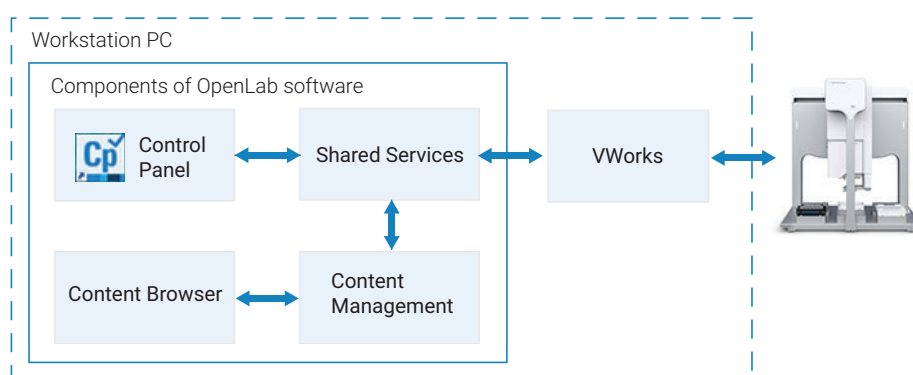VWorks Plus 14.2

Quick Reference

VWorks Plus components

VWorks Plus consists of components of Agilent OpenLab software and VWorks software. All the required software components are installed on a single computer that connects to an Agilent automation device or workstation.

Figure VWorks Plus architecture and primary components

VWorks component

The VWorks component provides the instrument control for the automation devices. The software provides the tools to create labware definitions and liquid classes, set up your devices, create device profiles, and create and run protocols.

The VWorks software also logs audit trails for records of interest, tracks records by record state (In Development, In Validation, and Released), and performs tamper detection on the records.

OpenLab for VWorks component

An administrator uses the OpenLab components to manage licenses, storage, user access, and project settings.

- **Control Panel** and **Shared Services**. The Control Panel is the interface you use to configure Shared Services to control user access to the software, manage software licenses, and manage storage.

- **Content Management and Content Browser.** Shared Services uses a secure storage repository, Content Management, to store records of interest and audit trails. An administrator can use the Content Browser to view and edit the VWorks project structure and content.

  Note: Unlike VWorks 13.1.x and earlier versions, the Windows Registry is not used for storing any records, such as labware definitions and device profiles.

Workflows The following table has two sections:

- Tasks to initially configure the system after installation
- Ongoing tasks

You can find detailed descriptions in the VWorks Knowledge Base. See "Opening VWorks Knowledge Base" on page 10.

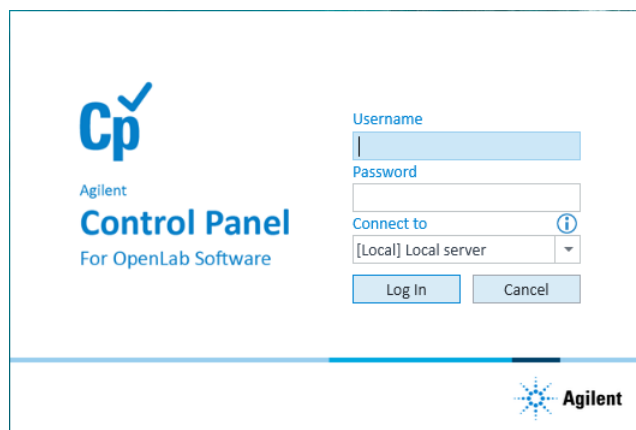| Step	Task	Role requirement	See …
	Initial configuration and set up		
1	Log in to OpenLab Control Panel and configure the software, including user management.	System Administrator (Everything role)	"Starting Control Panel" on page 3
	Configure project settings: • Audit comment options • E-signature levels	System Administrator or VWorks Administrator	
2	View the VWorks project in Content Browser.	VWorks Administrator	"Opening Content Browser" on page 9
3	Set up VWorks compliance features: • Audit trail options • E-Signatures database	VWorks Administrator	"VWorks compliance features" on page 5 and "Setting options for folders and audit trails" on page 6
4	Set up the VWorks software.	VWorks Administrator or Technician	"Setting up VWorks" on page 7
5	Set up your automation devices in VWorks.	VWorks Administrator or Technician	Device user guide, for example, *Bravo Platform User Guide*
	Ongoing use		
6	Create VWorks protocols and forms to run your automation devices.	VWorks Administrator or Technician	*VWorks Automation Control User Guide* and *VWorks Protocol Authors Quick Guide*
7	Run your VWorks protocols.	VWorks Administrator, Technician, or Operator	"Running a protocol" on page 8
8	Perform periodic software and data backups.	System Administrator	*VWorks Plus Configuration and Administration Guide*

