



Hubble Desktop

Minimum Technical Requirements and Installation Guide

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Document Information

Notices

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Disclaimer

This guide is designed to help you to use the Hubble applications effectively and efficiently. All data shown in graphics are provided as examples only. The example companies and calculations herein are fictitious. No association with any real company or organization is intended or should be inferred.

Version History

Date	Revision	Software Version	Comments
12th August, 2025	1.0	25.3	Initial issue for 25.3.

Customer Support

For more information regarding our products, please contact us at <https://insightsoftware.com/hubble/>.

For upgrade questions, parallel version installations, product support, training, and documentation, contact Professional Services at <http://central.insightsoftware.com/> or email HubbleServices@insightsoftware.com.

About This Guide

Hubble Desktop is a business intelligence and reporting solution by insightsoftware that provides self-service analytics capabilities for finance and operations teams. It enables users to:

- Access real-time data from multiple ERP systems and data sources without IT intervention
- Create custom reports using drag-and-drop functionality
- Perform ad-hoc analysis with drill-down capabilities to investigate financial and operational metrics
- Ensure data governance with role-based security and audit trails

The solution supports major ERP systems including JD Edwards EnterpriseOne, JD Edwards World, and Oracle E-Business Suite (EBS), with direct database connectivity that operates independently from the ERP application layer. This guide provides comprehensive information for installing and configuring HubbleDesktop. It covers:

- **System Requirements:** Detailed specifications for hardware, software, and operating system requirements for both individual workstations and terminal server deployments
- **Installation Process:** Step-by-step instructions for installing the Hubble Desktop client, including options for Platform and Standard authentication modes
- **Deployment Options:** Multiple deployment methods including manual installation, Citrix terminal services, and Microsoft ClickOnce technology
- **Configuration:** Post-installation setup procedures including database connectivity and user authentication
- **Single Sign-On Setup:** Instructions for configuring Federated Single Sign-On (FSSO) with various identity providers for Platform customers

The guide is designed for IT administrators and technical staff responsible for deploying Hubble Desktop within their organizations. It includes both minimum and recommended specifications to ensure optimal performance, as well as best practices for enterprise-wide deployments.

Minimum Technical Requirements

This document outlines the system requirements for installing and running the Hubble Desktop client. Please ensure your environment meets these specifications before proceeding with installation.

Desktop Client Requirements

The following sections detail the minimum and recommended specifications for running Hubble Desktop on individual workstations.

Operating System

Hubble Desktop requires a 64-bit Windows operating system to function properly:

- **Windows:** 64-bit Windows 7 SP1 or later



Note: Turkish language installations are not supported

Hardware

Your system must meet these minimum hardware specifications for optimal performance:

- **Processor:** Intel Core 2 Duo or equivalent (minimum)
- **Memory:**
 - 4 GB RAM (minimum)
 - 8 GB RAM (recommended for large reports and Planning/Modeling features)
- **Disk Space:** 500 MB available
- **Display:** 1024x768 minimum resolution (1200px+ recommended)

Software Dependencies

The following software components must be installed prior to installing Hubble Desktop:

- **Microsoft Office:** 2016 or later
- **PDF Reader:** Adobe Reader 10.X or later (required for printing and Approval snapshots)
- **.NET Framework:** Version 4.8 ([Download](#))
- **Universal C Runtime:** KB2999226 required for Windows versions prior to Windows 10 ([Download](#))

Browser Requirements

For web-based features to function correctly, ensure your browser has the following settings enabled:

- JavaScript enabled
- Cookies enabled
- SSL/TLS support enabled
- Third-party browser extensions should be disabled if display issues occur

Citrix/Terminal Server Requirements

Organizations deploying Hubble Desktop in a virtualized environment must ensure their servers meet these specifications:

Hardware

Terminal servers require more robust hardware to support multiple concurrent users:

- **Processors:** 2x 64-bit server-grade processors (e.g., Intel Xeon)
- **Memory:** 4 GB base RAM + 1-2 GB per concurrent user

Software

The following server operating systems are supported for terminal server deployments:

- **Operating System:** Windows Server 2016, 2019, or 2022
- **Virtualization:** Compatible with Citrix Server environments

Performance Optimization

To ensure optimal performance when working with large datasets and complex models, consider these recommendations:

Excel Models

Large Excel-based reports and models benefit from the following optimizations:

- Use Excel Binary Workbook (.xlsb) format for large models
- Minimize non-essential data in budgeting forms
- Split budget entry across multiple forms using Wildcard functionality

Planning And Modeling

The Planning and Modeling modules may require additional resources depending on your use case:

- Additional RAM may be required based on model complexity
- Performance scales with available system resources

Additional Considerations

Please be aware of these additional requirements and limitations when deploying Hubble Desktop:

Connectivity

Certain features require internet connectivity to function:

- Internet access required for Welcome tab (connects to welcome.gohubble.com)

Localization

For users working in multiple languages, additional configuration may be necessary:

- Multilingual User Interface Pack required if Excel locale differs from user language

Known Issues

The following issues have been identified and may require additional configuration:

- Logitech wireless mouse users may need to install Microsoft drivers
- Oracle schema creation may be considered a customization under Oracle licensing terms

Hubble Desktop System Requirements

The table below outlines all required software platforms, supported and latest updates necessary for deploying and operating Hubble Desktop in enterprise environments.

