# FLEXera



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### Introduction

FlexNet Manager Suite provides software asset, hardware asset, and contract management for enterprises across over 16,000 publishers and more than 225,000 applications. It reports detailed information for installed software, application usage, purchases, and reconciles these to provide a license position.

It inventories virtual environments and Oracle databases, imports inventory from Microsoft System Center Configuration Manager (SCCM) and other inventory tools through configurable adapters, and seamlessly integrates with Enterprise Resource Planning (ERP), Human Resources (HR), Active Directory (AD), and Purchase Order (PO) systems. With its built-in library of more than 1,380,000 Stock Keeping Unit numbers (SKUs), for automated reconciliation of purchases with inventory, and support for the latest license models, FlexNet Manager Suite is used by enterprises to gain control of their software estate and optimize their software spend.

This document contains information about FlexNet Manager Suite, covering:

- FlexNet Manager for Clients
- FlexNet Manager for Datacenters
- FlexNet Manager for SAP Applications
- · Service Life Data Pack.

Published System Requirement information will be available in English, French, German, Japanese, and Spanish.

# System Requirements

The system requirements are based on typical implementations in the range of 10,000 to 200,000 devices. For larger implementations, it is recommended you engage the Flexera Global Consulting Services team or a Flexera partner experienced in large scale FlexNet Manager Suite deployments.

The following diagram shows the structure of a typical implementation:

Application server Web application server Processing server Inventory Batch server External App server Portal API Application & Inventory Web Inventory beacon(s) reconciliation Browsers application processing engine engine Flexera Analytics Report Compliance Inventory Data snapshot database database warehouse Cognos database Store Cognos Database server (running all operations databases) server

Figure 1: Structure of a typical implementation

See the *Installing FlexNet Manager Suite 2018 R2 On-Premises* guide for recommendations on how many servers are appropriate for your implementation.

Please consult the FNM-SAP Sizing Guidelines 2018 R2 guide, available from the Installation Documentation for FlexNet Manager Suite 2018 R2 download file, for recommendations on sizing an implementation that uses only FlexNet Manager for SAP Applications functionality.

### Cloud

These connection details are relevant only if you are using the Software as a Service (SaaS, or cloud) edition of FlexNet Manager Suite.

Category	Requirement	
DNS hostname cloud production	www.flexnetmanager.com www.flexnetmanager.eu	
DNS hostname cloud User Acceptance Testing (UAT)	uat.flexnetmanager.com uat.flexnetmanager.eu	
Required IP ranges for Cloud customers who are not using DNS hostname	US domain: Production — 64.14.29.0/24 Disaster recovery — 64.27.162.0/ 24 EU domain: Production — 62.209.49.0/24 Disaster recovery — 162.244.221.0/ 24	It is recommended to use DNS hostnames for network configuration of firewalls between inventory beacons and FlexNet Manager Suite Cloud. IP addresses can change without or with limited notice.

# **Hardware Requirements**

#### **Application Server**

Category	Requirement
Processors	4 cores, with up to 8 cores if more than 100 operators
Memory	8 GB
System drive	60 GB  This includes an allowance of 8GB for the DataImport folder used for ARL, PURLs, SKU library, and EOSL library updates.

#### **Database Server**

Category	Requirement
Processors	4 cores per 100 operators
Memory available for SQL Server	16 GB per 50,000 devices
System drive	40 GB

Category		Requirement
Data drives (Typical figures based on "simple" database recovery model)	Compliance database data	Per 10,000 devices: 25 GB in first year + 15 GB growth per year
	Compliance database logs	20 GB per 10,000 devices
	Inventory database data	20 GB per 10,000 devices with FlexNet Inventory
	Inventory database logs	10 GB per 10,000 devices with FlexNet Inventory
	Report snapshot database data	10 GB
	Report snapshot database logs	10 GB
	Data warehouse database data	20 GB (based on 1,000 licenses)
	Data warehouse database logs	20 GB
	tempdb data	5 GB per 10,000 devices
	tempdb logs	1 GB per 10,000 devices
	Cognos content store data + logs	1 GB
	<u>Total</u>	60 GB + 80 GB per 10,000 devices
	Annual Growth Rate	15 GB per 10,000 devices

#### Flexera Analytics (Cognos) Server

Category	Requirement
Processors	4 cores
Memory	16 GB + recommended
System drive	100 GB

#### FlexNet Beacon

Category	Requirement
Processors	2 cores
Memory	4 GB minimum, 8 GB or higher recommended
Minimum free disk space	1 GB per 10,000 devices

