears.



- 3 In the **Install Cartridge** dialog box, click **Browse** and navigate to the *Virtual-HyperV-5\_7\_3.car* file that you want to install
- 4 Ensure that the **Enable on install** check box is selected.
- 5 Click Install Cartridge.

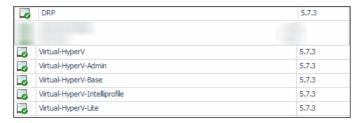
A message box appears.



After a few moments, the **Operation(s) Complete** message box appears, indicating a success.

- 6 Click **OK** to close the **Operation(s) Complete** message box.
- 7 Repeat Step 2 through Step 6 to install the DRP cartridge, DRP-5\_7\_3.car, and Virtual-HyperV-Admin-5\_7\_3.car (if applicable).
- 8 Observe the list of installed cartridges.

The list of installed cartridges refreshes, showing the newly installed cartridges.



From here, you can proceed to deploying the agent packages.

## Deploying agent packages to monitored hosts

Foglight<sup>™</sup> for Hyper-V uses Hyper-V, System Center Virtual Machine Manager (SCVMM),and Scale-Out File Server (SOFS) Agent instances to collect information from monitored hosts. Installing and enabling Foglight for Hyper-V on the Management Server makes its agent packagea available for deployment.

Hyper-V, SCVMM,and SOFS Agents use the Agent Manager for communication with the Management Server. Foglight for Hyper-V monitors host machines remotely using the WMI infrastructure. For that reason, the Agent Manager does not need to be installed on each individual host that you want to monitor. It is typically installed on one host; some scenarios may require multiple Agent Manager installations to balance the collection load.

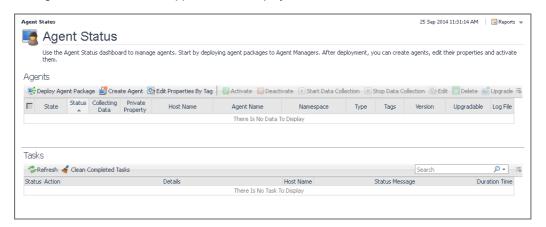
After you have installed the Foglight for Hyper-V, you must deploy the Hyper-V, SCVMM, and SOFS Agent packages to the applicable Agent Manager instances. Deploying the package is only required if you plan to use additional Agent Manager instance.

The following procedure describes the deployment process using the Agent Status dashboard. This administrative dashboard is useful for deploying the agent package one host at a time. Alternatively, for deploying the Hyper-V Agent package to multiple hosts, you can use the Agent Hosts dashboard. For more information, see the *Administration and Configuration Guide*.

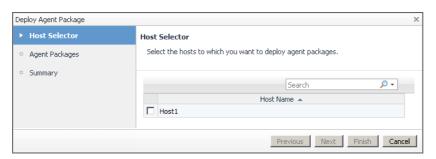
Another way to deploy agent packages is through the fglcmd command-line interface. For more information about the available fglcmd commands, see the *Command-Line Reference Guide*.

#### To deploy the Hyper-V, SCVMM, and SOFS agent packages:

- 1 Log in to the Foglight browser interface.
- 2 On the navigation panel, under Dashboards, click Administration > Agents > Agent Status.
  The Agent Status dashboard appears in the display area.



3 On the Agent Status dashboard, click the **Deploy Agent Package** button in the lower-left corner. The **Deploy Agent Package** wizard appears.

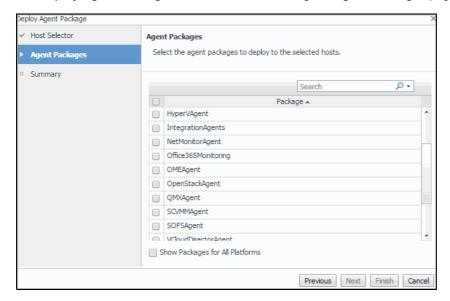


- i TIP: To have a monitored host available for selection, the Agent Manager must be up and running on that host, and connected to the Foglight Management Server.
- 4 Specify the monitored host to which you want to deploy the Agent package.

In the **Deploy Agent Package** wizard, on the **Host Selector** page, select the system on which the Agent Manager is running, and click **Next**.

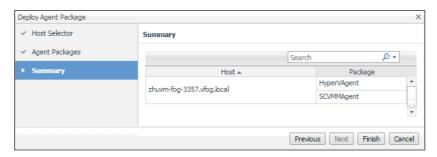
If the system name does not appear in the list, check that its Agent Manager is active and connected to the Management Server.

