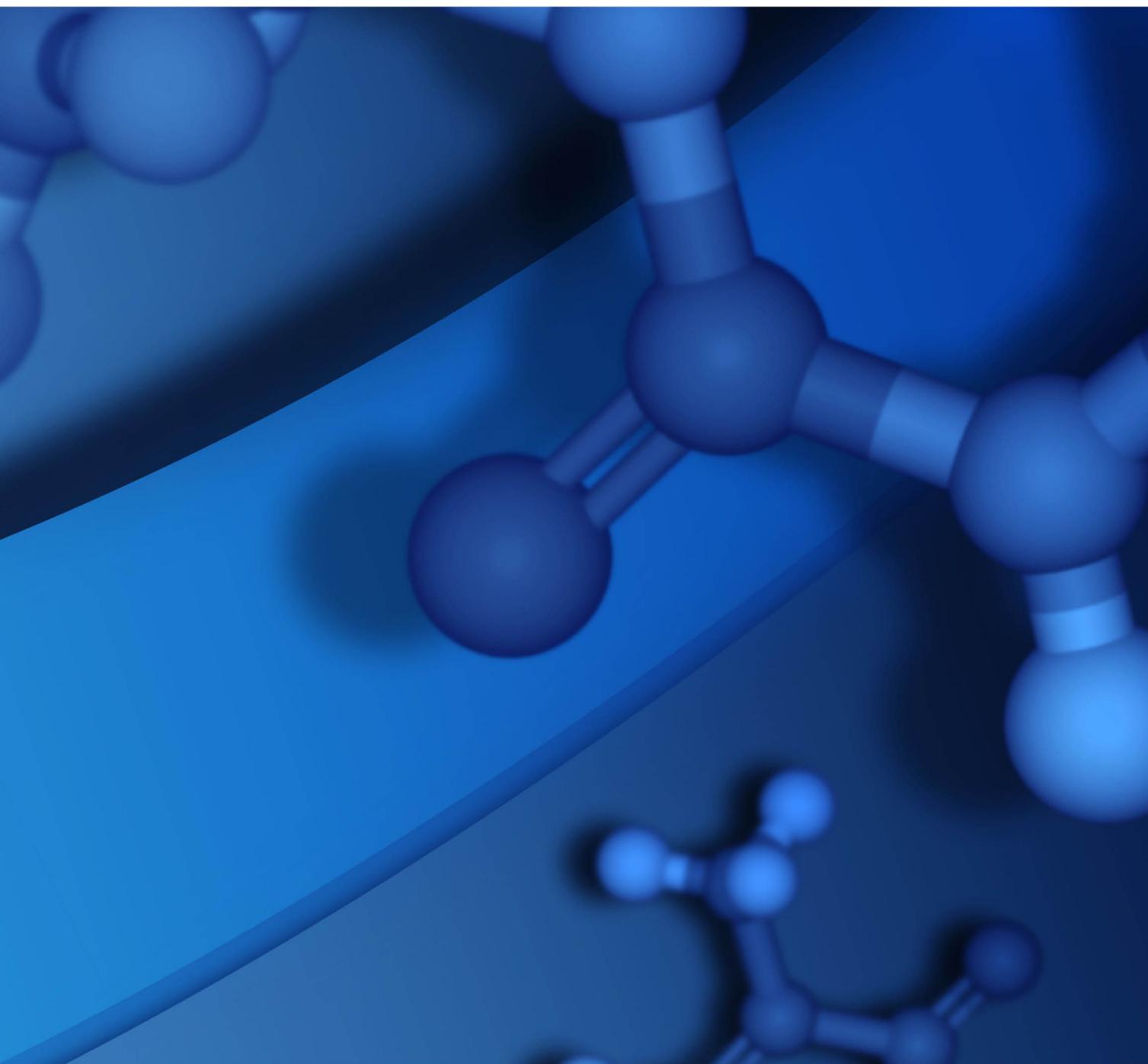


SYSTEM REQUIREMENTS

BIOVIA FOUNDATION HUB 2021 HF1



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Acknowledgments and References

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Overview

This document identifies hardware and software requirements for a supported installation of BIOVIA Foundation 2021 HF1. The requirements are categorized into the following areas:

- Required client hardware and software, including hardware, browsers, and operating systems
- Required and optional server hardware, software, and regional settings
- Required database software

For information about what constitutes a supported installation, refer to the *BIOVIA Software Product Lifecycle and Platform Support Policy*.

Client Requirements

Hardware Requirements

The following table lists the minimum hardware requirements for Foundation Hub 2021 HF1 clients.

| Component | Minimum Hardware |
|-----------------------------------------|--------------------------------------------------------------------------------------------------|
| Display Properties Screen Resolution | 1280 x 1024 Required to address potential display issues with Workbook/Task Plan integration. |

Browsers

The following table lists the browser requirements for Foundation Hub 2021 HF1 clients.

| Application | Versions |
|-----------------|---------------|
| Mozilla Firefox | ESR 68 64-bit |
| Google Chrome | Latest 64-bit |
| Microsoft Edge | Chromium |

Operating Systems

The following table lists the supported operating systems for Foundation Hub 2021 HF1 clients.

| Operating System | Supported Versions | Notes |
|------------------|-----------------------|-------------------------------------------------------------------------------------------|
| Windows | Windows 10 Pro | <ul style="list-style-type: none">■ 64-bit only■ English and Kanji |
| | Windows 10 Enterprise | <ul style="list-style-type: none">■ 64-bit only■ English and Kanji |

Server Requirements

Hardware Requirements

The following table lists the minimum hardware and networking requirements for Foundation Hub 2021 HF1 application servers.