#### FlexNet inventory agent

Category	Requirement
Processors	1 core
Memory	512 MB minimum, 2 GB or higher recommended
Minimum free disk space	25 MB installation + 100 MB workspace

## **Network Requirements**

Category	Requirement	
Internet Protocol version	IPv4, IPv6 and dual-stack	Remote execution (such as remote discovery and inventory collection) requires IPv4.
		Communication between FlexNet Manager Suite Cloud and the top-level inventory beacon server(s) requires IPv4.
		Microsoft CAL device license calculations require IPv4 for CAL evidence collection and computer inventory.
Ports	Minimally, 80 (for HTTP) or 443 (for HTTPS) to access the central application server(s).	Note: Other optional inventory sources may require additional ports. For further details, refer to the topic Ports and URLs for inventory beacons in the online help.

## **Compatibility with Other Products**

This section describes the compatibility of FlexNet Manager Suite 2018 R2 with other Flexera products at the time of release.

#### *Installation on the Same Server*

The following table lists the supported versions of components that can be installed on the same server as a FlexNet Manager Suite 2018 R2 application server.

Component	Version that can be installed on the same server as FlexNet Manager Suite 2018 R2
FlexNet inventory agent	2018 R2
FlexNet Beacon	2018 R2
Flexera Analytics	2018 R2

#### **Integration with Other Products**

FlexNet Manager Suite integrates with the following products and components. Support for third party products is based on the original software vendors publicly stated support dates. If an environment is no longer supported by the original software producer, Flexera will provide "as is" support; meaning troubleshooting issues, without committing to any defect fixes or enhancements. This table details the currently supported versions:

Product/Component	Version that can be imported from
App Portal	2013 R2-2017 R2
BDNA Normalize (Data Platform)	5
BMC Atrium CMDB	8.1–18.05 together with Atrium Integrator version 8.1–18.05
	Note: Only available for FlexNet Manager Suite On-Premises
BMC BladeLogic Client Automation (Marimba)	8.2
BMC Discovery (ADDM)	9.0, 10.0-10.2, 11.0-11.3
BMC Remedy ITSM Applications	7.6.04 SP4 through 9.1
	Note: Only available for FlexNet Manager Suite On-Premises
Citrix XenApp EdgeSight	5.4, 7.6, 7.147.16 (requires a Platinum license), 7.17, 7.18
Citrix XenApp Server	6.0, 6.5, 7.5-7.9, 7.11-7.18
Citrix XenDesktop	5.6, 6.0, 6.5, 7.5, 7.6, 7.8, 7.9, 7.11-7.18
FlexNet Manager for Engineering Applications	15.5, 2016 R1, 2016 R2, 2016 R2 SP1
HP Discovery and Dependency Mapping Inventory (DDMI)	9.30
HPE Universal Discovery (HP-UD)	10.10, 10.11, 10.33, 11
IBM BigFix Platform (previously Tivoli Endpoint Manager) on	8.2, 9.5
Microsoft SQL Server	Tip: Do not confuse the individual IBM BigFix products. IBM BigFix Platform (often referred to as simply "BigFix") and IBM BigFix Inventory are quite distinct. You may import inventory from IBM BigFix Platform if this is your only IBM BigFix product. However, if you also have IBM BigFix Inventory, you normally need import inventory only from IBM BigFix Inventory (see below).

Product/Component	Version that can be imported from
IBM License Metric Tool (ILMT) <i>or</i> IBM BigFix Inventory on IBM DB2	• IBM BigFix Inventory was previously known as IBM Software Usage Analysis (SUA), and SUA is supported (on IBM DB2) for versions 9.0, 9.1.
	• Rebranded from version 9.2.1, IBM BigFix Inventory on IBM DB2 is supported for versions 9.2.3-9.2.12
	• ILMT on IBM DB2 is supported for versions 9.0, 9.1, 9.2.3-9.2.12.
IBM License Metric Tool (ILMT) or	IBM BigFix Inventory on Microsoft SQL Server: 9.2.3-9.2.8.
IBM BigFix Inventory on Microsoft SQL Server	• ILMT on Microsoft SQL Server: 9.0, 9.1, 9.2.3-9.2.8.
IBM Passport Advantage	as of November 2014
Microsoft App-V Integration Server	4.6, 5.0, 5.1
Microsoft Exchange ActiveSync	2010
Microsoft Hyper-V	Running on:
	Windows Server 2016
	Windows Server 2012 R2
	Windows Server 2012
	Windows Server 2008 R2 x64 Server Core
	Windows Server 2008 R2 x64
	Windows Server 2008 x64 Server Core
	• Windows Server 2008 x64.
Microsoft SCCM (previously SMS)	2007, 2012, 2012 R2, 1511, 1602, 1606, 1610, 1702, 1706, 1710, 1802, 1806
Oracle Database	8i, 9i, 10g, 11g, 11g Release 2, 12c Notes:
	8i — requires a direct inventory beacon connection
	9i — requires a named account on Windows or a direct inventory beacon connection
	• 12c — the Oracle Multitenant option is not supported using a local agent.