The **Deploy Agent Package** wizard refreshes, showing the **Agent Packages** page.



5 In the Deploy Agent Package wizard, on the Agent Packages page, select the HyperVAgent, SCVMMAgent, and SOFSAgent packages, and then click Next.

The Deploy Agent Package wizard refreshes, showing the Summary page.



6 In the **Deploy Agent Package** wizard, on the **Summary** page, verify that the host name and package are correct, and click **Finish**.

The **Deploy Agent Package** wizard closes, and the Agent Status dashboard refreshes, showing in the **Tasks** area that the **Deploy Agent Package** task is in progress. After a few moments, a green icon appears in the **Status** column, indicating a successful deployment.

If agent deployment is not successful, there are several things you can do to troubleshoot the deployment failure. For more information, see the online help for the Agent Status dashboard.

From here, you can proceed to create Hyper-V,SCVMM, and SOFS Agent instances to monitor hosts. For more information, see Configuring monitoring agents for data collection on page 9.

## Configuring monitoring agents for data collection

Foglight<sup>™</sup> for Hyper-V uses the Hyper-V, SCVMM,and SOFS agents to collect information about your virtual environment:

Hyper-V Agents collect information from monitored Hyper-V servers. A Hyper-V server is a physical
component required to begin building a virtual infrastructure. Hyper-V servers provide hypervisor-based
architecture for controlling and managing resources for the virtual machines that run on it.

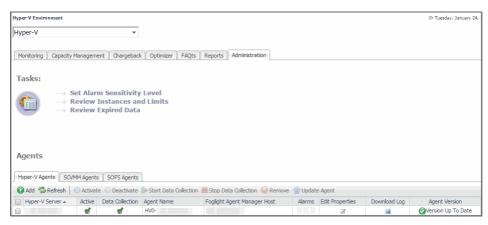
- SCVMM Agents collect information from Virtual Machine Managers (VMM). A VMM allows you to manage
  host, networking and storage resources when creating and deploying virtual machines to virtual clouds.
- SOFS Agents collect information from monitored SOFS servers. An SOFS server is a Windows Server
  cluster with some form of shared storage and provides highly available file-based storage for applications
  and general use.

When Hyper-V, SCVMM, and SOFS agent packages are successfully deployed, you can create agent instances, activate them and start their data collection. To perform these steps in a single operation for one or more monitored hosts, use the **Agents** area on the **Administration** tab.

When you add an agent instance, the agent process is created on the Agent Manager host. Activating the agent instance starts that agent process. When you start an agent's data collection, the agent process starts collecting data from the monitored host and to sends it to Foglight for Hyper-V.

#### To create, activate agent instances, and start their data collection:

- 1 Log in to the Foglight browser interface.
- 2 On the navigation panel, under **Dashboards**, choose **Hyper-V > Hyper-V Environment**.
- 3 On the Hyper-V Environment dashboard that appears in the display area, open the **Administration** tab.



- 4 On the **Administration** tab, under **Agents**, open the **Hyper-V Agents**, **SCVMM Agents**, or the SOFS Agents tab, as required.
- 5 On the Administration tab, under Agents, click Add to launch the Agent Setup wizard.
  - The Agent Setup wizard appears, showing the Prepare page.
- 6 Review the information on this page. If you want to configure WinRM or DCOM settings automatically, download the appropriate script, and follow the instructions provided with the scripts. When done, click Next.

The **Agent Setup** wizard refreshes, showing the **Select Fglam Client** page. The page shows a list of all hosts that already have the Agent Manager installed and running, and to which you can deploy the Hyper-V Agent package.

7 Select the Agent Manager on which you want to create the Agent instance, and click Next.



8 **Hyper-V Agents only**. On the **Discover or Manual** page that appears, you can indicate if you want to manually specify the Hyper-V Server that you want to monitor, or to choose between the servers running in a given domain.

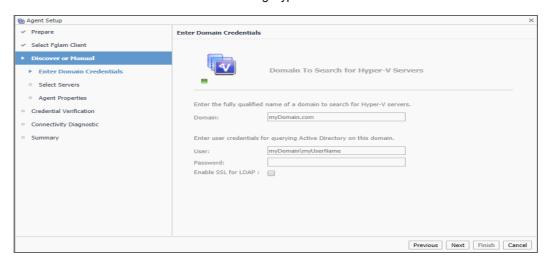


Select one of the following options:

**Discover**. Select this option if you want to choose from the available Hyper-V Servers running in the desired domain. Click **Next** and proceed to Step a.