Note: For details about the predefined VWorks user groups and roles, see the *VWorks Workstation Administrator Guide*.
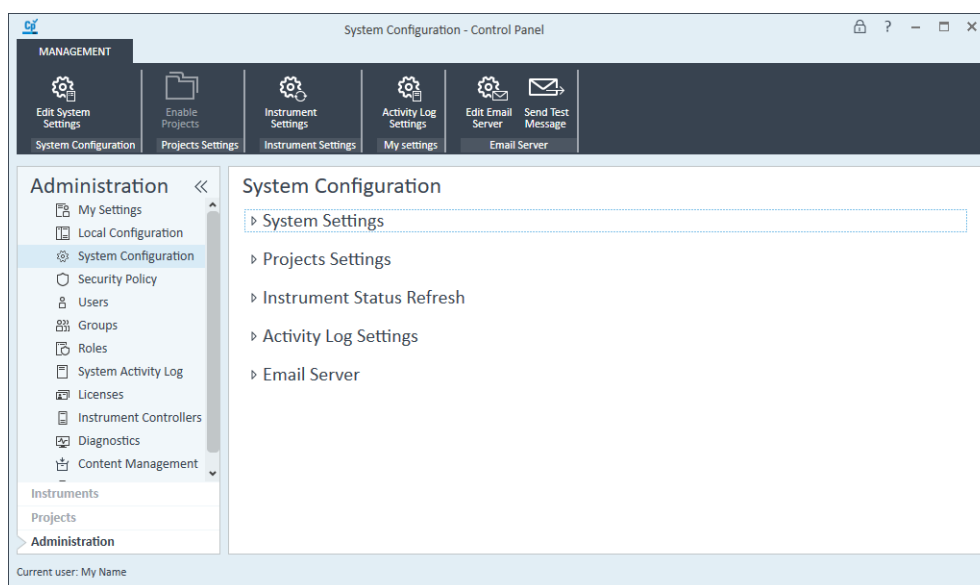
Starting Control Panel

To start Control Panel:

1   Click the Control Panel icon on the Windows desktop.

2   In the Control Panel login window that opens, enter your login credentials.

The Control Panel window opens.

For detailed instructions on how to configure Control Panel settings for VWorks, see the *VWorks Plus Configuration and Administration Guide*.

Note: Some Control Panel features are not applicable for VWorks users, such as the Diagnostics and Instrument Controllers reports.

Starting VWorks

To log in to the VWorks software, you must have a role of VWorks Administrator, VWorks Technician, VWorks Operator, or VWorks Guest.

Note: During installation, a VWorks shortcut is placed on the Windows desktop. The shortcut is configured for the default instrument (computer) and project (VWorks).

To start VWorks from a desktop shortcut:

1 On the Windows desktop, double-click the VWorks shortcut .
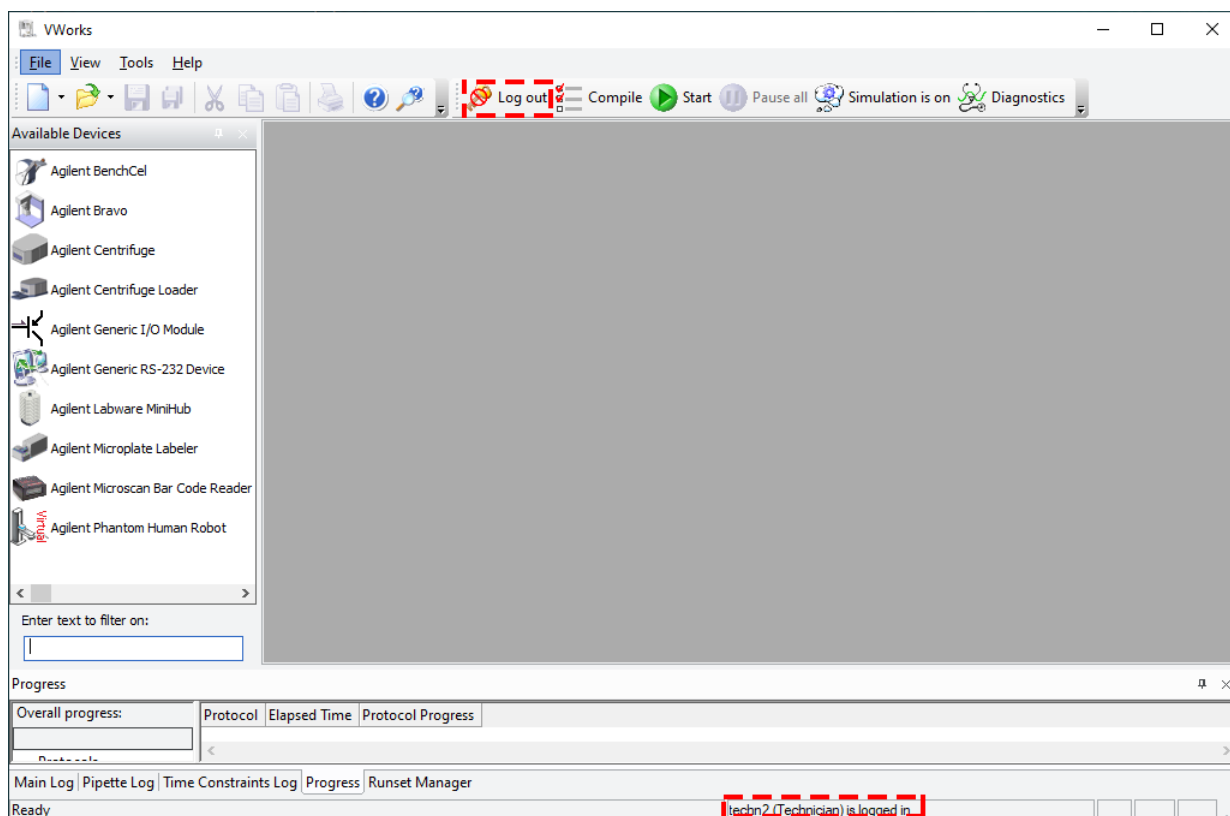
The Control Panel Login window opens.

2 In the **Control Panel** login window:
- Type your **Username** and **Password**.
- If applicable, select the server from the **Connect to** list.

Click **Log In.** The VWorks window opens. The following figure shows an example. The window display can vary depending on any previous settings for view options.

In the VWorks window, the Log in button changes to Log out, and the status bar indicates that the login is successful.

VWorks compliance features

The following table lists the primary VWorks features that support compliance with Part 11 of Title 21 of the Code of Federal Regulations (21 CFR Part 11).

For a detailed description of these features, see the *VWorks Automation Control Setup Guide*.

Feature	Task
Audit trails and reports	The VWorks software automatically logs audit trails for records of interest (ROI) that are in validation or released states and for records exempt from record states. Released records cannot be changed. Before saving a change to a record that is not yet in the released state, the user must enter an audit comment.
	To generate an audit trail report for a record of interest, in the **VWorks** window click **Tools > Audit Trail Reports**.
Record state tracking	The states for records of interest are In Development, In Validation, and Released.
	To change a record state, ensure no records are open In the **VWorks** window, and then click **Tools > Change ROI State**.
	Note: Some records of interest are exempt from state changes, for example, the VWorksOptions.xml file that stores your settings for the VWorks global options.
Tamper detection	The software verifies data integrity automatically by detecting corrupted records and records that have been modified externally from the VWorks software.
	You can also run the Tamper Detection command at any time. In the **VWorks** window, click **Tools > Tamper Detection**.

Feature	Task
Electronic signatures	If e-signatures are enabled, VWorks prompts for signatures to transition record states and to close experiment IDs.
VWorks activity logs	The VWorks software records events that occur during a VWorks session in the Main log, Pipette log, and Time Constraints log. The logs for the current session can be displayed in the VWorks window. The logs from previous sessions are saved to the Content Management Repository. For details on how to view logs, see the *VWorks Automation Control User Guide*.
Device activity logs	The diagnostics software for each automation device records events that occur during a diagnostics session. The log for the current session appears in the diagnostics window for the device. These logs are saved in the VWorks Main log.

