

# Foglight<sup>®</sup> Evolve Network Topology 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 Evolve Network Topology Guide First Edition April 2022

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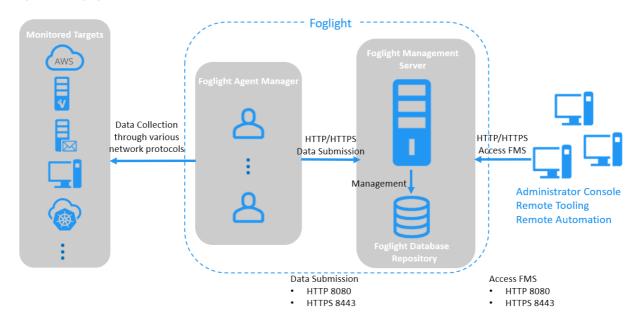
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### **Overview**

## Overview of interaction between Foglight components

Foglight<sup>®</sup> consists of the Foglight Management Server (FMS), a database repository, and a set of cartridges. Foglight relies on a browser-based user interface and is controlled via role assignments in the Foglight security model. The Foglight Web application runs in an Apache Tomcat® server. Users interact with the FMS Web application via an HTTP or HTTPS connection.

Figure 1. Foglight Components Overview



## Foglight Management Server default port assignments

The Foglight installation process allows you to configure port assignments. The default ports are displayed during installation.

Table 1. FMS default port assignments

Port Name	Port Number	Outgoing/Incoming
Embedded DB	TCP 15432	Outgoing
HTTP	TCP 8080	Incoming

Table 1. FMS default port assignments

Port Name	Port Number	Outgoing/Incoming
HTTPS	TCP 8443	Incoming
High Availability	UDP 45566	Incoming/Outgoing
	TCP 7800	
Federation RMI	TCP 1099	Incoming/Outgoing
Federation RMI Service	TCP 4444	Incoming/Outgoing
		<b>NOTE:</b> If your Federation Master Server is installed behind the firewall, you must configure this port on the Federation Child Server to set up the connection with the server.
QP5	TCP 8448	Incoming/Outgoing

High Availability (HA) refers to running a secondary instance of Foglight as a failover backup server (redundant mode). Foglight listens to the multicast port (45566) only when configured for HA mode.

## Foglight default ports

Table 2. Ports used when Foglight is installed with an external database

Port Name	Port Number	Outgoing/Incoming
External PostgreSQL®	5432	Outgoing
Microsoft <sup>®</sup> SQL Server <sup>®</sup>	1433	Outgoing
Oracle <sup>®</sup>	1521	Outgoing
MySQL™	3306	Outgoing

Table 3. Agent adapter ports used when configuring the Foglight Administration Console

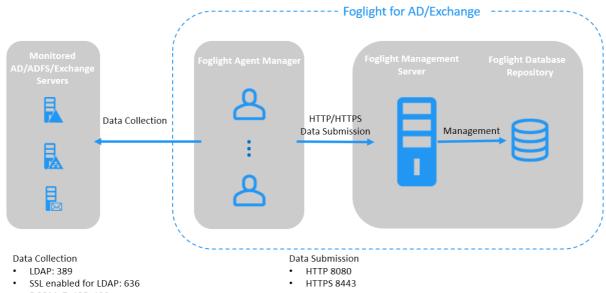
Port Name	Port Number	Outgoing/Incoming	
Agent Manager	8080	Incoming	
Agent Manager over SSL	8443	Incoming	
Java EE Technology Agent	41705	Incoming	

## **Network topologies**

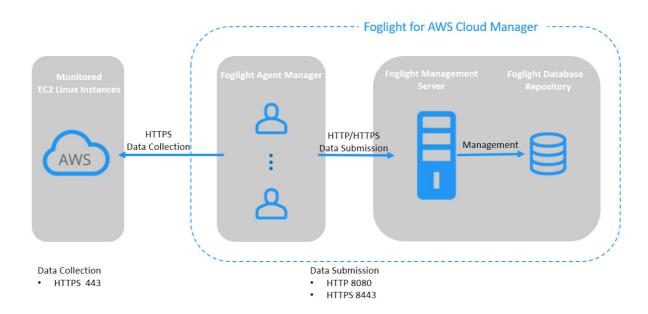
This chapter includes the network topology for the following cartridges:

- · Foglight for Active Directory/Foglight for Exchange
- Foglight Hybrid Cloud Manager for AWS
- Foglight Hybrid Cloud Manager for Azure
- Foglight Hybrid Cloud Manager for Google Cloud
- Foglight for Hyper-V
- Foglight for Infrastructure
- Foglight for Container Management
- Foglight for NetVault
- Foglight for Office 365
- Foglight for VMware
- Quest Protect Dashboard
- Foglight for Citrix XenDesktop and XenApp
- Foglight for Storage Management