**Manual**. Select this option if you want to manually specify the name of the Hyper-V Server. Click **Next** and proceed to Step b.

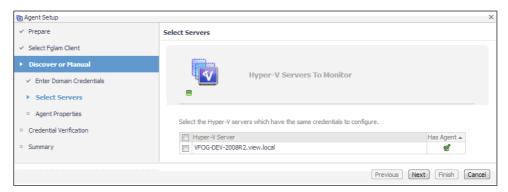
a **Discovering Hyper-V Servers only**. On the **Enter Domain Credentials** page that appears, specify the information needed to search for the running Hyper-V Servers.



- a Provide the following information, and then click Next.
  - **Domain**: Type the fully qualified name of a domain to search for the Hyper-V Server. For example, myDomain.com.

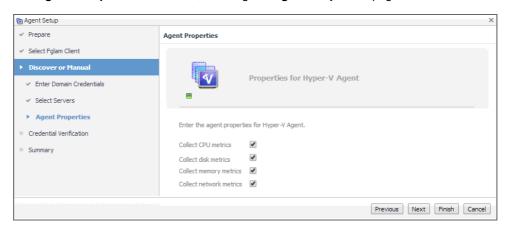
- User: Type the user name to be used by the agent to be used to query Active
   Directory on the selected domain using the syntax Domain\UserName. For example,
   myDomain\myUserName.
- Password: Type the password associated with the above user name.

The **Agent Setup** wizard refreshes, showing the **Select Servers** page. The page shows a list of all Hyper-V servers that you have access to, based on the domain name and user credentials you provided in this step.

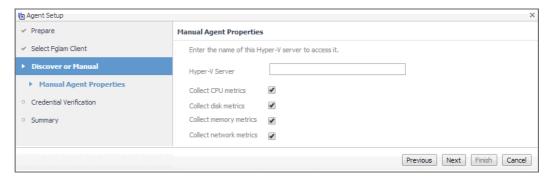


Select one or more Hyper-V Servers that you want to monitor and click Next.

The Agent Setup wizard refreshes, showing the Agent Properties page.



- c By default, the options for collecting CPU, disk, memory, and network metrics are selected. Review these settings, and make any changes, if required. When done, click **Next**.
- d Proceed to Step c.
- b **Manually specifying a Hyper-V Server only**. On the **Manual Agent Properties** page that appears, specify the information needed to search for the running Hyper-V servers.

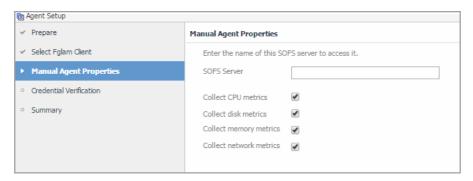


Click Next.

- c On the **Credential Verification** page that appears, review the existing set of credentials. If the wizard determines that the selected Agent Manager has any credentials configured for the host on which the Hyper-V Server is running, they appear listed on this page.
  - **i IMPORTANT:** Credentials are security data that provide the Infrastructure agent with the permission to monitor system resources, such as a host or a range of hosts.
- 9 SCVMM Agents only. On the Input Agent Properties page that appears, type the name of the SCVMM server, and click Next.



10 **SOFS Agents only.** On the Manual Agent Properties page that appears, type the name of SOFS Server, specify whether or not this SOFS Server collects CPU/disk/memory/network metrics, and click **Next**.

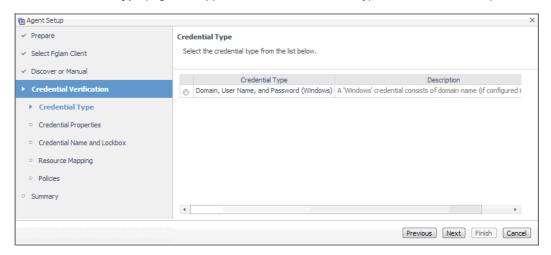


- 11 On the **Credentials Verification** page, select one of the following options:
  - **Do not configure a credential**: Select this option if you want to configure the credential for this resource at a later time. Click **Next** and continue with Step 14.
  - Add host(s) to a new credential: Select this option if you want to add the host to a new credential.
     This option is suitable if none of the existing credentials have the connection details needed to access the new host. Click Next and continue with Step 12.
  - Add host(s) to an existing credential: Select this option if you want to add the host to an existing
    credential. This option is suitable if an existing credential has the security data needed to access the
    new host, but you need to edit its resource mappings to include this host. Click Next and continue
    with Step 13.



