



revvity
signals

Revvity Signals Inventa™ 3.5.1

System Requirements

Powered by Spotfire®

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Table of Contents

1. System Overview	3
2. System Requirements.....	4
2.1 Signals Data Factory	4
2.2 Signals Inventa.....	5
3. Technical Support	6

1. System Overview

A Signals Inventa environment embodies the following subsystems:

- A client machine for managing the cluster running under Linux Server OS
- A Kubernetes cluster with the ingress controller enabled.
You should prepare three machines to be used as nodes of a Kubernetes cluster running under Linux Server OS. For more information about the requirements of the node machines, please refer to the **Prerequisites** section of the **Revvity Signals Inventa v3.5.1 Installation Guide (Bare-Metal Kubernetes)** documentation.
- A Spotfire Server running under Windows Server or Linux OS.
- A Spotfire Web Player worker node running under Windows Server OS.
- An Oracle, SQL Server, or PostgreSQL database for the persistence of the Spotfire Server data.

Note: For the pilot environment, it is typically acceptable to consolidate the Spotfire Server, Spotfire Database, and Web Player worker node onto a single Windows Server environment.

Note: For requirements specifically related to Lead Discovery Premium (e.g., for installs only of LDP), please refer to *Revvity Lead Discovery Premium v3.5 System Requirements.pdf*.

The detailed requirements specification for the above servers is outlined below.

2. System Requirements

2.1 Signals Data Factory

Requirement	Recommended Configuration
Operating System	<ul style="list-style-type: none"> • Ubuntu 20.04 LTS (64-bit) • Ubuntu 22.04 LTS (64-bit)
CPU	<ul style="list-style-type: none"> • For client machine that is used for running the installation and administrative tools, 2 CPUs at minimal, 4 CPUs is recommended. • For each of the node machine that is used by the Kubernetes cluster, 8 CPUs at minimum.
RAM	<ul style="list-style-type: none"> • For client machine that is used for running the installation and administrative tools, 16 GB RAM at minimum. • For each of the node machine that is used by the Kubernetes cluster, 64 GB RAM at minimum.
Disk Space	<ul style="list-style-type: none"> • For the client machine that is used for running the installation and administrative tools, 50 GB storage at minimum. • For each of the node machine that is used by the Kubernetes cluster, 1 TB storage at minimum. <p>Note: For each of the node machine that is going to be used by the new Kubernetes cluster:</p> <ul style="list-style-type: none"> • It is required that all cluster machine storage is using Solid State Hard Drives (SSDs). The recommendation is that these SSDs should provide at least 3000 IOPS (Input/Output Operations per second) and 250MB/s throughput for better performance on data importing, publishing and searching. • You should use an unformatted attached disk as the storage device and reserve 850GB at minimal on your storage device for storing the Signals Inventa metadata and the imported and indexed assay data. • You should reserve 150GB at minimal on your storage device for storing docker images and runtime data. By default, this data is stored in /var/lib/docker, but the location can change depending on your OS distribution. If you don't have sufficient disk space being mounted to the root (/), you need to change the docker daemon directory to the location that is on a mounted storage that has sufficient disk space. For the detailed steps, please check the Docker official documentation: https://docs.docker.com/config/daemon/#docker-daemon-directory • A small amount of runtime data is stored at /var/lib/rook and this is currently not configurable. Please ensure that at least 1GB of space is available in this file system location
Storage	<p>High performance direct-attached disk or SAN</p> <p>Note: NAS is not supported for index storage.</p>

Requirement	Recommended Configuration
Network Connection	<ul style="list-style-type: none"> For the three Kubernetes cluster node machines, they should use the same physical VLAN and IP subnet for the internal communication. Specifically: <ul style="list-style-type: none"> Following ports should be allowed for inbound traffic for the nodes to communicate with each other: 22, 80, 443, 2376, 2379, 2380, 6443, 8472/udp, 9099, 10250, 10254, 10256, 30000-32767, 30000-32767/udp The following ports should be allowed for outbound traffic for the nodes to communicate with each other: 443, 2379, 2380, 6443, 8472/udp, 9099, 10250, 10254, 10256. It is recommended using machines that have 25Gbps network bandwidth, and that lower networking bandwidth may reduce performance. For the client machine that is used for running the installation and administrative tools, it should be on a separate subnet and be able to communicate with any of the node machines in the cluster.
Web browser	<ul style="list-style-type: none"> Google Chrome latest MS Edge (Chromium based) latest

2.2 Signals Inventa

Software Requirements	
Revvity Signals Inventa™ 3.5.1 for Spotfire 12.0.x LTS and 14.0.x LTS	
Category	Requirement
Spotfire	<p>Spotfire Client:</p> <ul style="list-style-type: none"> TIBCO Spotfire Analyst 12.0.x LTS TIBCO Spotfire Business Author/Consumer 12.0.x LTS Spotfire Analyst 14.0.x LTS Spotfire Business Author/Consumer 14.0.x LTS <p>Spotfire Server:</p> <ul style="list-style-type: none"> TIBCO Spotfire Server 12.0.x LTS Spotfire Server 14.0.x LTS <p>Note: 32-bit Spotfire is not supported for this release.</p>

Hardware Requirements

As an extension of Spotfire, Signals Inventa uses the same hardware requirements as Spotfire.

Please refer to the following website for the Spotfire hardware requirements:

[System requirements for Spotfire® products](#)

Software Requirements

As an extension of Spotfire, Signals Inventa uses the same software requirements as Spotfire.

Please refer to the following website for the Spotfire software requirements:

[System requirements for Spotfire® products](#)

Note: Signals Inventa does not support MS Internet Explorer.

3. Technical Support

This software is supported by Revvity Signals Software Support.

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<https://support.revvitysignals.com/hc/en-us>