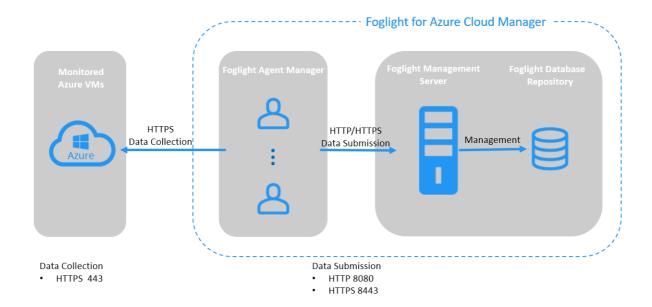
## Foglight for Active Directory/Foglight for Exchange



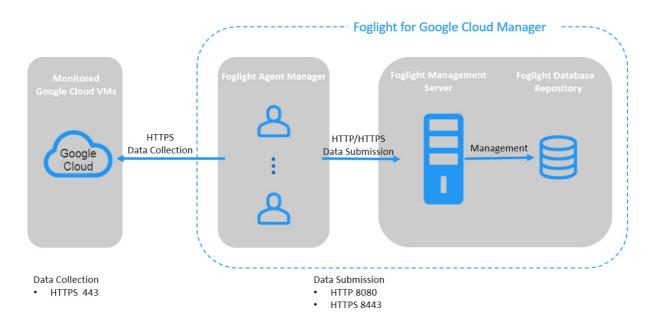
- DCOM: 7, 135, 139
- WinRM HTTP 5985
- WinRM HTTPS 5986
- Foglight Hybrid Cloud Manager for AWS



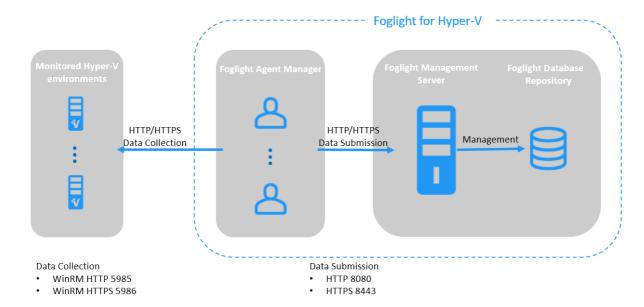
## Foglight Hybrid Cloud Manager for Azure



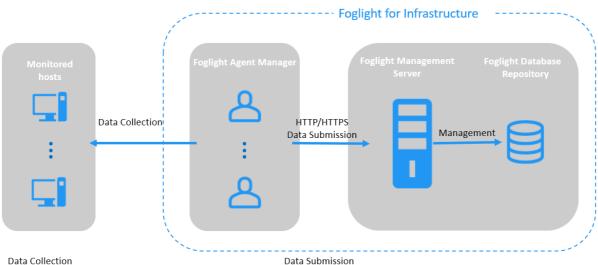
## Foglight Hybrid Cloud Manager for Google Cloud



## Foglight for Hyper-V

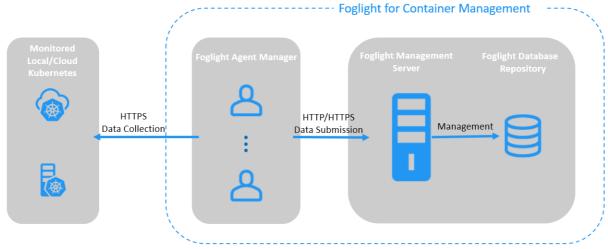


## **Foglight for Infrastructure**



- Linux/Solaris/HP-UX/AIX: SSH 22
- Windows: WMI, WinRM HTTP 5985, WinRM HTTPS 5986
- HTTP 8080
- HTTPS 8443

## **Foglight for Container Management**



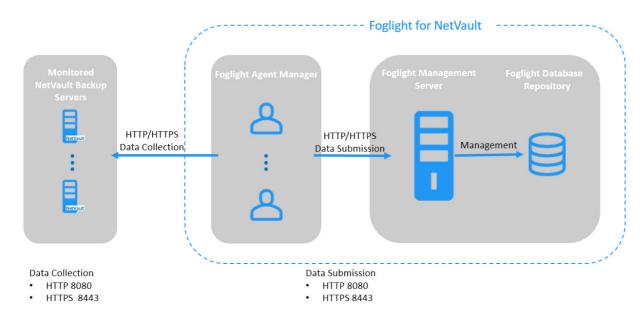
#### Data Collection

- Azure AKS: https://XXX.hcp.<region>.azmk8s.io:443
- Amazon EKS: https://XXX.XXX.<region>.eks.amazonaws.com
- · Others: <Kubernetes API Server Endpoint>

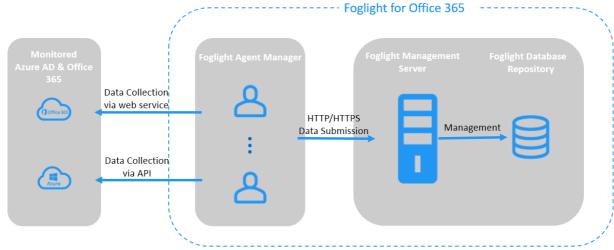
#### Data Submission

- HTTP 8080
- HTTPS 8443

## Foglight for NetVault



## **Foglight for Office 365**



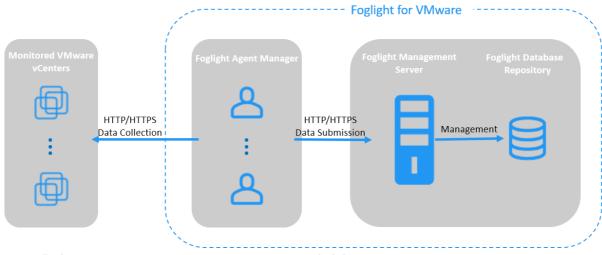
Data Collection – Ensure port 443 is open.