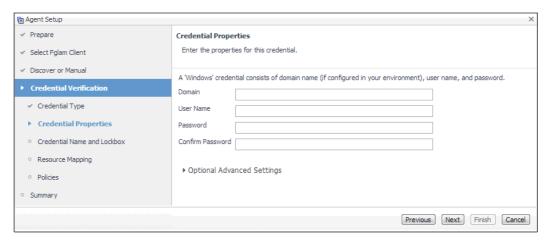
#### 12 Create a new credential.

a On the Credential Type page that appears, select the credential type from the available options.



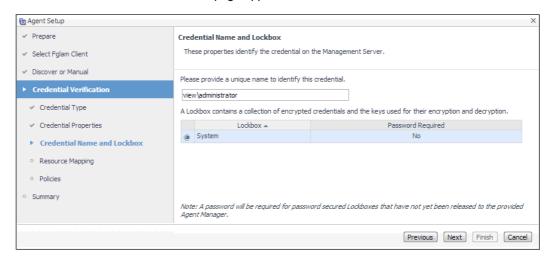
b Click Next.

The Credential Properties page appears.



c On the  ${\bf Credential\ Properties}$  page, type the required properties, and click  ${\bf Next}.$ 

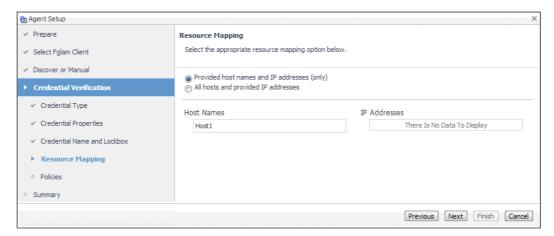
The Credential Name and Lockbox page appears.



- d On the Credential Name and Lockbox page, provide a name to uniquely identify the credential, and select a lockbox in which you want to keep the credential. A lockbox can be used to group credentials for access and/or security. In smaller Foglight installations, using the default System lockbox should be sufficient.
  - NOTE: If a lockbox is password protected and is not released to the target Foglight Agent Manager, you can provide the lockbox password on the last page of the wizard.

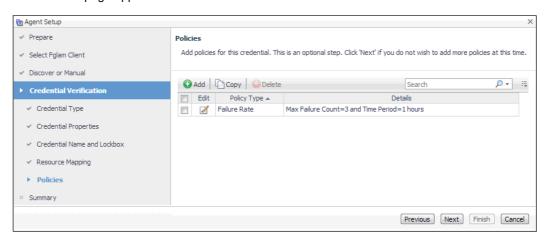
#### Click Next.

The **Resource Mapping** page appears.



e On the Resource Mapping page, indicate which hosts you want to associate with this credential. Click Next.

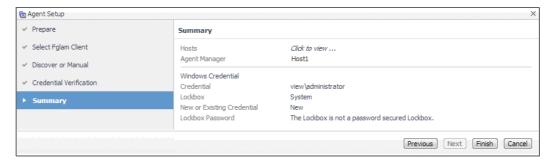
The Policies page appears.



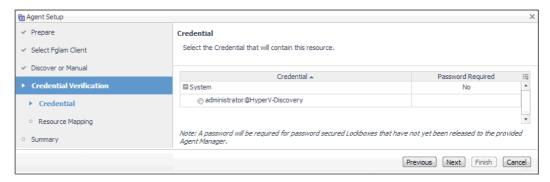
f Optional—On the **Policies** page, define one or more policies for this credential. A policy defines the number of times a credential can be used, the number of allowed authentication failures, the time range during which the credential is valid, or the length of time the credential data can be cached on the client. For example, you can specify the number of times the credential can be used, or the time period during which it can be used. For complete information about the available credential policies, see the *Administration and Configuration Help*.

#### Click Next.

The Summary page appears.

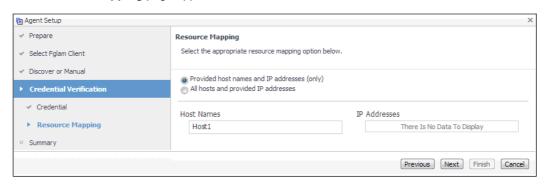


- g Proceed to Step 14.
- 13 Use an existing credential.
  - a On the Credential page that appears, select an existing credential to contain this host.



b Click Next.