Category	Software/Product	Supported Versions	Latest Version
ERP	JD Edwards (JDE)	EnterpriseOne 9.0, 9.2; A9.1, A9.2 or higher	EnterpriseOne 9.2
	JDE World	A9.4	A9.4
	Oracle EBS	R12	11.5.10.2 (support ended 2021), R12 12.2.x
Database	IBM DB2	Series V5R4	Series V7R5
	SQL Server for JDE	2022	2022
	Oracle DB for JDE	12c (expected July 2025), 19c	
	Oracle DB for EBS R12	12c (expected July 2025), 18c, 19c	
Architecture	System Architecture	x86/64-bit	
Productivity	Microsoft Office	Office 365	2505
PDF Tool	Adobe Acrobat		23.0012006x
Operating System	Microsoft Windows	10, 11 Platform version (v25.3 and above), compatible with 11 only	11
Server Operating System	Microsoft Windows	For versions prior to 25.3, Windows Server 2016, 2019, and 2022 with Internet Information Services (IIS) (customer supplied)	

Category	Software/Product	Supported Versions	Latest Version
		For Standard and Platform versions 25.3 and above, Windows Server 2022 and 2025.	

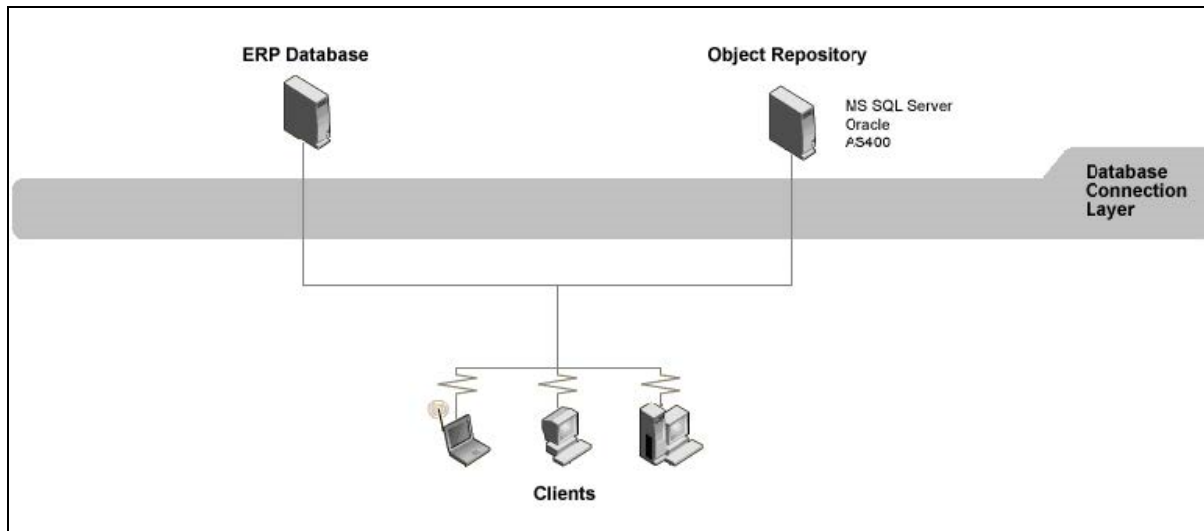
Architecture

Hubble is a Microsoft.NET Windows application that runs under a 2-tier architecture. The application has its own built-in database connectivity layer which is responsible for submitting the queries to the ERP database directly and independently from the ERP application. The software’s configuration and inquiry parameters are stored in a centralized database (an Object Repository) created during the initial installation.

The repository can be created on one of the following different database servers:

- Oracle
- SQL Server
- DB2

The architecture is as follows.



Deployment

The following deployment options are available:

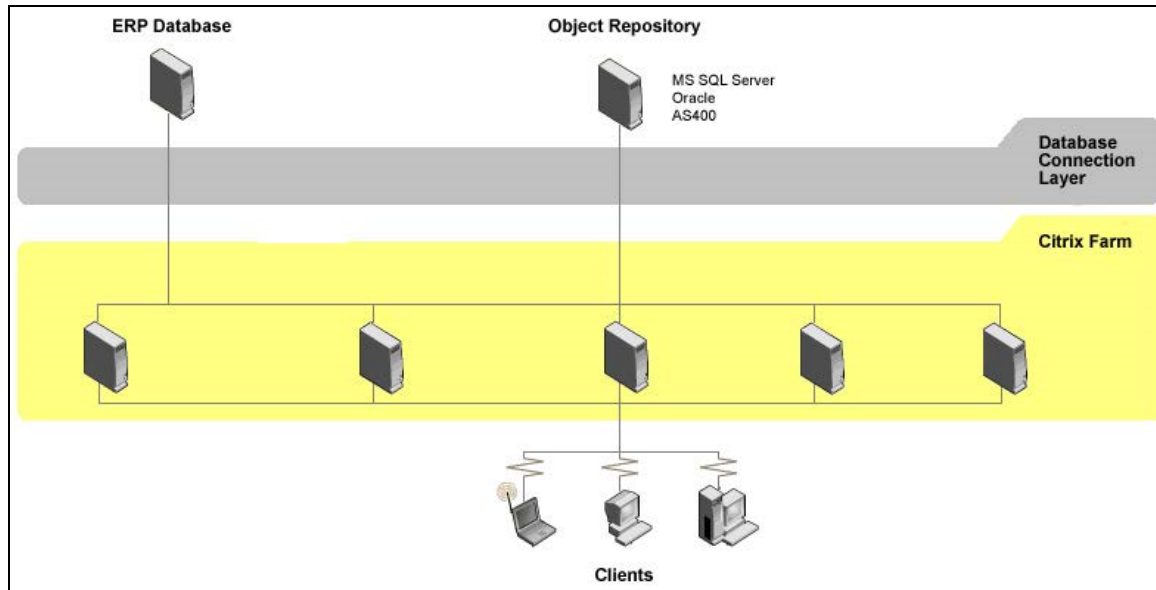
1. Manual desktop deployment

When initially installing and configuring the software, the manual desktop deployment option is used. This same installation process can be used if a small number of additional desktops need to be installed.

2. Terminal server deployment

For larger desktop installations, a terminal server deployment utilizing Windows Terminal Services or Citrix is available.