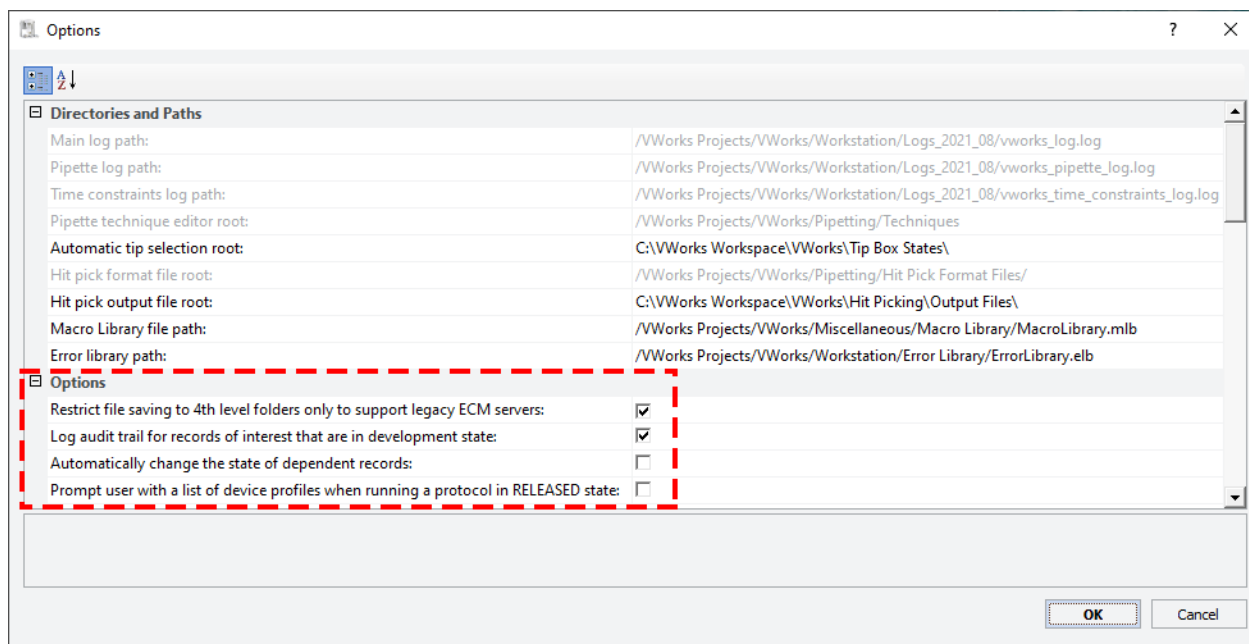## Setting options for folders and audit trails

To set options for folders and audit trails:

In the **VWorks** window, click **Tools > Options**. The Options dialog box opens. See the following figure.

In the Options dialog box, select or clear the check boxes for the following options:

- Restrict file saving to 4th level folders only to support legacy ECM servers.

  Selected by default. If compatibility with legacy ECM servers is not required and you want to remove this restriction, clear the check box.

- Log audit trail for records of interest that are in development state.

- Automatically change the state of dependent records.

- Prompt user with a list of device profiles when running a protocol in RELEASED state.

***Figure*** Options dialog box in VWorks

For details on audit options, see the *VWorks Automation Control Setup Guide*. For details on other options, see the *VWorks Automation Control User Guide*.

Setting up VWorks

The following table provides a summary of the VWorks setup tasks that can be performed by a user with VWorks Administrator or VWorks Technician privileges.

Step	VWorks Administrator or Technician task	Where to find instructions
1	*Administrator only*. If upgrading from VWorks 12.3, 13.0, or 13.1.x, migrate files and registry information into Shared Services storage for use in VWorks Plus.	*VWorks Automation Control Setup Guide*
2	Use the Labware Editor to create or edit labware definitions for the labware you will use during protocol runs. In the **VWorks** window, click **Tools > Labware Editor** to open the Labware Editor.	*VWorks Automation Control Setup Guide*
3	*Liquid handling devices only*. Use the Liquid Library Editor to specify the pipetting speed and accuracy. In the **VWorks** window, click **Tools > Liquid Library Editor** to open the Liquid Library Editor and define liquid classes.	*VWorks Automation Control Setup Guide*
4	Set up your Agilent automation devices.	User guide for the device
5	*Labware storage device only*. If you have a Labware MiniHub, set up the Inventory database to manage the labware inventory.	*VWorks Automation Control Setup Guide*
6	*Optional*. If you plan to use the Experiments Editor, establish a connection to the Experiments database.	*VWorks Automation Control Setup Guide*
7	If you plan to use E-Signatures, establish a connection to the E-Signatures database.	*VWorks Automation Control Setup Guide*