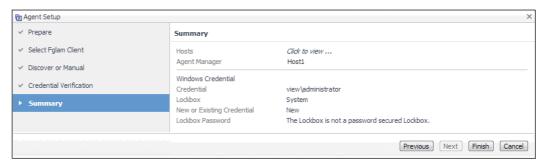
The Resource Mapping page appears.



c On the **Resource Mapping** page, indicate which hosts you want to associate with this credential. You can either select the host that you are about to start monitoring, all monitored hosts, or hosts whose name contains a specific text string.

#### Click Next.

The Summary page appears.



- d Proceed to Step 14.
- 14 On the **Summary** page that appears, review the information provided about the host and the monitoring agent.
- 15 Click Finish.

The new host is added to the Hosts dashboard after a short delay. The monitoring agent is created. If the operation is successful, the **Agent Setup** message box appears. Review the information and close the message box.



The agent instances created to monitor the new host appear on the **Administration** tab, in the **Agents** area.

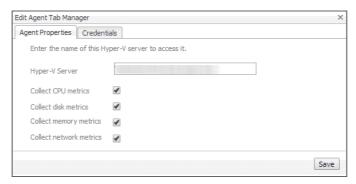
Close the dialog box. The Hyper-V Agent Management dashboard refreshes, showing the newly created Hyper-V Agent in the list.

16 If required, reconfigure the agent properties or credentials. For example, you can specify the name of the monitored Hyper-V server or the authentication schema.

When a Hyper-V Agent, for example, connects to the Management Server, it is provided with sets of properties that it uses to configure its correct running state. Foglight for Hyper-V stores agent properties on the Management Server.

a Select an agent and click Edit Properties.

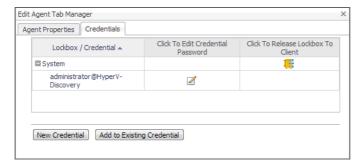
The **Edit Agent Tab Manager** dialog box appears, showing the Hyper-V Agent properties on the **Agent Properties** tab.



- i NOTE: When multiple agents are selected, you can only edit the properties that are common to all selected agents.
- b Review and edit the agent properties, as required.

The combination of properties you can configure in this step and the required values depend on the desired collection method (WinRM or DCOM) and the type of authentication required (local or domain-based). For complete information, about the possible configuration scenarios, see Setting the Hyper-V Agent Configuration properties on page 23.

c Open the Credentials tab, and review the available credentials.



d If required, you can create a new credential for this agent, or associate it with an existing credential.

**Creating a new credential.** Click **New Credential** and use the **Create Credential Wizard** that appears to provide the required information. For more details, see Step 12.

Associating the agent with an existing credential. Click Add to Existing Credential and use the Create Credential Wizard that appears to provide the required information. For more details, see Step 13.

17 Activate one or more agents.

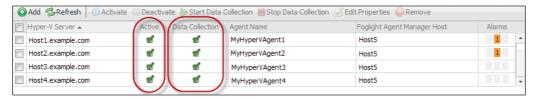
On the Agent Management dashboard, select the agents that you want to activate and click Activate.

18 Start the data collection for one or more agents.

On the Agent Management dashboard, select the agents whose data collection you want to start and click **Start Data Collection**.

19 Click Refresh.

If the agent configuration is successful, the **Active** and **Data Collection** columns show green check marks indicating that the agents are active and collecting data.



If the agent unexpectedly fails or stops, this is an indicator of an incorrect configuration. Unknown host names or invalid WinRM configuration can cause the agent to fail. Incorrect configuration causes the agent to stop. If this happens, the agent generates an observation containing a message with more information about the failure. You can view the message contents in the Data Browser. For example, to find out any massages related to the Hyper-V Agent, in the Data Browser, navigate to Hyper-V > Hyper-V Agents > <Hyper-V Agent instance> > Messages > History > <message>. For more information about the Data Browser, see the Data Model Guide.

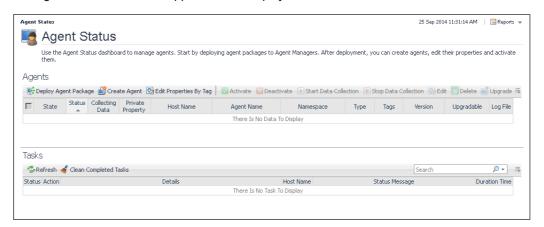
# Using an alternative method to create and activate agent Instances, and to start their data collection

The following procedure describes the process of creating and activating Agent instances and starting their data collection using the Agent Status dashboard. This dashboard is useful for creating agent instances one Agent Manager at a time.

