Notices

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Software Revision
This guide is valid for VWorks software 14.1.1 or later, until superseded.

Contact Information
Agilent Technologies Inc.
Automation Solutions
5301 Stevens Creek Blvd.
Santa Clara, CA 95051
USA

Web:
https://www.agilent.com

Contact page:

Documentation feedback:
documentation.automation@agilent.com

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Safety Notices

WARNING
A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

CAUTION
A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.
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Preface

This preface contains the following topics:

- “About this guide” on page vi
- “Accessing user guides” on page viii
About this guide

What this guide covers

This guide provides administrator instructions for the VWorks Standard edition. The guide describes the software architecture and workflow and provides instructions for the following:

- Generating and installing the license
- Configuring and managing the user access
- Backing up and restoring data and software

Note: For information on VWorks Plus, see the VWorks Automation Control Plus Administrator Guide.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VWorks Automation Control</td>
<td>VWorks software component that you use to create the protocols that run your automation devices.</td>
</tr>
<tr>
<td>VWorks Plus</td>
<td>The compliance-enabled workstation edition of the VWorks software. This edition includes VWorks and OpenLab Control Panel, Shared Services, Content Management, and Content Browser installed on a single computer.</td>
</tr>
<tr>
<td>VWorks Standard</td>
<td>The workstation edition of the VWorks software that is not compliance enabled. This edition includes VWorks and OpenLab Control Panel and Shared Services installed on a single computer.</td>
</tr>
<tr>
<td>Content Management (OpenLab component)</td>
<td>The secure data storage repository for VWorks compliance-enabled editions.</td>
</tr>
<tr>
<td>Control Panel (OpenLab component)</td>
<td>The user interface for Shared Services.</td>
</tr>
<tr>
<td>Microsoft Control Panel</td>
<td>Part of the Microsoft Windows operating system.</td>
</tr>
<tr>
<td>Shared Services (OpenLab component)</td>
<td>Set of administrative services that control VWorks user access and file storage. Shared Services are accessed via the Control Panel.</td>
</tr>
</tbody>
</table>
What is new in this edition

<table>
<thead>
<tr>
<th>Feature and description</th>
<th>See...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updated the licensing topic to state that two licenses for the VWorks Standard edition are included with an instrument purchase, such as the Bravo Platform.</td>
<td>“Types of licenses” on page 6</td>
</tr>
<tr>
<td>Created an appendix for some of the optional project and instrument configuration procedures.</td>
<td>“Optional configuration” on page 71</td>
</tr>
</tbody>
</table>

Related guides

For information about the following VWorks-related topics, see the corresponding Agilent guide.

<table>
<thead>
<tr>
<th>For information about ...</th>
<th>See...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer requirements</td>
<td>VWorks Automation Control Site Preparation Checklist</td>
</tr>
<tr>
<td>Software installation</td>
<td>VWorks Automation Control Installation Guide</td>
</tr>
<tr>
<td>Overview of the software components and workflow</td>
<td>VWorks Standard Quick Reference Guide</td>
</tr>
<tr>
<td>• Setting up labware definitions and liquid classes</td>
<td>VWorks Automation Control Setup Guide</td>
</tr>
<tr>
<td>• Setting up an experiments database and labware inventory database</td>
<td>VWorks Automation Control Setup Guide</td>
</tr>
<tr>
<td>• Migrating protocols from previous versions of VWorks software</td>
<td>VWorks Automation Control Setup Guide</td>
</tr>
<tr>
<td>• Setting up devices</td>
<td>VWorks Automation Control User Guide</td>
</tr>
<tr>
<td>• Writing protocols and creating forms</td>
<td>Relevant Agilent device user guide</td>
</tr>
<tr>
<td>• Running protocols</td>
<td>Relevant Agilent device user guide</td>
</tr>
<tr>
<td>• Troubleshooting protocols</td>
<td>Relevant Agilent device user guide</td>
</tr>
<tr>
<td>Setting up a specific device and operating the device using VWorks and device diagnostics software</td>
<td>Relevant Agilent device user guide</td>
</tr>
<tr>
<td>General safety information and potential safety hazards that you might encounter when using Automation Solutions products</td>
<td>Automation Solutions Products General Safety Guide</td>
</tr>
</tbody>
</table>

Software version

This guide documents VWorks Standard edition 14.1.1 and later versions.
About this topic

This topic describes the different formats of user information and explains how to access it for the Agilent Automation Solutions products.