Product/Component	Version that can be imported from
Oracle Enterprise Manager	12.1-13.2
Oracle VM Server for x86	3.2-3.4.3
ServiceNow	Jakarta
	• Kingston
	• London.
Symantec IT Management Suite (Altiris)	6.5, 7.1, 7.5
VMware vSphere/vCenter/ESXi	5.0-6.7
	Note: Remote inventory is not possible on the free license versions of ESXi.
Workflow Manager	2014-2016



**Note:** Further detail is available from the Gathering FlexNet Inventory guide, listed in the opening page of the online help.

#### **Inventory Components**

The following table lists the versions of the FlexNet Beacon and FlexNet inventory agent that can be managed by FlexNet Manager Suite 2018 R2.

Component	Compatible versions
FlexNet inventory agent (Windows) FlexNet inventory agent (Linux) FlexNet inventory agent (Solaris) FlexNet inventory agent (Mac OS X) FlexNet inventory agent (AIX) FlexNet inventory agent (HP-UX)	<ul> <li>Note: Earlier versions are compatible in that they receive default policy and collect inventory on schedule. They cannot support more recent agent functionality, such as: <ul> <li>Internet Protocol version 6 (IPv6)</li> </ul> </li> <li>Control of usage tracking through UI settings (rather than .ini files and registry controls), from 2014 (R1)</li> <li>Settings targeted by IP addresses, from 2014 (R1)</li> <li>CAL inventory, from 2016 R1.</li> </ul>
Citrix XenApp server agent	2014 R3-2018 R2

Component	Compatible versions	
FlexNet Beacon	2017 R2-2018 R2	
	<b>Tip:</b> Older inventory beacons continue to function with this release, but Flexera strongly recommends that you update to at least the range shown.	
	Citrix XenApp inventory requires FlexNet Beacon 2014 R2 or later.	
	• AWS EC2 connector requires FlexNet Beacon 2018 R2 (13.1.x) or later.	

# Prerequisite Software

The table below describes the supported operating systems and software prerequisites of FlexNet Manager Suite 2018 R2 at the time of release. Unless otherwise noted, support for a release includes support for all official service packs issued against the same release.

Component	Operating System	Prerequisite Software
Application Server	<ul><li>Windows Server 2016</li><li>Windows Server 2012 R2</li></ul>	The following three prerequisites apply to each server in a multi-server implementation:
	<ul> <li>Windows Server 2012</li> <li>Windows Server 2008 R2 x64 SP1-SP2.</li> </ul>	<ul> <li>Microsoft .NET Framework 4.5-4.7.2 (registration of ASP.NET is documented in Configure .NET and IIS, in either the Installation or Upgrading PDF files)</li> <li>Microsoft Internet Information Services 7.0-10.0</li> <li>Microsoft Message Queuing (MSMQ).</li> <li>The following additional prerequisites apply only when the batch server components are installed.</li> <li>Important: There must be one and only one batch server in your environment. The batch server may be installed on its own server; or it may be co-located on either your web application server or your inventory server; or all components may be installed on a single application server. Wherever the batch server is installed, the following additional prerequisites apply.</li> <li>Microsoft Access Database Engine (32-bit)</li> </ul>
		<ul> <li>SQL Server features: Client Tools Connectivity, Management Tools.</li> </ul>

Component	Operating System	Prerequisite Software
Component  Database Server (including Cognos Database Server)	Windows Server 2012 R2     Windows Server 2012     Windows Server 2008 R2 x64 SP1.	<ul> <li>SQL Server 2014</li> <li>SQL Server 2012</li> <li>SQL Server 2008 R2</li> <li>SQL Server Client Tools, of the same version.</li> <li>Note: <ul> <li>Microsoft SQL CLR integration must be enabled.</li> <li>* All FlexNet Manager Suite databases, including the Cognos content store database, should be run with compatibility level set to SQL Server 2012 (110) or SQL Server 2014 (120) when running on SQL Server 2016 SP1 or later. Also ensure that at least SP1 has been applied, as this update repaired a fatal error in SQL Server 2016.</li> <li>Multi-tenant installations require the Enterprise Edition of SQL Server. <ul> <li>Single-tenant installations can use any edition of SQL Server.</li> <li>Customers using the legacy Contracts Portal may want to enable full-text indexing to permit searching within documents.</li> <li>Flexera Analytics requires that</li> </ul> </li> </ul></li></ul>
		documents.