Note: You can click ? in the VWorks window or dialog box to display the corresponding knowledge base topic for a given setup task.
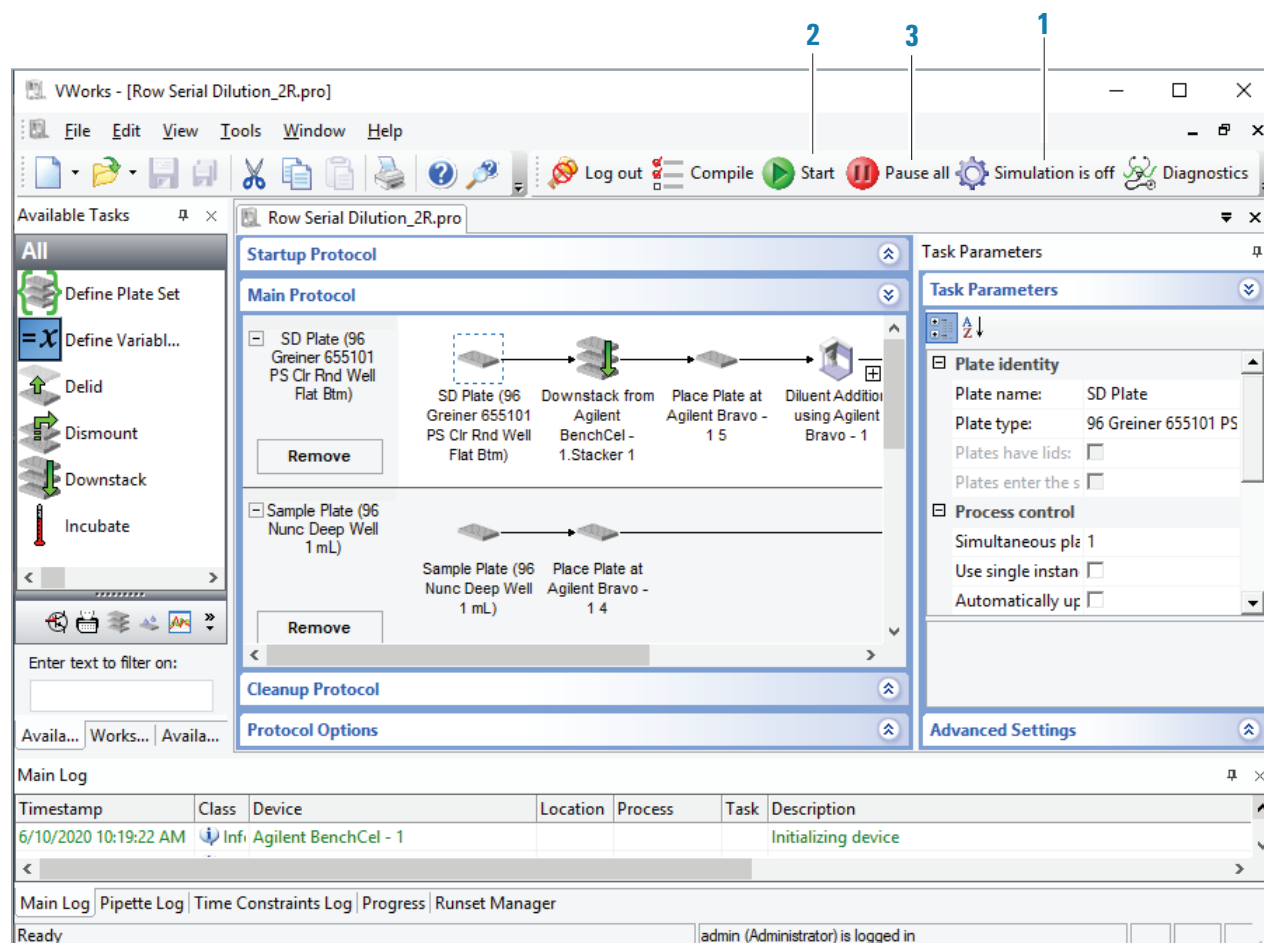
Running a protocol

For instructions on creating forms and protocols, see the *VWorks Automation Control User Guide*.

If you are using a VWorks form:

Use the controls in the form to set up and run the protocol.

If you are running a protocol from the VWorks window:

1 Click **Simulation is on** to turn off the simulation mode. The button changes to Simulation is off (figure, item **1**).