Where to find user information

The user information is available in the following locations:

- **Knowledge base.** The help system for the Automation Solutions products is available from:
  - Help menu within the VWorks software: Select **Help > Knowledge Base** or press F1.
  - From the Windows desktop: Select **Start ( ) > All Apps > Agilent Technologies > VWorks Knowledge Base.**

  For guidelines on using the VWorks context-sensitive help and knowledge base features, see **Using the knowledge base,** below.

- **PDF files.** The PDF files of the user guides are installed with the VWorks software (C:\Program Files (x86)\Agilent Technologies\VWorks\UserGuides) and are available in the VWorks Knowledge Base.

- **Website.** You can search the online VWorks Knowledge Base or download the latest version of any PDF file from the Agilent website at [www.agilent.com/chem/askb](http://www.agilent.com/chem/askb).

Accessing safety information

Safety information for the Agilent Automation Solutions devices appears in the **Automation Solutions Products General Safety Guide** and in the corresponding device safety guide or user guide.

You can also search the knowledge base or the PDF files for safety information.

Using the knowledge base

Knowledge base topics are displayed using web browser software such as Microsoft Edge.

**Note:** If you want to use Microsoft Internet Explorer to display the topics, you might have to allow local files to run active content (scripts and ActiveX controls). For instructions, see the Microsoft user documentation.
Opening the help topic for an area in the VWorks window

1. In the main window of the VWorks software, click the help button \( \text{Help} \). The pointer changes to \( \text{Help} \). Notice that the different icons or areas are highlighted as you move the pointer over them.
2. Click an icon or area of interest. The relevant topic or document opens.

To access the context-sensitive help feature:

1. In the main window of the VWorks software, click the help button \( \text{Help} \). The pointer changes to \( \text{Help} \). Notice that the different icons or areas are highlighted as you move the pointer over them.
2. Click an icon or area of interest. The relevant topic or document opens.
Preface

Accessing user guides

Features in the Knowledge Base window

1. **Contents pane.** Lists all the books and the table of contents of the books.

2. **Search.** Allows you to search the Knowledge Base (all products or selected products) using keywords.

3. **Topic area.** Displays the selected online help topic.

4. **Navigation buttons.** Enable you to navigate through the next or previous topics listed in the Contents tab.

5. **Toolbar buttons:** Enable you to:
   - Expand or collapse all the sections in a topic that has drop-down headings.
   - Print the topic.
   - Send feedback by email for a given topic.
1 About VWorks Standard

This chapter provides an overview of VWorks Standard edition.

The topics are:

- “Software architecture and components” on page 2
- “Workflow for VWorks Standard” on page 3
- “Logging in to Control Panel” on page 4
Software architecture and components

VWorks Standard consists of components of 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. The following figure shows the relationships between these components.

**Figure** VWorks Standard edition architecture

![VWorks Standard edition architecture](image)

**OpenLab for VWorks components**

VWorks Standard uses the following components of the OpenLab software:

- **Control Panel** and **Shared Services**. Control Panel is the user interface for Shared Services, which are set of administrative services. An administrator uses the Control Panel to configure the following:
  - User access management
  - Software licenses
  - Storage
  - Instrument and project settings

- **Shared Services storage**. VWorks Standard uses the local file system for file storage. The files are stored in a predefined Shared Services project folder:

  `/VWorks Projects/VWorks/`

  The files, such as protocols, are stored as .roiZip archives.

  **IMPORTANT**

  VWorks cannot load files (.roiZip extension) that have been modified or renamed outside of the VWorks software.

**Note:** Unlike previous VWorks versions, VWorks Standard does not use the Windows Registry for storing records, such as labware definitions and device profiles.

**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.
# Workflow for VWorks Standard

The following table provides the software workflow, including user roles for each task. The table has two sections: initial configuration tasks and ongoing tasks.