Another way to create agent instances is using the fglcmd command-line interface. For more information about the available fglcmd commands, see the Command-Line Reference Guide.

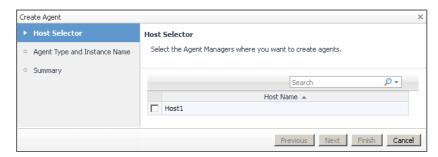
## To create, activate agent instances and start their data collection using the Agent Status dashboard:

- 1 Log in to the Foglight for Hyper-V<sup>™</sup> browser interface.
- 2 On the navigation panel, under **Dashboards**, choose **Administration > Agents > Agent Status**.
  The Agent Status dashboard appears in the display area.



3 On the Agent Status dashboard, click Create Agent.

The Create Agent wizard appears with the Host Selector page open.

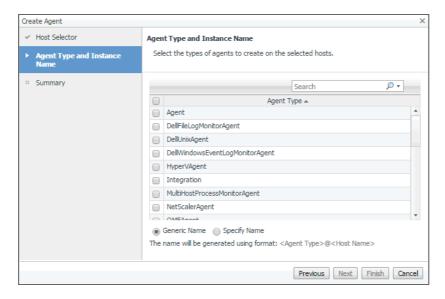


4 Specify the monitored host that you want to use to monitor with the Hyper-V Agent.

In the **Create Agent** wizard, on the **Host Selector** page, select the system on which the Agent Manager is running, and click **Next**.

If the system name does not appear in the list, check that its Agent Manager is active and connected to the Management Server.

The Create Agent wizard refreshes, showing the Agent Type and Instance Name page.



- i IMPORTANT: If the HyperVAgent, SCVMMAgent, or SOFSAgent type is not listed, you need to deploy the Hyper-V, SCVMM, or SOFS Agent package to that host. For more information, see Deploying agent packages to monitored hosts on page 7.
- 5 On the Agent Type and Instance Name page, select HyperVAgent, SCVMMAgent, or SOFSAgent, as required.
- 6 Specify the name of the agent instance that you are about to create.
  - To have Foglight for Hyper-V assign a generic name, ensure that Generic Name is selected.
  - To use a specific agent name, select Specify Name, and in the Name box that appears, type the
    agent name.
- 7 Click Next.

The Create Agent wizard refreshes, showing the Summary page.

8 In the Create Agent wizard, on the Summary page, verify that the host name and agent name are correct, and click Finish.

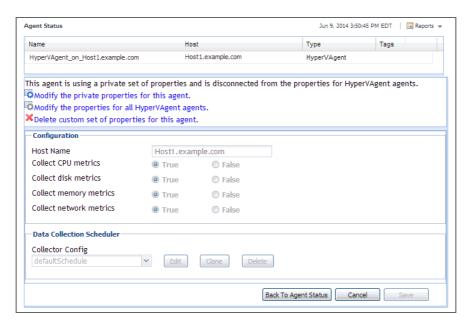
The **Create Agent** wizard closes, and the Agent Status dashboard refreshes, showing in the **Tasks** area that the **Deploy Agent Package** task is in progress. After a few moments, a green icon appears in the **Status** column, indicating a successful deployment.

9 Configure the properties of the newly created agent instance.

When an agent connects to the Management Server, it is provided with sets of properties that it uses to configure its correct running state. Foglight stores agent properties on the Management Server.

a On the Agent Status dashboard, select the newly created Hyper-V, SCVMM,or SOFS agent instance, click **Edit**, and chose **Edit Properties** from the menu that appears.

The Agent Status dashboard refreshes, showing the agent properties in the display area.



- i NOTE: When multiple agents are selected, you can only edit the properties that are common to all selected agents.
- b Click Modify the private properties for this agent.
- c Edit the agent's properties, as required.

For more information, seethe following sections:

- Setting the Hyper-V Agent Configuration properties on page 23
- Setting the SCVMM Agent Configuration properties on page 23
- Setting the SOFS Agent Configuration properties on page 24
- Setting the Hyper-V, SCVMM, or SOFS Agent Data Collection Scheduler properties on page 24.
- d When finished, click Save, then click the Back to Agent Status button.
- 10 Activate the newly created Agent instance.

On the Agent Status dashboard, select the row containing the agent instance that you want to activate, and click **Activate**.

The **Activate Agent(s)** message box appears, showing the status of the activation process. If the agent configuration is successful, after a few moments, the **Activate Agent(s)** message box closes, and the Agent Status dashboard refreshes, showing a green check mark in the **Status** column.