Component	Operating System	Prerequisite Software
Rote: Flexera Analytics Server is not supported in multi-tenant installations.	<ul><li>Windows Server 2016</li><li>Windows Server 2012 R2</li><li>Windows Server 2012.</li></ul>	• .NET Framework 4.5-4.7.2 (registration of ASP.NET is documented in <i>Configure</i> . <i>NET and IIS</i> , in either the <i>Installation</i> or <i>Upgrading</i> PDF files)
		Important: When Flexera Analytics is installed on a server other than the database server running the content store database, Microsoft SQL Server Native Client 2012 must be installed on the server hosting Flexera Analytics (this 2012 version of the Native Client interoperates successfully when the remote database is SQL Server 2016 SP1 with the correct compatibility mode set, as noted above).
Admin Module Transport for FlexNet Manager for SAP Applications	• SAP Basis release between 7.0 and 7.5.	The SAP GUI matching the SAP release must be installed.
Satellite Transport for FlexNet Manager for SAP Applications	• SAP Basis release between 4.6C and 7.5.	No prerequisites.
Web Browser	Microsoft Internet Explorer 10-11	Flexera Analytics is not compatible with
	Microsoft Edge for Windows	Microsoft Edge.  A minimum screen resolution of 1024
	• Google Chrome 64-68	horizontal pixels is required.
	Mozilla Firefox 57-61	
	• Apple Safari 9-11.	
	Some Flexera Analytics menu options are not available in the Chrome browser. For further information refer to this IBM Knowledge Center article.	
	Support for future web browser releases cannot be verified, however there are no anticipated issues for future releases.	

Component	Operating System	Proroquicito Software	
Component	Operating System	Prerequisite Software	
FlexNet inventory agent	<ul> <li>Windows Server 2003 SP1 and SP2, 2008 R2 x64, 2012, 2012 R2, 2012 R2 SP1, 2016</li> </ul>	No prerequisites.	
	• Windows Server Core 2008, 2008 R2 x64, 2012, 2012 R2, 2016		
	• Windows Vista x64, 7 x64, 8 x64, 10 x64		
	• Windows Vista, 7, 8, 10.		
	• AIX 7.1 LPARs, 7.2		
	Amazon Linux 2		
	• CentOS 6–7.5 (x86, 32-bit and 64-bit)		
	• Debian Linux 7–9.5 (x86, 32-bit and 64-bit)		
	Note: For Debian Linux 9.4 and 9.5 (both 32-bit and 64-bit), minimal installations of the OS core omit the ifconfig command. This prevents collection of the IP address and MAC address in inventory. The root user can use the following command to restore this functionality:		
	apt-get install net-tools -y		
	• Fedora Linux 25, 26 (x86, 32-bit and 64-bit); 28 (x86 64-bit only)		
	HP-UX 11i v3, vPars/nPars		
	• Mac OS X 10.6–10.10; 10.11–10.14 (Gatekeeper needs to be disabled)		
	<ul> <li>OpenSuSE Leap 42.2, 42.3 (x86, 32-bit and 64-bit); 15 (x86 64-bit only)</li> </ul>		
	• Oracle Linux 4.5–7.3 (x86, 32-bit and 64-bit); 7.4, 7.5 (x86 64-bit only)		
	<ul> <li>Red Hat Enterprise Linux 5–7.3 (x86, 32-bit and 64-bit); 7.4, 7.5 (x86 64-bit only)</li> </ul>		

Component	Operating System	Prerequisite Software
	• Red Hat Linux 8–9 (x86 only)	
	• Solaris 8–11 (SPARC), Zones for versions 10–11	
	• Solaris 9–11 (x86), Zones for versions 10–11	
	• SuSE Linux Enterprise Server 12.3 (x86 64-bit only); 11 and 12 (x86, 32-bit and 64-bit)	
	• Ubuntu 12–17.04 (x86, 32-bit and 64-bit); 18.04-18.10 (x86 64-bit only).	