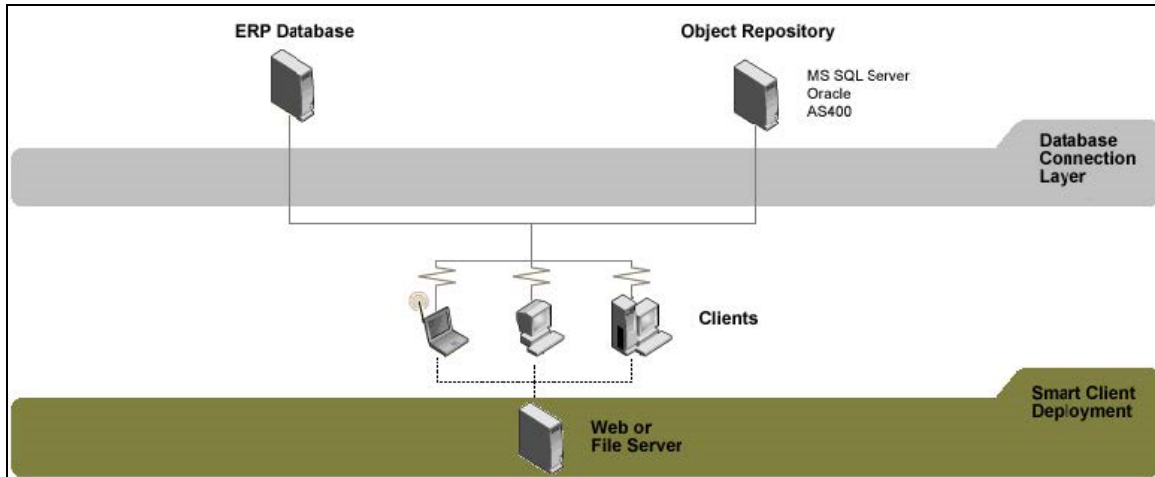
This option is best for those users who will be accessing the Object Repository and ERP databases from a Wide Area Network (WAN) connection. Terminal server deployment is shown below:



3. Microsoft's ClickOnce technology

ClickOnce, a Microsoft deployment technology, enables users to install and run an application with minimal IT involvement. This deployment method can be used with Hubble due to the built-in database connectivity layer delivered with the product. All database connectivity is handled within the application, thus eliminating the need for desktop-specific connectivity setup. The software deployment files are stored on a web or network file server, which is referred to as the deployment location. The users access the link and the software is automatically downloaded to the individual workstation. Software updates are delivered automatically and roll-back options are also available. The major benefit of this deployment method is that the desktop deployment version of Hubble can be delivered and managed centrally like a web application. This option requires minimal IT involvement and potentially eliminates the need for costly servers.

ClickOnce Deployment is shown below:



Note: All of the above options can be used in combination to meet the needs of the users and the IT Department.

Database For Object Repository

During the installation of Hubble Desktop, the repository database can be configured in one of the following supported databases:

- Microsoft SQL Server
- Oracle
- IBM AS/400

Hubble Desktop Installation

Hubble Desktop installation involves three main components:

- **Object Repository:** A centralized database that stores configuration data, user permissions, and report parameters. Must be hosted on SQL Server, Oracle, or DB2.
- **Installation Process:** Deploy using the MSI installer, which includes built-in database connectivity. Choose between Platform (single sign-on) or Standard (local license) authentication during setup.
- **Deployment Options:**
 - Manual installation on individual workstations
 - Citrix/Terminal Services for centralized access
 - ClickOnce for web-based deployment with automatic updates



Note: For Oracle EBS Users: Additional database scripts are required to create schemas and grant permissions.

The installation is designed for minimal IT involvement while ensuring secure access to ERP data. Multiple versions can be installed simultaneously for testing purposes.

Install Hubble Desktop

Process Overview

The installation process involves connecting to the Object Repository, installation of the software, configuration of the application and deployment. The database connectivity layer is built into the application and is set up during the configuration stage of the process.

Object Repository - The Object Repository contains the application's configuration information, objects such as hierarchies, Reusable Inquiry Objects and user-specific information. Report parameters are stored in the repository, but *not the report results* themselves.

The repository is hosted on a supported database platform. The application uses the repository to perform critical processes such as user verification and validation of permissions. The application has a built-in database layer that will allow access from the application to the database.

Installation and Configuration - The software is installed via a Windows Installer Component (msi file). Once the software is installed, the application needs to be configured and users set up via Administrator.

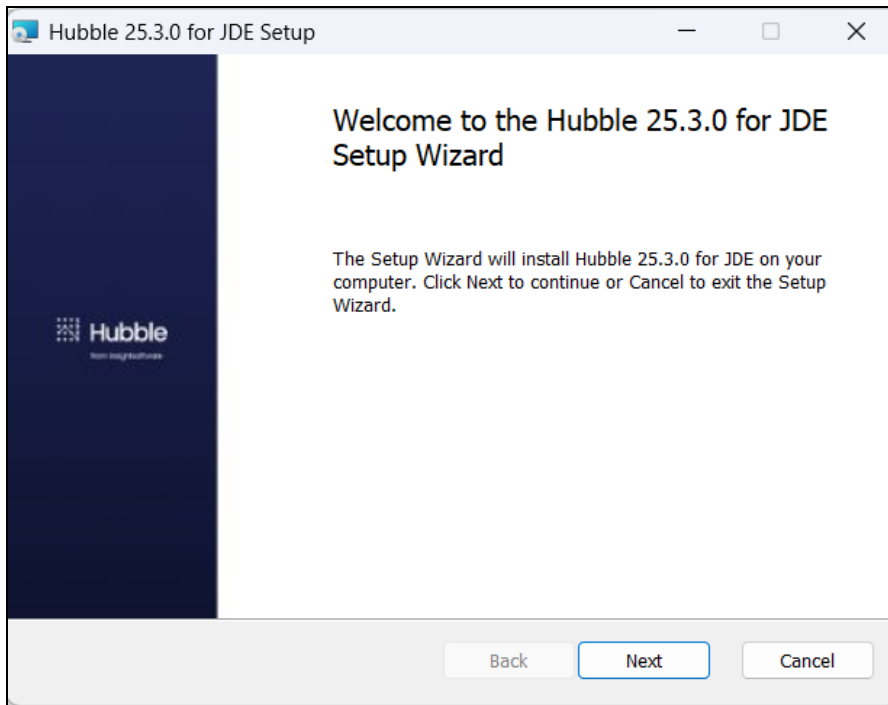
Software Installation

The insightsoftware Professional Services Department provides the installation file for the version you are installing. Save this file to the machine where you will install the software. This section guides you through the Installation Wizard.