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Role</th>
<th>See ...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Initial configuration and set up</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>In OpenLab Control Panel, do the following:</td>
<td>System Administrator (Everything role)</td>
<td>&quot;Logging in to Control Panel&quot; on page 4</td>
</tr>
<tr>
<td></td>
<td>• Install and manage software licenses.</td>
<td></td>
<td>&quot;Licensing the software&quot; on page 5</td>
</tr>
<tr>
<td></td>
<td>• Configure and manage user access to the software.</td>
<td>System Administrator (Everything role)</td>
<td>&quot;Configuring the software&quot; on page 13</td>
</tr>
<tr>
<td></td>
<td>• Configure project settings.</td>
<td>System or VWorks Administrator</td>
<td>&quot;Configuring VWorks project settings&quot; on page 29</td>
</tr>
<tr>
<td></td>
<td>• Understand the <em>instrument</em> (VWorks computer) configuration.</td>
<td>System or VWorks Administrator</td>
<td>&quot;Understanding the instrument configuration&quot; on page 32</td>
</tr>
<tr>
<td>2</td>
<td>Set up the VWorks software:</td>
<td>VWorks Administrator</td>
<td>VWorks Automation Control Setup Guide</td>
</tr>
<tr>
<td></td>
<td>• <em>If applicable.</em> Migrate protocols from earlier versions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Verify the VWorks labware definitions for any labware you plan to use.</td>
<td>VWorks Administrator or Technician</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If you have a Bravo Platform, specify the pipetting speed and accuracy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <em>Labware MiniHub.</em> Establish connection to the VWorks Inventory database for labware inventory management.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <em>If applicable.</em> Establish connection to the VWorks Experiments database.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>In the VWorks software, set up your automation devices.</td>
<td>VWorks Administrator or Technician</td>
<td>Device user guide, for example, <em>Bravo Platform User Guide</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Ongoing use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>In the VWorks software, create protocols to run your automation devices.</td>
<td>VWorks Administrator or Technician</td>
<td>VWorks Automation Control User Guide</td>
</tr>
<tr>
<td>5</td>
<td>Run VWorks protocols.</td>
<td>VWorks Administrator, Technician, or Operator</td>
<td>VWorks Automation Control User Guide</td>
</tr>
<tr>
<td>6</td>
<td>Perform periodic software and data backups.</td>
<td>VWorks Administrator or Technician</td>
<td>&quot;Disaster recovery planning&quot; on page 43</td>
</tr>
</tbody>
</table>
Logging in to Control Panel

To log in to the Control Panel:

1. To start the Control Panel, click on the Windows desktop. Alternatively, you can click All apps > Agilent Technologies > Control Panel.

2. In the Login window, enter your Login (user name) and password. If this is the first time to log in to Control Panel after installing the software, enter the following:
   - Login: admin
   - Password: openlab

Note: After installing the software license, you will configure user accounts in Control Panel and change the password for this login.

The Control Panel window opens.
2 Licensing the software

This chapter describes how to obtain your software license. The topics are:

- “About the software licensing” on page 6
- “About the Control Panel Licenses page” on page 6
- “Workflow for software licensing” on page 7
- “Prerequisites for getting a license” on page 8
- “Getting a license” on page 9
- “Installing your license” on page 10
About the software licensing

Types of licenses

**Trial license**
A trial license for the software allows you to run it for 60 days after the installation. In order to run the software after the 60-day period, you must install your license file.

**Licenses included with instrument purchase**
Two licenses for the VWorks Standard edition are included with each purchase of an automation instrument, such as the Bravo Platform. You must install one license file on the computer that runs the automation instrument. The second license file may be installed on a second computer, for example, a computer used for VWorks protocol development.

**License file**
A license file contains your software license. You generate and download the license file in SubscribeNet. This file will be installed on the computer where the VWorks software is installed. The license file is bound to this computer, and cannot be moved to another computer without regenerating the license in SubscribeNet.