2 Click **Start** (**2**).

To pause the protocol run:

1 Click **Pause all** (**3**).

2 In the **Scheduler Paused** dialog box, select the command to resume, finish processing existing labware already in the system, or abort the run. You can also make device adjustments in the diagnostics software before resuming the run.

To stop the protocol run in an emergency:

Press the hardware emergency-stop button. Note that you may not be able to resume a run after an emergency stop.
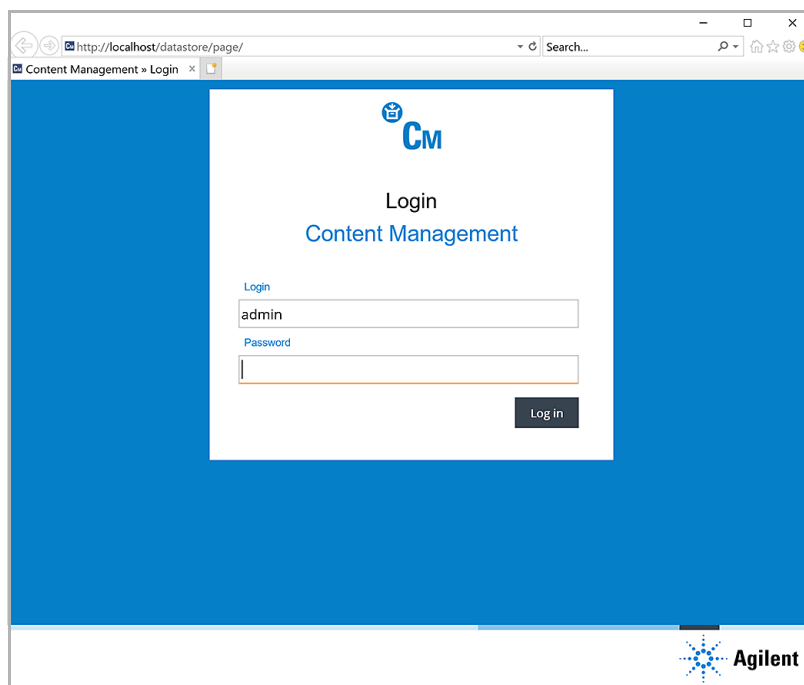
Opening Content Browser

A user with administrator privileges can open the Content Browser to view and manage the VWorks Project contents in the Content Management Repository.
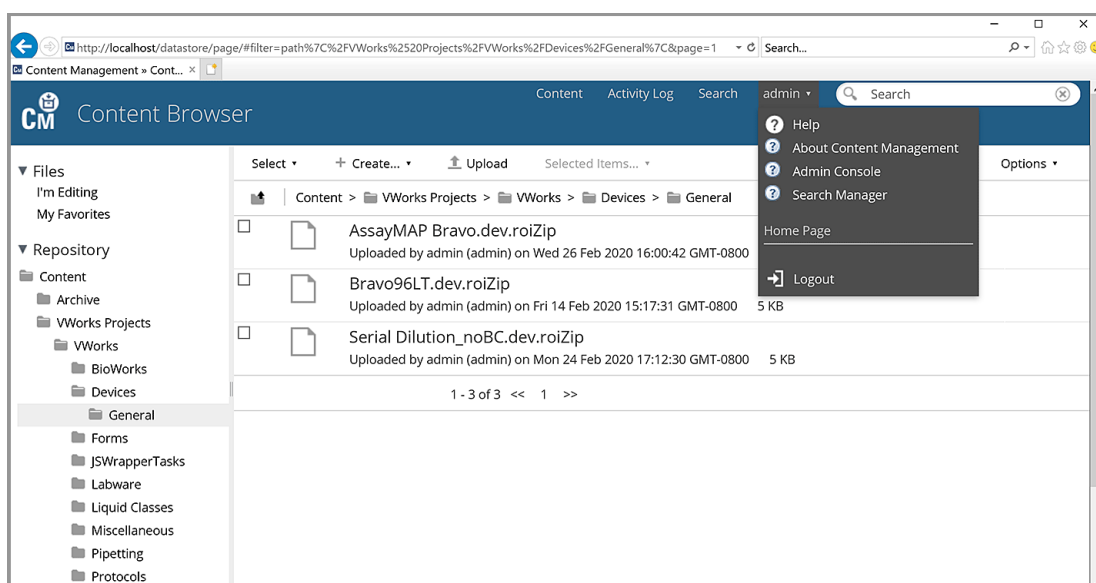
To start the Content Browser:

1 Select **Start** > **All apps** > **Agilent Technologies** > **Content Browser**.

2 Log in using your user name and your password.

3 In the Content Browser navigation pane, click **Repository > Content > VWorks Projects > VWorks** to display the project structure.