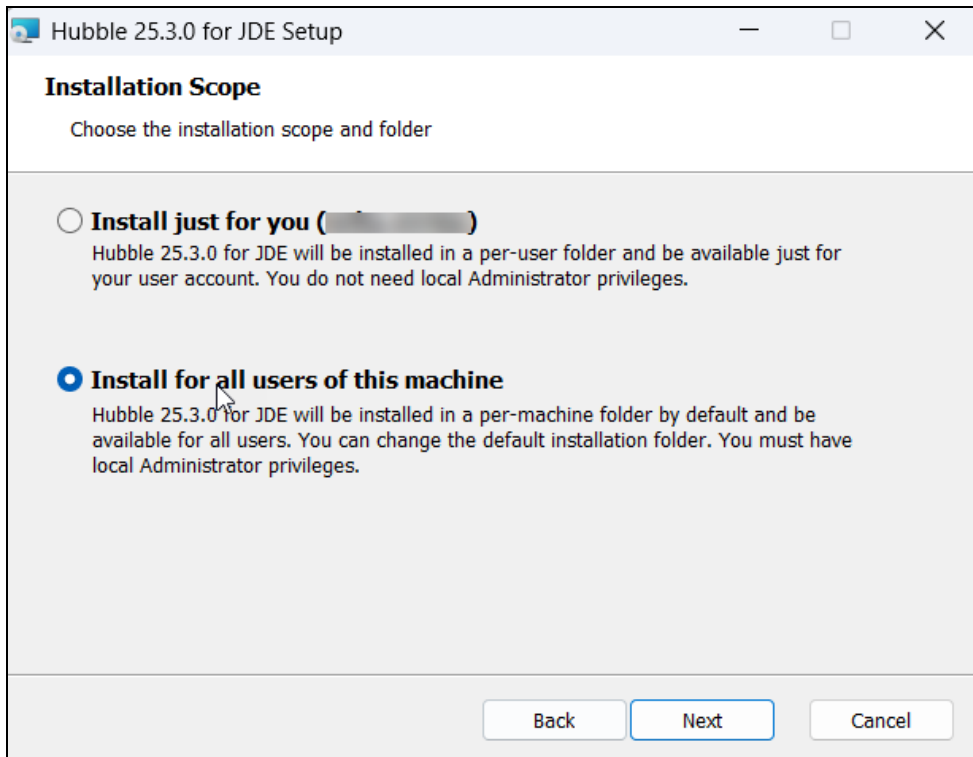


Important: The Platform version is available for users to install from version 25.3 onwards, hence the **Platform Authentication** option will be available from version 25.3 onwards in the installation wizard.

1. Right click the MSI file and select **Open with Windows Installer**.
2. In the Welcome screen of the setup wizard, select **Next**.



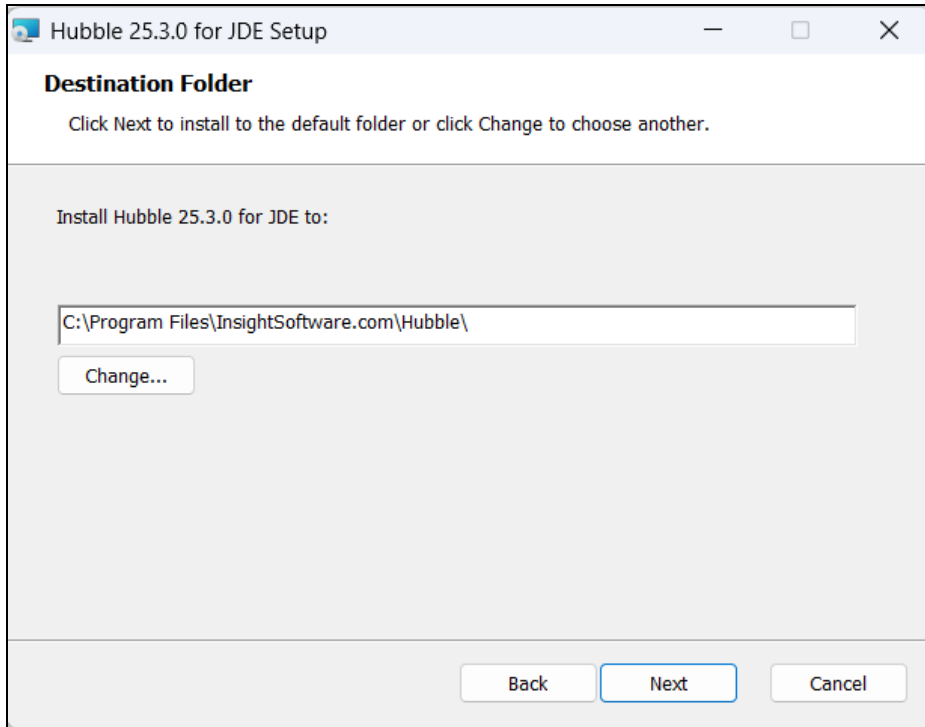
3. In the **Installation Scope** screen, select the installation scope and folder.