| Component | Minimum Hardware |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Processor | <ul style="list-style-type: none">■ x64 architecture-based computer with Intel processor that supports Intel 64 architecture (formerly known as Intel EM64T).■ AMD processor that supports the AMD64 platform. <div style="border: 1px solid #ccc; padding: 5px;">Note: Intel Itanium IA64 processors are not supported.</div> <p>As a guide to your processor requirement decision, one processing core for every 2 simultaneous jobs, with at least 8 cores total, should provide adequate performance.</p> |
| RAM | <ul style="list-style-type: none">■ General: 16 GB.■ Foundation Hub: The default settings for Foundation Hub are a fixed size memory poolsize of 6 GB. Site specific Foundation Hub usage may require a larger maximum memory poolsize. |
| Hard disk space | <ul style="list-style-type: none">■ Foundation Hub: 10 GB minimum. |
| Swap Space | <ul style="list-style-type: none">■ Foundation Hub: At least 1 x RAM for systems <= 8 GB or 0.5 x RAM for large memory systems. Refer to your operating system recommendations for more precise guidelines. |
| Network | TCP/IP 1Gbps |
| Oracle Tablespace | The quota for the user's default tablespace should be unlimited and all roles should have access to the database. The tablespace should have at a minimum 10 GB of available space plus 5 GB for every 1000 users. 25 GB is recommended. |

Operating Systems

The following table lists the supported operating systems for Foundation Hub 2021 HF1 application servers.

| Operating System | Version |
|----------------------------|---------------------|
| Microsoft® Windows Server | Windows Server 2019 |
| | Windows Server 2016 |
| Red Hat® Enterprise Linux® | 8.1+ |
| | 7.5+ |

BIOVIA Software Requirements

BIOVIA Foundation Hub 2021 HF1 is compatible with other BIOVIA applications. Refer to the *Unified Lab Management 2021 HF1 System Requirements* for supported versions of Compose and Capture, Workbook, CISPro, Direct, and Notebook. For other BIOVIA applications, refer to the *System Requirements* documentation for the specific product.

Pipeline Pilot and FoundationSSO Package

This version of Foundation Hub is compatible with Pipeline Pilot Server 2021.

For Foundation Hub 2021 HF1, install the separate *FoundationSSO* package on the Pipeline Pilot server. This package contains Pipeline Pilot components and protocols required for Foundation Hub 2021 HF1. For details about installing the FoundationSSO package, see the *Foundation Hub Installation and Configuration Guide*.

Ansible Requirements

BIOVIA supports using Ansible scripting to manage installations and upgrades of Foundation Hub on some platforms. For the Ansible requirements and the supported platforms for target nodes, see the *Ansible Installation Guide for BIOVIA*.

CDS Add-in Requirements

These requirements apply to separately installed add-in software for Empower and Chromeleon Chromatography Data System (CDS) clients.

| CDS System | CDS Client Version |
|------------|-----------------------------|
| Empower | 3 FR5 3 FR4 SR3 3 FR4 |
| Chromeleon | 7.2.10 7.2 SR5 |

Note: An SDK Runtime license is required for each Chromeleon account that will use the BIOVIA Chromeleon add-in. For more information, see the *Foundation Hub Installation and Configuration Guide*.

Required Permissions

The following permissions are required to use the CDS add-in import and export functionality:

- To import data from Foundation Hub to CDS:
 - Sequences > Copy Sequence
 - Sequences > Modify Sequence
 - Sequences > Manage Sequence Variables
 - Injections > Modify Finished Or Interrupted Injections
 - Injections > Add New Injections

- To export data from CDS to Foundation Hub:
 - Electronic Report > Export Electronic Report

Regional Settings

The following table lists the supported regional settings for Foundation Hub 2021 HF1 application servers.

Note: The Foundation Hub application server database server must be set to the same Regional Language Setting.

| Domain | Supported Settings |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Client OS | <ul style="list-style-type: none"> ■ English ■ German ■ Kanji |
| Database Languages | <ul style="list-style-type: none"> ■ English NLS_CHARACTERSET=WE8ISO8859P1 ■ Kanji NLS_CHARACTERSET=JA16SJIS |
| Database Charactersets | <ul style="list-style-type: none"> ■ UTF8 ■ AL32UTF8 ■ AL16UTF16 |
| Regional Settings | <ul style="list-style-type: none"> ■ Danish ■ Dutch (Belgium) ■ Dutch (Netherlands) ■ English (United Kingdom) ■ English (United States) ■ French (France) ■ German (Germany) ■ German (Switzerland) ■ Hungarian ■ Italian (Italy) ■ Swedish ■ Swedish (Finland) |

Database Requirements

Operating System

The following table lists the supported operating systems for Foundation Hub 2021 HF1 database servers.

| Application | Version | Notes |
|----------------------------|---------------------|--------|
| Microsoft® Windows Server | Windows Server 2019 | 64-bit |
| | Windows Server 2016 | 64-bit |
| Red Hat® Enterprise Linux® | 8.1+ | 64-bit |
| | 7.5+ | 64-bit |

Supported Oracle Versions

The following table lists the supported Oracle versions for Foundation Hub 2021 HF1 database servers.

| Application | Version | Notes |
|-------------|---------|-------|
| Oracle | 19c | |
| | 12c R2 | |

Dassault Systèmes Support Resources

For additional resources or to contact Dassault Systèmes Customer Support, visit the Support portal:

<https://www.3ds.com/support/>

From this portal, you can:

- Call or email Dassault Systèmes Customer Support
- Submit a request
- Download installers
- Access hardware and software requirements
- Access Knowledge Base
- Access Communities and Twitter feeds