If the agent unexpectedly fails or stops, this is an indicator of an incorrect configuration. Unknown host names or invalid WinRM configuration can cause the agent to fail. Incorrect configuration causes the agent to stop. If this happens, the agent generates an observation containing a message with more information about the failure. You can view the message contents in the Data Browser. For example, to find out any massages related to the Hyper-V Agent, in the Data Browser, navigate to Hyper-V > Hyper-V Agents > <Hyper-V Agent instance> > Messages > History > <message>. For more information about the Data Browser, see the Data Model Guide.

## Setting the agent properties

The Hyper-V and SCVMM Agents collect data from your virtual infrastructure and sends it to the Management Server. The agents keep track of resource utilization metrics and alerts you when certain pre-defined thresholds are reached.

When an agent connects to Foglight Management Server, it is provided with sets of properties that it uses to configure its correct running state. Each agent is provided with a combination of two types of properties: agent properties and shareable properties.

Default versions of these properties are installed with Foglight<sup>™</sup> for Hyper-V. However, you can edit the default shareable and agent properties, configure agent properties that apply only to a specific agent instance, and create edited clones of shareable properties that are used by a subset of agents of a certain type.

There are two ways to access the Hyper-V and SCVMM Agent properties:

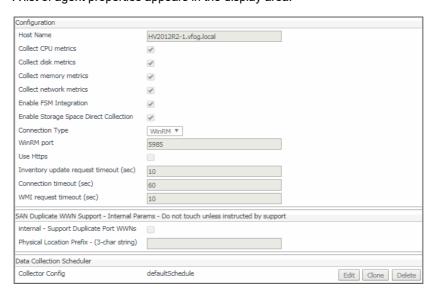
- On the Hyper-V Environment dashboard, on the **Administration** tab, select an agent instance and click **Edit Properties** (see Configuring monitoring agents for data collection on page 9). This method only provides access to the Configuration properties, but not the Data Collection Scheduler properties.
- On the Agent Status dashboard, select an agent instance and click **Edit Properties**. This method provides access to the full set of Hyper-V Agent properties, and is described in this topic.

For more information about working with agent properties, see the Administration and Configuration Guide.

#### To modify agent properties:

- 1 Log in to the Foglight browser interface.
- 2 Ensure that the navigation panel is open.
  - To open the navigation panel, click the right-facing arrow **I** on the left.
- 3 Open the Agent Status dashboard and navigate to the agent properties.
  - e On the navigation panel, under Dashboards, choose Administration > Agents > Agent Status.
    - i IMPORTANT: Another way of editing agent properties is through the Agent Properties dashboard. The properties you specify on this dashboard apply to all instances of the selected type. To be certain that you are editing properties for a particular agent instance, without overwriting any properties of other agent instances of the same type, use the Agent Status dashboard instead of the Agent Properties dashboard.
  - f On the Agent Status dashboard, select the instance of the Hyper-V or SCVMM Agent whose properties you want to modify and click **Edit Properties**.
  - g Indicate that you want to edit the properties of the selected agent instance.

A list of agent properties appears in the display area.



The position of the Properties pane depends on the dashboard you used to access agent properties. If you used the Agent Properties dashboard, the Properties pane appears to the right of

the **Namespace > Type** pane in the display area. If you used the Agent Status dashboard, the Properties pane appears across the display area.

### **Setting the Hyper-V Agent Configuration properties**

To monitor a desired Hyper- $V^{\otimes}$  server, ensure the Hyper-V Agent's **Configuration** properties are set up as required.

Figure 1. Hyper-V Agent Configuration properties



#### To set the Hyper-V Agent configuration properties:

- 1 Locate the Hyper-V Agent's **Configuration** properties.
- 2 Set the Configuration properties as follows:
  - Host Name: Type the fully qualified host name of the machine on which the monitored Hyper-V Server is running.
  - Collect CPU metrics: Select this option if you want to collect CPU metrics from the monitored Hyper-V environment.
  - Collect disk metrics: Select this option if you want to collect disk metrics from the monitored Hyper-V environment.
  - Collect memory metrics: Select this option if you want to collect memory metrics from the monitored Hyper-V environment.
  - Collect network metrics: Select this option if you want to collect network metrics from the monitored Hyper-V environment.

To start monitoring for a specific Hyper-V server, use the Hyper-V Agent's Configuration properties.

### **Setting the SCVMM Agent Configuration properties**

To monitor a desired System Center Virtual Machine Manager (SCVMM), ensure the SCVMM Agent's **Configuration** properties are set up as required.