To open the help topics in the Content Browser, click the user name in the Content Browser banner, and then click **Help**.
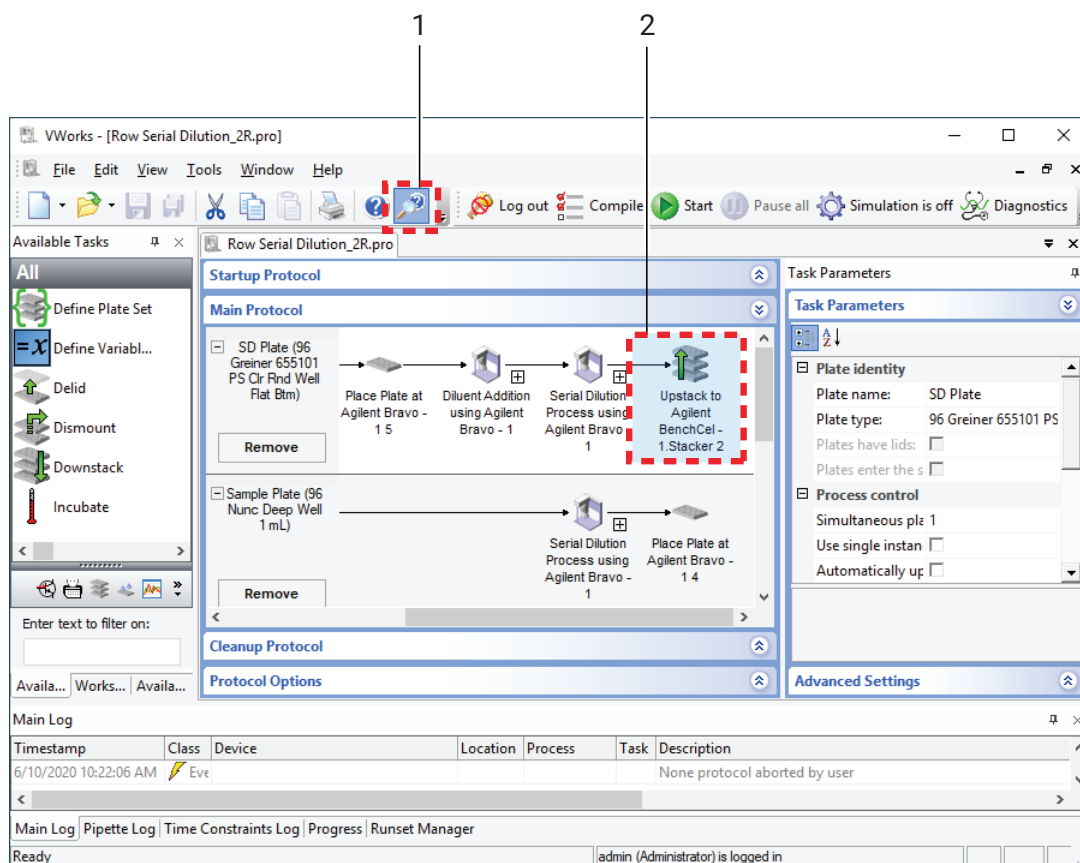
IMPORTANT The Sign File feature that is available when you use the Content Browser is not supported in the VWorks software. To ensure proper tracking of signatures for VWorks records, only use the VWorks E-Signatures feature.

Opening VWorks context-sensitive help

To open context-sensitive help in the VWorks window:

1 In the VWorks window, click the ⟳ button on the toolbar. The pointer changes to ⟳.

2 Click an icon or area of interest in the VWorks window. The relevant help topic or guide opens.

Opening VWorks Knowledge Base

To open the knowledge base:

- From within the VWorks software, click **Help > Knowledge Base** or press F1.

- From the Windows desktop, select **Start** ⊞ **> All apps > Agilent Technologies > VWorks Knowledge Base.**

For the online knowledge base, go to www.agilent.com/chem/askb

Contacting Agilent

Web: https://www.agilent.com

Contact page: https://www.agilent.com/en/contact-us/page

Documentation feedback: documentation.automation@agilent.com