Component	Operating System	Prerequisite Software
FlexNet Beacon	<ul> <li>Windows Server 2016, 2012 R2, 2012, 2008 R2 x64</li> <li>Windows 10 x64, 8 x64, 7 x64</li> <li>Window 10, 8, 7.</li> </ul>	<ul> <li>.NET Framework versions 4.5.2–4.7.2.</li> <li>Any supported web browser.</li> <li>For Oracle Database inventory, Oracle OLE DB Provider (32-bit), version 10.2.0.3 or later.</li> </ul>
		• For connections to import data from DB2 databases, IBM OLE DB Provider (32-bit or 64-bit). Whether the driver is 32-bit or 64-bit is determined by the operating system, so that for 64-bit operating systems the 64-bit drivers are required.
		• PowerShell 3.0+.
		<ul> <li>For connection to AWS, you also require AWS Tools for PowerShell version 3.3.283.0 or later.</li> </ul>
		<ul> <li>For connection to Microsoft Office 365         Online Service, the following are also required:     </li> </ul>
		<ul> <li>64-bit server operating system</li> </ul>
		<ul> <li>PowerShell 5.1 or later</li> </ul>
		<ul> <li>Microsoft Online Services Sign-in Assistant (64-bit version)</li> </ul>
		<ul> <li>Microsoft Azure Active Directory Module for Windows PowerShell</li> </ul>
		<ul> <li>Skype for Business Online PowerShell Module</li> </ul>
		<ul> <li>Microsoft Visual C++ 2017         Redistributable (note that this is installed automatically by the above PowerShell modules).     </li> </ul>

# Installation and Upgrade Advice

If you are upgrading your on-premises implementation from FlexNet Manager Suite release 2017 R1 or later, you may follow normal upgrade procedures (using the *Upgrading* document from the list below).

If you are upgrading from any earlier release (2014-2016 R2), you should be sure to upgrade all components:

- Your application server(s) (naturally only for on-premises implementations, using the normal upgrade processes)
- All forms of FlexNet inventory tools, including the full FlexNet inventory agent, the lightweight FlexNet Inventory Scanner, and FlexNet core inventory components, wherever you may have installed them
- · FlexNet Beacon installed on all your inventory beacons.

This strong recommendation follows from the ongoing security improvements touching all these components that were released from version 2017 R1 and later versions.



**Tip:** Customers using the cloud (SaaS) implementation are also strongly advised to ensure that all FlexNet inventory tools and installed inventory beacons are updated to the latest versions, for the same reasons.

There are four documents for On-Premises customers that provide instructions for installing and upgrading to the current release, FlexNet Manager Suite 2018 R2.

- Installing FlexNet Manager Suite 2018 R2 On-Premises. This includes the option of installing Flexera Analytics 2018 R2.
- Installing FlexNet Manager Suite 2018 R2 for a Managed Service.
- Upgrading FlexNet Manager Suite from 2014 Rx to 2018 R2 On-Premises. This is designed for upgrades from FlexNet Manager Suite, version 2014 or later.
- Migrating to FlexNet Manager Suite 2018 R2 On-Premises. This covers migration from FlexNet Manager Platform 9.2 to FlexNet Manager Suite 2018 R2 On-Premises. Earlier versions of FlexNet Manager Platform will need to be upgraded to 9.2 before starting this migration.

These are contained in the **Installation Documentation for FlexNet Manager Suite 2018 R2** archive that is available from the Product and License Center and the Customer Community Documentation site. They are also available through the title page of online help for on-premises implementations.

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## **Documentation**

Documentation for FlexNet Manager Suite 2018 R2 is provided as online help. From the web user interface, click the question mark icon to launch the help. Additional documents are available from the title page of the online help. Note that both the online help and additional documents are customized for their different contexts, so that appropriate differences exist between the On-Premises and cloud versions of all documentation. On-Premises customers can also access the additional documentation files from the Documentation Center.

<b>Documentation Component</b>	Language
Online help	English
	German
	French — for FlexNet Manager for SAP Applications functionality.
Additional PDF documents	English
	German — for FlexNet Manager for SAP Applications user and installation guides.

For installation and upgrade documentation, please refer to the section in this document called <u>Installation and Upgrade Advice</u>.

# **More Information**

Item	Description
Flexera website	Information about Flexera http://www.flexera.com
Flexera System Status Dashboard	Displays the current availability information for Flexera's cloud products https://status.flexera.com
Support	Support website, including the Knowledge Base https://flexeracommunity.force.com/customer
Product downloads	Flexera Product and License Center https://flexera.flexnetoperations.com/flexnet/operationsportal/ startPage.do
Email sign-up for product announcements	For notification of FlexNet Manager Suite software updates, including hot fixes
	http://learn.flexerasoftware.com/SLO-FMS-Software-Content-Library- Updates

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