Figure 2. SCVMM Agent Configuration properties



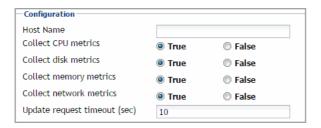
#### To set the SCVMM Agent Configuration properties:

- 1 Locate the SCVMM Agent's **Configuration** properties.
- 2 In the **Configuration** area, in the **SCVMM Host Name** box, type the name of the machine on which the Virtual Machine Manager is running.

### **Setting the SOFS Agent Configuration properties**

To monitor a desired Scale-Out File Server (SOFS), ensure the SOFS Agent's **Configuration** properties are set up as required.

Figure 3. SOFS Agent Configuration properties



#### To set the SOFS Agent Configuration properties:

- 1 Locate the SOFS Agent's Configuration properties.
- 2 Set the Configuration properties as follows:
  - Host Name: Type the fully qualified host name of the machine on which the monitored SOFS Server is running.
  - Collect CPU metrics: Select this option if you want to collect CPU metrics from the monitored environment.
  - Collect disk metrics: Select this option if you want to collect disk metrics from the monitored environment.
  - Collect memory metrics: Select this option if you want to collect memory metrics from the monitored environment.
  - Collect network metrics: Select this option if you want to collect network metrics from the
    monitored environment.

## Setting the Hyper-V, SCVMM, or SOFS Agent Data Collection Scheduler properties

Use the Data Collection Scheduler properties to adjust how frequently the Hyper-V or SCVMM Agent collects data from the monitored server.

#### To set data collection scheduler properties:

- 1 Locate the Hyper-V or SCVMM Agent Data Collection Scheduler properties.
- 2 Select the collection configuration list that you want to use.

Click Collection Config, and from the list that appears, select a collection list.

**TIP:** If you want to clone a list and associate it with the agent instance whose properties you are editing, select it and click **Clone**. When prompted, enter a name for the cloned list. For more information on cloning, see the *Administration and Configuration Guide*.

The following collection lists are available:

- Essential Collection: Includes the server host OS, memory, and processor metrics, the server property values, the server host metrics for the LanmanServer, LanmanWorkstation, Netlogon, Dnscache, RpcSs, vhdsvc, nvspwmi, vmms and OS services, the VM processor metrics, and the VM host metrics for the Key-Value Pair Exchange, Shutdown, Heartbeat, and Time Synchronization OS services.
- Resource Collection: Includes the VM processor, network, and storage metrics.

- Inventory Collection: Includes the cluster, server, and VM collections.
- TIP: The Inventory Collection process does not submit data back to the Management Server, it is used entirely to support the Essential and Resource metric collections.
- 3 Update the selected collection configuration list.
  - a Click the Edit button on the right of Collector Config.
    - A dialog box appears.
  - b Edit the entries in the list, as required.
  - c To edit a value in the table, double-click the table cell, and enter the required value. Each list has the following values:
  - Collector Name: Contains the name of the collector: Essential Collection, Resource Collection (Resource, Disk, Network), and Inventory Collection.
  - **Default Collection Interval**: Contains the length of the default collection interval.
  - Time Unit: Contains the time unit for measuring the default collection interval: milliseconds, seconds, minutes, hours, or days.
  - **Fast-Mode Collection Interval**: Contains the length of the collection interval when the agent is running in fast mode.
  - Fast-Mode Time Unit: Contains the length of the collection interval when the agent is running in fast mode.
  - Fast-Mode Max Count: Contains the maximum count of entries when the agent is running in fast mode.
  - d Save your changes to the list by clicking Save Changes in the dialog box.
    The dialog box closes.
- 4 In the display area, click Save.

## **Upgrading Foglight for Hyper-V**

The latest version of the Foglight  $^{\text{TM}}$  for Hyper-V is 6.1.0.

To upgrade Foglight for Hyper-V, you must first stop Hyper-V agent services, or uninstall any older Hyper-V Agent instances. Do not delete the older version of the .car file. Then, install version 6.1.0 of the cartridge on top of the older version. Refer to Installation and setup on page 6 for the installation procedure.

For complete information about the upgrade procedure, see the Foglight Upgrade Guide.

NOTE: When upgrading the cartridge from a version earlier than 5.6.7, you must deploy the Hyper-V Agent package to monitored hosts using the Update Agent button on the **Administration** tab of the Hyper-V Environment dashboard, not the Agent Status dashboard.

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