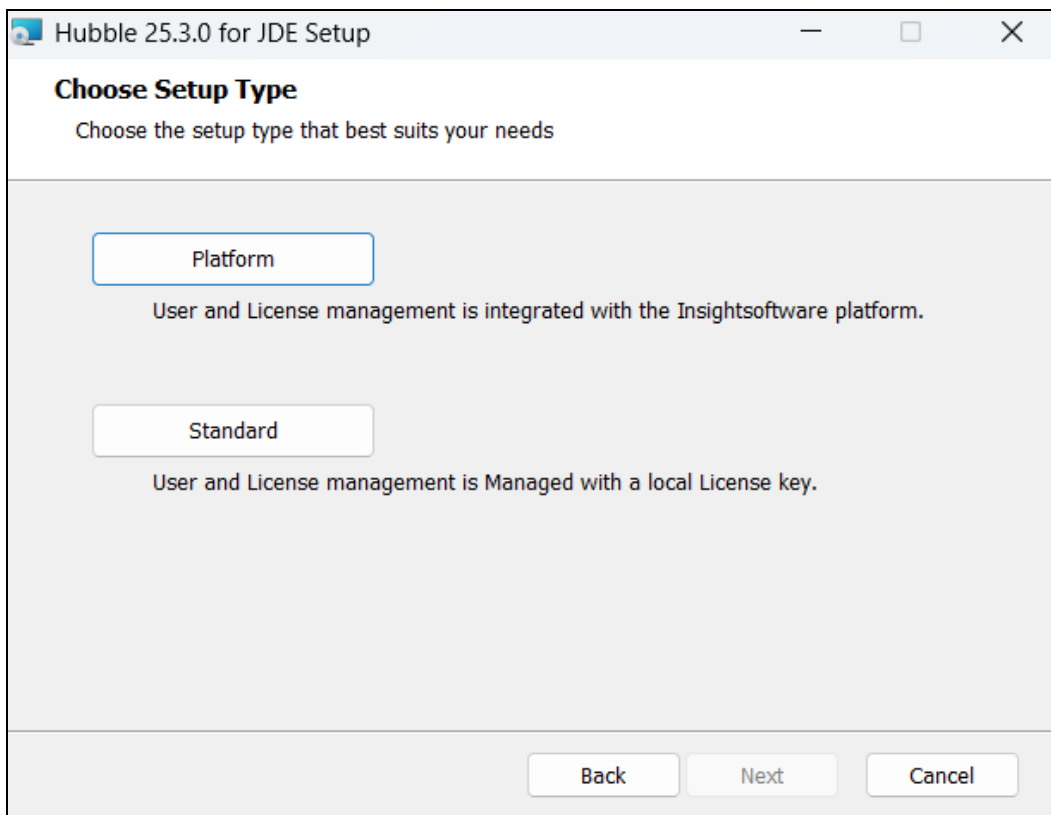
4. In the **Destination Folder** screen, select **Change** to modify the installation location.



Important: If you have another version installed, specify a different location for the new version to avoid overwriting the existing installation.

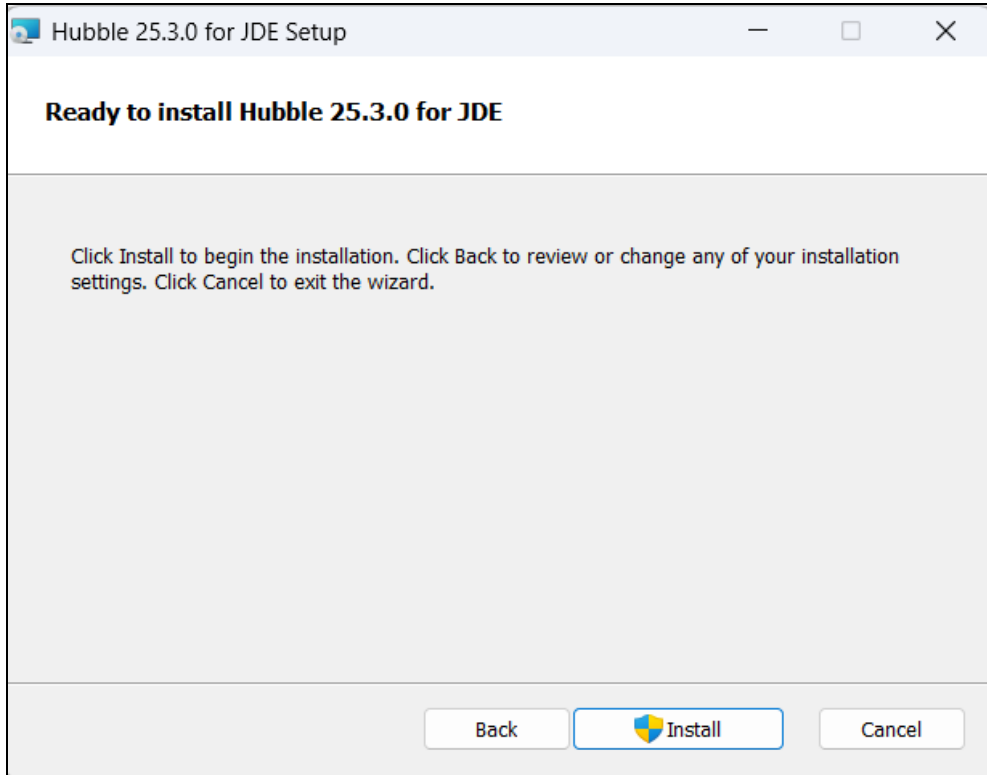


5. Select **Next**.
4. In the setup type screen, choose the required authentication type and select **Next**.



- **Platform:** Installs the Production version of Platform
- **Standard:** Installs the Standard version