- Communication API: <a href="https://msdn.microsoft.com/en-us/office-365/office-365-service-communications-api-reference">https://msdn.microsoft.com/en-us/office-365/office-365-service-communications-api-reference</a>
- Collecting Report data through Reporting web service: https://msdn.microsoft.com/en-us/library/office/jj984325.aspx

#### Data Submission

- HTTP 8080
- HTTPS 8443

### **Foglight for VMware**



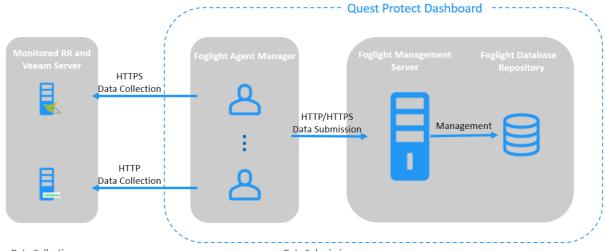
#### Data Collection

- HTTP 80 to vCenter Web Service End Point
- HTTPS 443 to vCenter Web Service End Point

#### Data Submission

- HTTP 8080
- HTTPS 8443

### **Quest Protect Dashboard**



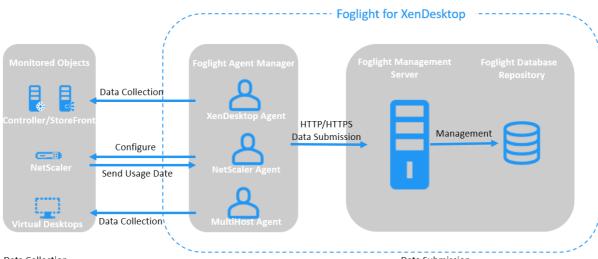
#### Data Collection

- Rapid Recovery Core Server: HTTPS 8006
- Veeam Enterprise Server: HTTP 9399

#### Data Submission

HTTP 8080 HTTPS 8443

## Foglight for Citrix XenDesktop and **XenApp**



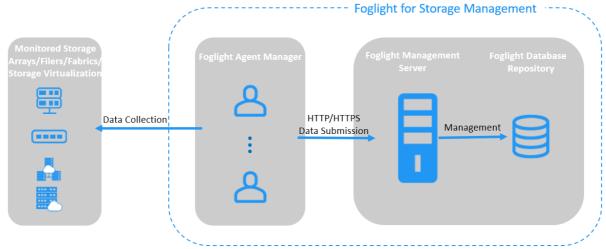
#### Data Collection

- StoreFront/Desktop Data Collection: WinRM 5895, 5986 (HTTPS)
- Controller Data Collection: WinRM 5895, 5986 (HTTPS), Odata 80, Odata URL: http://{controller}/Citrix/Monitor/Odata
- NetScaler Agent: Send Data 9995(UDP); Configure 80, 443(HTTPS)

#### Data Submission

- HTTP 8080
- HTTPS 8443

## **Foglight for Storage Management**



Data Collection: See the following table for details.

Data Submission

- HTTP 8080
- HTTPS 8443

Table 1. Data Collection protocol and port for Foglight for Storage Management

Model	Protocol	Port
Brocade	SMI-S	default 5988 (HTTP)
		default 5989 (HTTPS)
Cisco	SSH	22
Dell Compellent	API	default 3033
Dell Equallogic	SNMP	161
EMC CLARIION CLI	DCOM	135, 139 (DCOM)
	SSH	22 (SSH)
EMC VNX/ CLARiiON/VMAX	SMI-S	default 5988 (HTTP)
SMI-S		default 5989 (HTTPS)
EMC Isilon	OneFS CLI	default 22
HDS AMS/USP/VSP	SMI-S	default 5988 (HTTP)
	DCOM (TM)	default 5989 (HTTPS)
		135, 139 (DCOM)
HP EVA	SMI-S	default 5988 (HTTP)
		default 5989 (HTTPS)
HP 3PAR	SMI-S	default 5988 (HTTP)
		default 5989 (HTTPS)
NetAPP Filer	ONTAP API	443
EMC VPLEX	REST API	443 (HTTPS)
Generic SMI-S	SMI-S	default 5988 (HTTP)
		default 5989 (HTTPS)

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- · Engage in community discussions.
- · Chat with support engineers online.
- · View services to assist you with your product.