About the Control Panel Licenses page

The following figure shows the Licenses page in Control Panel.
To view the Licenses page:

1. Log in to Control Panel. For details, see “Logging in to Control Panel” on page 4.
2. In the Control Panel navigation pane, click Administration > Licenses. The Licenses page appears.
   The ribbon at the top of the page includes the following controls that you can use to manage your software licenses:
   • Add License and Remove License. Allows you to install and uninstall license files.
   • Copy MAC Address. Copies the MAC address of the license server.
   • Save MAC Address. Saves the MAC address of the license server to a text file (.txt) at the specified location.
   • Get License. Links to the Agilent SubscribeNet Electronic Software and License Delivery web page, where you can obtain a license.
   • Change Server. Not applicable. This feature is only for systems that have a license server on a separate computer from the client software.

Workflow for software licensing

<table>
<thead>
<tr>
<th>Step</th>
<th>For this task...</th>
<th>See...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Make sure you have the prerequisites for getting a license.</td>
<td>“Prerequisites for getting a license” on page 8</td>
</tr>
<tr>
<td>2</td>
<td>Generate and download your license.</td>
<td>“Getting a license” on page 9</td>
</tr>
<tr>
<td>3</td>
<td>Install your license using Control Panel.</td>
<td>“Installing your license” on page 10</td>
</tr>
<tr>
<td>4</td>
<td>Restart the computer for the license to have an immediate effect.</td>
<td>–</td>
</tr>
</tbody>
</table>
Prerequisites for getting a license

License prerequisites

To generate, download, and install a license for your product, you will need:

- The authorization code label provided in the envelope containing your Software Entitlement Certificate.
  If you have not received an envelope for your product, contact your vendor or internal support.
- The URL for SubscribeNet from the Software Entitlement Certificate.
- The name of the computer (local host) where the VWorks software and the OpenLab components are running.
  Note: If any changes are made to the computer name or domain reference after the license is installed, remove the license. A new license will need to be created in SubscribeNet, downloaded, and installed.
- The MAC address. See the following procedure to retrieve the MAC address.
  Note: If the network adapter that provides the MAC address used during license creation is removed from the computer, your license will no longer be valid. A new license will need to be generated with a currently available MAC on the license server.

Retrieving your MAC address

To retrieve your MAC address:

1. In the Control Panel navigation pane, click Administration > Licenses.
2. Use the Copy MAC Address or Save MAC Address function to obtain the MAC address for license generation.
Getting a license

This section describes how to generate and download your license in SubscribeNet.

- If you are a new user who has not registered with SubscribeNet, see “New SubscribeNet users” on page 9.
- If you have registered with SubscribeNet, see “Users registered with SubscribeNet” on page 9.

New SubscribeNet users

*To generate and download your license:*

1. Go to https://agilent.subscribenet.com/control/agil/AgilRegisterToAccount to register the product with SubscribeNet.
2. On the registration page, enter the authorization code from the label and complete the profile information.
   *Note:* Required fields are marked with an asterisk (*). The email address you enter will become your SubscribeNet login ID.
3. Click Submit. The system will generate and display an account name for you. SubscribeNet will send a welcome email with your login ID and password.
4. Log in to SubscribeNet using your login ID and password.
   *Note:* Once you log in, you can use the online user manual link for help with any questions you have.
5. Select Generate or View licenses from the left navigation bar.
6. Follow the prompts to generate your new license.

   You will be prompted for the HOST NAME of the computer and the MAC address. The host name you enter must match with the network name of the computer where the Control Panel (OpenLab) is running. Do not include any DNS suffix (domain.com) references in the entered computer name.

7. When the system generates the license, view its details, and then click Download License File. Save the license file to your computer and to a backup location, such as a portable storage device.

    Use your login ID and password when you revisit the Agilent SubscribeNet site to regenerate a license file, add new authorization codes, or further configure the license for your system.

Users registered with SubscribeNet

*To generate and download your license:*

1. If you already have a SubscribeNet account, go to https://agilent.subscribenet.com/
   *Note:* If you lost your SubscribeNet password, go to https://agilent.subscribenet.com/control/agil/password to have it emailed to you.
2. Select the SubscribeNet account associated with this authorization code.
3. From the SubscribeNet account navigation pane, select Register Authorization Code.