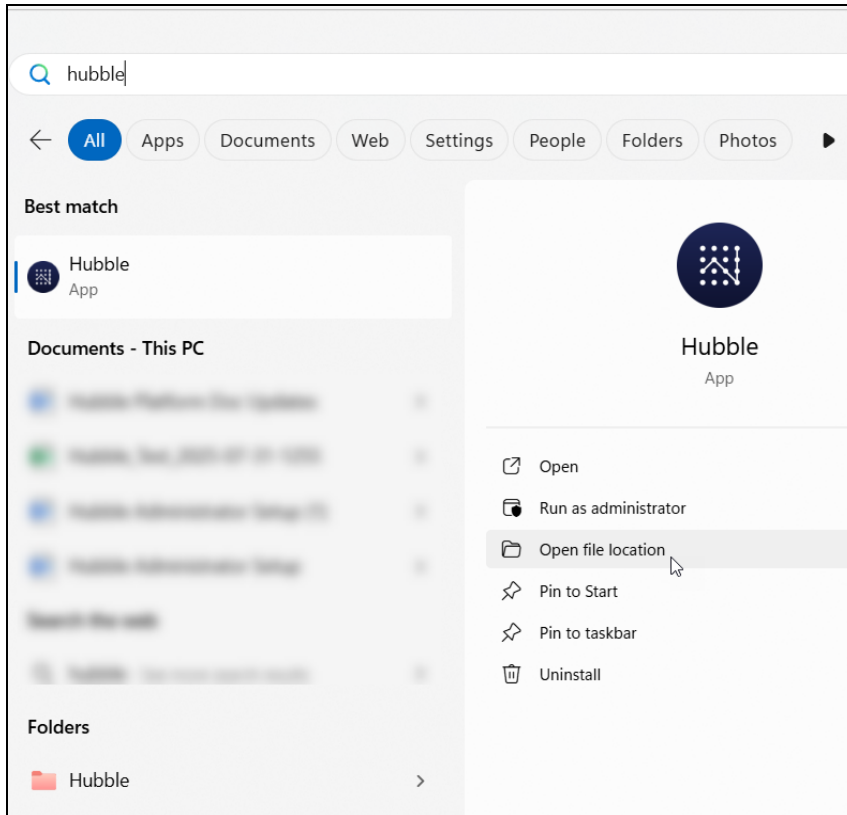
6. Select **Install** to complete the installation.



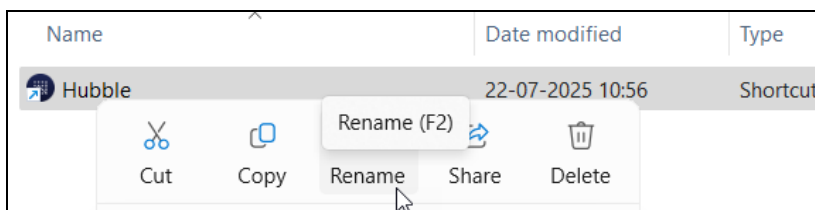
Rename Program Menu Shortcut

After installation completes, you can rename the Program Menu Name from Hubble to include the specific version name to distinguish between multiple installations:

1. Right click the Program Menu name.
2. Select **Open File Location**.



3. Rename the shortcut to include the version number (for example: Hubble 25.3).



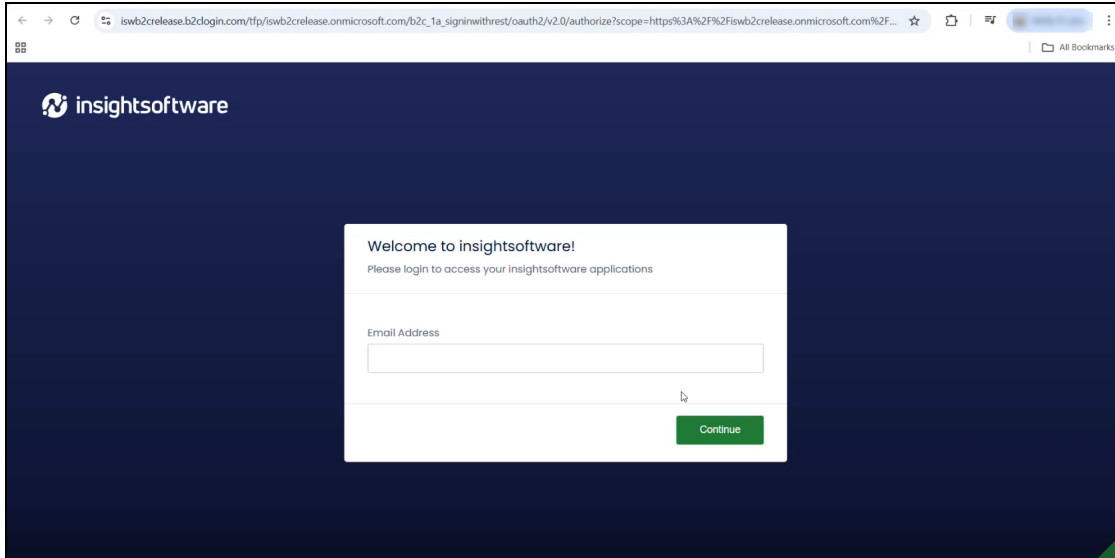
Version Upgrade Recommendation

When upgrading to a newer Hubble version, run the new version and current version in parallel. This approach enables you to complete testing and user acceptance phases before fully transitioning to the new version.