   This will allow you to enter your new authorization code, which will make available the new license entitlements.
2 Licensing the software
Installing your license

4 Follow step 5 through step 7 in the previous procedure (“New SubscribeNet users” on page 9) to generate or view your new licenses.

Installing your license

You add the license to your system using Control Panel (OpenLab component).

To install your license:
1 If you have not already done so, log in to Control Panel. For details, see “Logging in to Control Panel” on page 4
2 In the Control Panel navigation pane, click Administration > Licenses.
3 In the ribbon, click Add License.
4 In the **Add Licenses** dialog box, select one of the following:

- **Select a license file.** Browse to and open the license file (.lic) saved from the license generation process in SubscribeNet.
- **Paste the contents of a license file.** Copy the license text from a text file and paste the copy in the provided field.

5 Click **OK.** The Licenses page in the Control Panel displays the status of installed licenses.

**IMPORTANT**

Restart the computer for the license to have an immediate effect.
2 Licensing the software
Installing your license

This page is intentionally blank.
3 Configuring the software

This chapter describes how to use Control Panel to configure the Shared Services for VWorks Standard.

The topics in this chapter are:

- "Configuring authentication" on page 14
- "Configuring the security policy" on page 17
- "Configuring users, groups, and roles" on page 19
- "Configuring VWorks project settings" on page 29
- "Understanding the instrument configuration" on page 32
- "About configuring automation devices in VWorks" on page 36
- "Configuring the email server" on page 37

Note: The changes that you make in Control Panel are recorded in the System Activity Log. For details, see "Control Panel activity log and administrative reports" on page 40.
Configuring authentication

VWorks Standard supports either Internal or Windows Domain as authentication providers. After the software installation, internal authentication is configured by default.

**IMPORTANT**

Changing the Control Panel authentication setting from Internal (default) to Windows Domain will erase any existing users and user groups. You should reinstall the VWorks software after changing the authentication setting to Windows Domain. Installing the VWorks software automatically recreates the predefined VWorks user groups.

Authentication options

**Internal (default)**

The Internal option uses OpenLab components of the VWorks Standard edition to perform the authentication. You create the users and manage user access in the Control Panel, and Shared Services provides the user authentication.

Internal authentication is the only mode in which you can create new users within the Control Panel (OpenLab). If you want to use internal authentication, you can proceed to “Setting the security policy parameters” on page 17.

**Windows Domain**

The Windows Domain option uses Microsoft Windows to perform the user authentication. You import the users and groups that exist in the active Windows directory into OpenLab Control Panel and then assign them to the appropriate VWorks groups or roles.
Table Workflow for Windows Domain authentication

<table>
<thead>
<tr>
<th>Step</th>
<th>For this task...</th>
<th>See...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In OpenLab Control Panel, configure Windows Domain authentication.</td>
<td>&quot;Configuring Windows Domain authentication&quot; on page 16</td>
</tr>
<tr>
<td>2</td>
<td>If you changed the Control Panel authentication setting after running the VWorks installer, re-run the VWorks installer to automatically publish the predefined VWorks user groups and roles.</td>
<td>VWorks Automation Control Installation Guide</td>
</tr>
<tr>
<td>3</td>
<td>In Microsoft Windows, create users and user groups and configure the Security Policy.</td>
<td>Microsoft Windows user documentation</td>
</tr>
<tr>
<td>4</td>
<td>In OpenLab Control Panel, set up the users and user groups:</td>
<td>&quot;Configuring users, groups, and roles&quot; on page 19</td>
</tr>
<tr>
<td></td>
<td>a Import the Windows users and user groups from Windows Domain.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b Assign the imported Windows users to predefined VWorks groups. This automatically grants the appropriate instrument and project privileges.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c Assign any imported Windows groups to predefined VWorks roles, and also assign the appropriate instrument and project privileges.</td>
<td></td>
</tr>
</tbody>
</table>
Configuring Windows Domain authentication

**IMPORTANT**

Make sure you install or reinstall VWorks after configuring Windows Domain authentication. The VWorks installer automatically installs a predefined set of VWorks groups that contain all the required privileges for using the VWorks software.