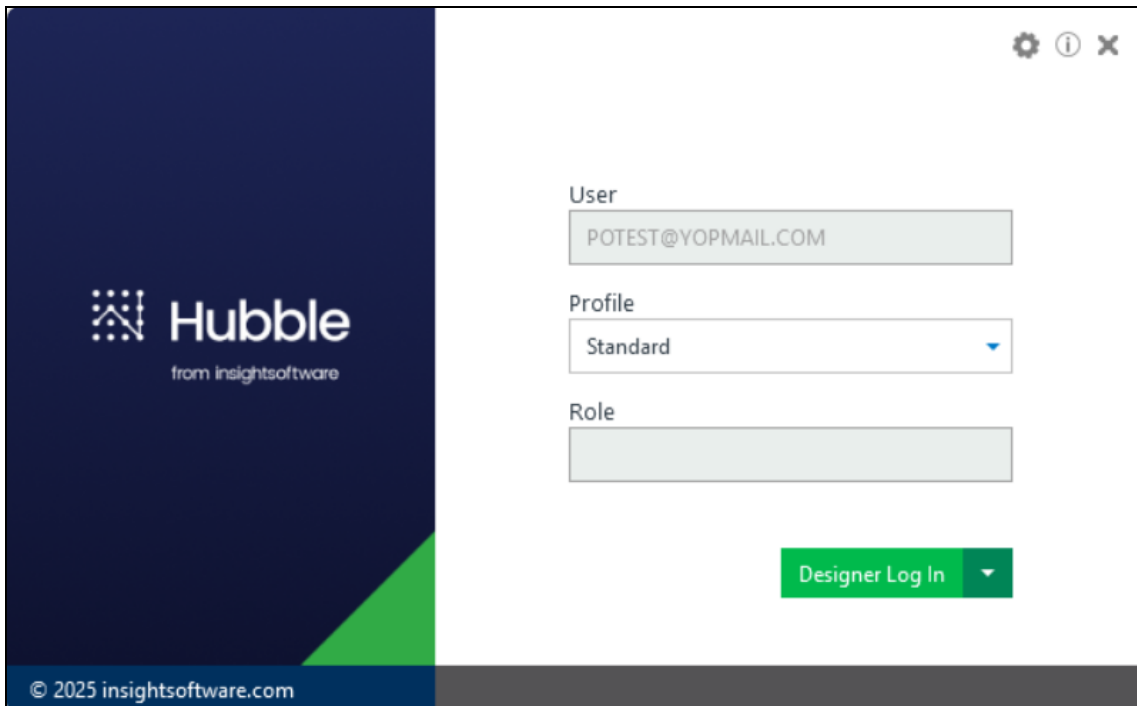
Log In To Hubble Reporting As A Platform User

After installing Hubble Desktop, follow these steps to log in as a Platform user:

1. Start `Hubble.exe` from the Hubble MSI package. The Platform authentication page opens in your browser.



2. Enter your credentials and complete authentication. After successful authentication, the system returns you to the Hubble application where the profile selection screen appears.
3. Review the pre-populated fields:



- **User:** Displays your email address from Platform authentication
- **Profile:** Shows available profiles associated with your user
- **Role:** Displays your assigned role

4. Select **Log In**. The system opens the Hubble reporting tool with your selected profile and role.

EBS Script

For Oracle e-Business Suite (EBS) users, installs and upgrades from one major Hubble product release to another require a release-specific script being run. The script will be run for the Schema username you have defined for the release. This script will grant the proper permissions to the ERP Tables we use in our product as well as generate the necessary views. One of the steps in the script includes the creation of a new schema for the EBS Data Connection. Following are important points regarding the new schema:

1. In the script, you will be prompted to enter the name of the new schema. The default schema name is Hubble; however you need to be sure to change it so that you use a new name when creating a new schema. A best practice is to name the schema after the Hubble release so you can associate the schema name easily. An example for a schema name is "HUB19_3" or "HUB19_4".
2. The same situation exists for every EBS instance (which is the Hubble profile, e.g. PROD or DEV) you connect to within the product. For an upgrade to a major release, the script needs to be run over the data in each instance and the Hubble Data Connection(s) modified to have the new schema name being used in that Connection(s).
3. If you are using Budgeting, you also need to run a separate database script that creates a schema to hold the budgeting tables.

Please contact our Customer Support Department for obtain the scripts or for any questions related to the scripts.

Deploying Using Citrix

Once the software has been installed, it can be deployed in several ways. One way it can be published is via Citrix, and in order to do that, the Hubble application must first be installed on the Citrix server. For detailed information on publishing to Citrix, please refer to the product information provided by Citrix.

When following the steps detailed by Citrix, you will input specific information related to Hubble. Some examples are listed below.

- When locating the application, on the Command Line, input the install path and executable file such as `C:\ProgramFiles\InsightSoftware.com\Hubble\19.4\Hubble.exe`
- When locating the application, optionally you can input the working directory, which is the install path. An example is `C:\Program Files\InsightSoftware.com\Hubble\19.4\`
- The icon is located in the install path, such as:
 - `C:\Program Files\InsightSoftware.com\Hubble\Hubble_19.4\citrix_hubble.icon.ico`

Deploying Using ClickOnce

Hubble can also be deployed via ClickOnce, a Microsoft deployment technology that enables users to install and run an application with minimal IT involvement. See the *Hubble Supplementary Deployment Topics Guide* for information about deploying via ClickOnce.

Deleting The Application From A Workstation

Follow the steps below to delete the application from a workstation:

1. Back up the repository from within your old version of Administrator.
2. To prevent the occurrence of an orphaned repository database, delete the repository from within Administrator.
3. Access **Control Panel > Add/Remove Programs**.
4. Find the correct version of Hubble and select it.
5. Click **Uninstall**.
6. Review folders/files in the install path related to the removed version to verify removal. (The default install path for Hubble is *C:\Program Files\InsightSoftware.com\Hubble...* If the files are still present in the install path, you can delete them.

Configure Federated Single Sign-On For Platform

This document describes how to enable Federated Single Sign-On (FSSO) for Platform customers.

Overview

The FSSO configuration process involves:

1. insightsoftware provides configuration requirements to the customer
2. The customer creates an IdP registration and generates required credentials
3. The customer shares credentials with insightsoftware
4. insightsoftware configures the Platform environment
5. The customer validates the configuration

Process Steps

The following roles perform the configuration steps:

Role	Description
Customer	Organization with a cloud product requiring single sign-on
ISW	insightsoftware contact person
DEV	insightsoftware resource who configures FSSO

Configuration Workflow

Role	Action
ISW	Requests the following information from the customer: <ul style="list-style-type: none"> ▪ Domain ▪ Identity Provider (IdP) ▪ Authentication protocol (SAML 2.0, OIDC, or OAuth) ▪ SSO technical contact information
Customer	Provides the requested information
ISW	Provides IdP-specific configuration instructions based on the customer's authentication protocol
Customer	<ul style="list-style-type: none"> ▪ Creates IdP registration following the provided instructions

Role	Action
	<ul style="list-style-type: none"> Provides ClientID/ClientSecret or metadata URL to ISW
ISW	Creates a configuration request ticket with customer-supplied information
DEV	<ul style="list-style-type: none"> Configures SSO for the customer's Platform organization Updates ticket when configuration is complete
ISW	Requests customer validation of FSSO functionality
Customer	Tests and confirms FSSO works correctly

Authentication Protocol Instructions

Select the instructions that match your IdP and authentication protocol.

Important Notes

FSSO enablement is an iterative process requiring:

- Approximately one week for initial configuration (non-consecutive downtime)
- Coordination with your SSO team
- Complete testing before production deployment
- Less than one hour of production downtime when properly tested

Okta SAML 2.0 Configuration

- Navigate to **Applications**.
- Select **Create App Integration**.
- Select **SAML 2.0**.
- Select **Next**.
- Enter the app name and complete other required fields. Select **Next**.
- Configure the following SAML settings:

Field	Value
Single sign-on URL	https://iswb2c.b2clogin.com/iswb2c.onmicrosoft.com/B2C_1A_TrustFrameworkBase/samlp/sso/assertionconsumer
Recipient URL	https://iswb2c.b2clogin.com/iswb2c.onmicrosoft.com/B2C_1A_TrustFrameworkBase/samlp/sso/assertionconsumer
Destination URL	https://iswb2c.b2clogin.com/iswb2c.onmicrosoft.com/B2C_1A_TrustFrameworkBase/samlp/sso/assertionconsumer

Field	Value
Audience URI (SP Entity ID)	https://iswb2c.b2clogin.com/iswb2c.onmicrosoft.com/B2C_1A_TrustFrameworkBase
Name ID format	Unspecified

7. Add the following attribute statements:

Attribute Statements (optional) [LEARN MORE](#)

Name	Name format (optional)	Value
given_name	Unspecified	user.firstName
family_name	Unspecified	user.lastName
email	Unspecified	user.email

[Add Another](#)

8. Select **Next**, then **Finish**.
9. Locate the metadata URL under **View Setup Instructions**.
10. Copy the metadata URL and provide it to insightsoftware.

Okta OIDC And OAuth Configuration

1. Navigate to **Applications**.
2. Select **Create App Integration**.
3. Set **Sign-in method** to **OIDC**.
4. Set **Application type** to **Web application**.
5. Select **Next**.
6. Configure the following settings:

Field	Value
Grant type	Implicit (hybrid)
Sign-in redirect URLs	https://iswb2c.b2clogin.com/iswb2c.onmicrosoft.com/oauth2/authresp

7. Select **Finish**.
8. Ensure the IdP response includes these attributes:
 - firstName
 - lastName
 - email
9. Copy the **Client ID** and **Client Secret** and provide them to insightsoftware.

Auth0 SAML 2.0 Configuration

1. Navigate to **Applications**.
2. Select **Create application**.
3. Enter an app name and select **Regular Web Applications**.
4. Select **Create**.
5. Open **Addons**.
6. Enable **SAML2 WEB APP**.
7. In the popup, open **Settings** and set **Application Callback URL** to:
`https://iswb2c.b2clogin.com/iswb2c.onmicrosoft.com/oauth2/authresp`
8. Select **Enable** and close the popup.
9. Copy the **Identity Provider Metadata: Download** link.
10. Ensure the IdP response includes these attributes:
 - firstName
 - lastName
 - email
11. Provide the metadata URL to insightsoftware.

Auth0 OIDC And OAuth Configuration

1. Navigate to **Applications**.
2. Select **Create application**.
3. Enter an app name and select **Regular Web Applications**.
4. Select **Create**.
5. Open **Settings**.
6. In **Application URIs / Allowed Callback URLs**, add:
`https://iswb2c.b2clogin.com/iswb2c.onmicrosoft.com/oauth2/authresp`

7. Select **Save Changes**.
8. Ensure the IdP response includes these attributes:
 - firstName
 - lastName
 - email
9. Copy the **Client ID** and **Client Secret** and provide them to insightsoftware.

Azure AD Configuration

1. Sign in to the [Azure portal](#).
2. Verify you're using the correct directory:
 - Select the **Directories + subscriptions** icon in the portal toolbar
 - Find your Azure AD directory in the **Directory name** list
 - Select **Switch**
3. Under **Azure services**, select **App registrations**.
4. Select **New registration**.
5. Enter a **Name** for your application (for example, Cloud Platform).
6. Accept the default **Accounts in this organizational directory only**.
7. For **Redirect URI**:
 - Keep the default value of **Web**
 - Enter:
`https://iswb2c.b2clogin.com/iswb2c.onmicrosoft.com/oauth2/authresp`
8. Select **Register**. Record the **Application (client) ID**.
9. Select **Certificates and secrets**, then select **New client secret**.
10. Enter a **Description**, select an expiration period, then select **Add**.
11. Ensure the IdP response includes these attributes:
 - firstName
 - lastName
 - email
12. Record the secret **Value** and provide it to insightsoftware with the Application ID.