**To configure Windows Domain authentication:**

1. If you have not already done so, log in to the Control Panel.
2. In the System Configuration page, click Edit System Settings in the top-left corner of the ribbon. The Edit System Settings dialog box opens.
3. Select the authentication provider Windows Domain from the list, and then click Next.
4. In the Edit System Settings dialog box, select the Windows Domain check box, click Next, and then confirm your settings.

When complete, the Control Panel will restart.

**IMPORTANT**

Do not change the storage type. The storage type is determined automatically based on the VWorks edition for which you have a license.
Run the Agilent VWorks 14.1.1 installer to re-install the VWorks software. This will republish the predefined VWorks groups. The VWorks groups have all the roles and privileges required to run the VWorks software.

**Note:** For instructions, see the *VWorks Automation Control Installation Guide*.

## Configuring the security policy

Adjust the security policy as follows:

- **Internal authentication.** You can set all security policy parameters in the Control Panel using the following procedure.
- **Windows Domain authentication.** You can set only the inactivity time in the Control Panel. All other parameters are defined by the Windows system. See the Microsoft Knowledge Base for instructions.

### Setting the security policy parameters

**To configure the security policy in Control Panel:**

1. If you have not already done so, log in to the Control Panel.
2. In the Control Panel navigation pane, click *Administration > Security Policy.*
3. In the ribbon, click *Edit Security Policy.*
4. Edit the settings per your requirements, and then click *OK.*
5 When the restart message appears, restart Control Panel to ensure that any changes take effect.
Configuring users, groups, and roles

This section contains the following topics:

- "User groups and roles" on page 19
- "Workflow for configuring users and groups" on page 21
- "Creating a user (internal authentication only)" on page 21
- "Importing Windows users (Domain authentication only)" on page 23
- "Importing Windows user groups (Domain authentication only)" on page 24
- "Assigning imported groups to roles (Domain authentication only)" on page 25
- "Changing a password and managing user data" on page 27
- "Removing users" on page 28

User groups and roles

System administrator
You configure a system administrator account in the Control Panel with all privileges (Everything role) before setting up other users. This administrator account is for a superuser who has access privileges to everything in the software.

Agilent recommends having a primary and a backup for these roles to ensure coverage in the event that the primary administrator is unavailable.

VWorks groups
The most efficient way to assign user privileges is to assign users to the predefined VWorks groups, which are automatically created when the VWorks software is installed. These VWorks groups, listed in the following table, are already associated with the corresponding VWorks roles, plus all the project and instrument privileges required to run the VWorks software.

VWorks roles
The VWorks roles listed in the table are automatically created when the VWorks software is installed. Each role defines what the users assigned with the role are allowed to view or do.

IMPORTANT To log in to the VWorks software, you must have a role of VWorks Administrator, VWorks Technician, VWorks Operator, or VWorks Guest. In addition, privileges for an instrument and project are required.
### Groups | Roles and privileges
---|---
**VWorks Administrators** | **VWorks Administrator role**
- Log in and log out of Control Panel and VWorks.
- View and manage projects or project groups
- Edit project content, including deleting content
- Manage project group access
- **VWorks Administrator privileges in VWorks to**
  - Run a protocol that contains compiler errors.
  - Delete development state records of interest.
  - Perform all the functions of VWorks Technicians.
**Instrument Administrator role**
**Instrument User role**

**VWorks Technicians** | **VWorks Technician role**
- Log in and log out of Control Panel and VWorks.
- View projects or project groups
- Edit project content
- **VWorks Technician privileges in VWorks to**
  - Perform all functions listed in the VWorks Tools menu.
  - Create and save protocols.
  - Create and edit devices using the device manager.
  - Perform all the functions of VWorks Operators.
**Instrument Administrator role**
**Instrument User role**

**VWorks Operators** | **VWorks Operator role**
- Log in and log out of Control Panel and VWorks.
- View projects or project groups
- Edit project content
- **VWorks Operator privileges in VWorks to**
  - Run protocols.
  - Operate devices using diagnostics software.
  - Access the VWorks Knowledge Base through the Help menu.
  - Use context-sensitive help.
**Instrument User role**
### Workflow for configuring users and groups

To create the required VWorks users, do one of the following:

- **Internal authentication.** You create each user in the OpenLab Control Panel and add them to one of the predefined VWorks groups. See "Creating a user (internal authentication only)" on page 21.

- **Windows domain authentication.** You import the Windows domain users into Control Panel (OpenLab component) using the following procedures:
  - "Importing Windows users (Domain authentication only)" on page 23
  - "Importing Windows user groups (Domain authentication only)" on page 24 and "Assigning imported groups to roles (Domain authentication only)" on page 25

### Creating a user (internal authentication only)

Use this procedure if your system uses internal authentication.

**To create a new user:**

1. If you have not already done so, log in to the Control Panel.

2. In the Control Panel navigation pane, click **Administration > Users**. The Users page appears, which displays the current list of users that have been assigned to VWorks groups.

3. In the ribbon, click **Create User**. The Create User dialog box opens.
4 Enter a **Name (ID)** and **Description** for the user.

5 In the **General** tab, enter a **Password** for the user and **Confirm password**.
   *Note: The password length and expiration period is set under the Security policy.*

6 **Optional:** Enter the user’s **Full name**, **Email**, and **Contact Information**.
   *The full name is used in activity log entries and the welcome message at the lower right of the Control Panel.*

7 Select the password options:
   - Typically, you select **User must change password at next logon** so that the user can set their password and keep it private.
   - To prevent the user from changing the password assigned here, select **User cannot change password**.
   - To set the password to never expire, select **Password never expires**.
   *Note: To prevent the user from logging in to the VWorks software, select **Account is disabled**.*

8 Click the **Group Membership** tab, select the VWorks group for this user, and click **OK**.
These predefined VWorks groups correspond to the predefined VWorks roles. For details, see “User groups and roles” on page 19.

Importing Windows users (Domain authentication only)

If you are using Windows Domain as the authentication provider, you can import users into the Control Panel and assign them to a predefined VWorks group using the following procedure.

*Note:* The computer must be connected to the server of the company network to import Windows users.

**To import Windows users and assign them to groups:**

1. In the Control Panel navigation pane, click **Administration > Users**. The Users page appears and displays the current list of users that have been assigned to VWorks groups.

2. In the ribbon, click **Import**.

3. In the **Search Users** dialog box, type the search string for the user name.

4. In the **Search Results** list, select the user you want to import, and click **Add**. The user is added to the Selected Users list.

5. Repeat steps 2 through 4 until you have added all the user names that you want to import, and then click **OK**.
In the Control Panel navigation pane, click Administration > Groups. The Groups page appears.

Select one of the four predefined VWorks Groups, and then click Edit Group on the ribbon. The Edit Group dialog box opens.

In the Users tab, select the check box of the user to be assigned to this group, and then click OK.

Do not change the roles for the predefined VWorks groups. The VWorks software requires one of the following roles: VWorks Administrator, VWorks Technician, VWorks Operator, or VWorks Guest.

Importing Windows user groups (Domain authentication only)

If you use Windows Domain as the authentication provider, you can import user groups from the active Windows directory. After you import the groups, you assign the groups to one of the VWorks roles.

To import a Windows user group:

1. In the Control Panel navigation pane, click Administration > Groups.
2. In the ribbon, click Import.
3. In the Search Groups dialog box, type the search string for the group name.
4. In the Search Results list, select the group you want to import, and click Add. The group is added to the Selected Groups list.
5. Click OK.
Assign each imported user group to a predefined VWorks role using the following procedure.

Assigning imported groups to roles (Domain authentication only)

Use the following procedure to assign VWorks roles to imported user groups.

To assign roles to an imported Windows group:
1. In the Control Panel navigation pane, click Administration > Roles. The Roles page appears.
2. Select one of the following predefined VWorks roles for the group:
   - VWorks Administrator
   - VWorks Technician
   - VWorks Operator
   - VWorks Guest
3. In the ribbon, click Edit Role. The Edit Role dialog box opens.

For a description of the role privileges, see “User groups and roles” on page 19.

Assign each imported user group to a predefined VWorks role using the following procedure.
3 Configuring the software
Configuring users, groups, and roles

4 In the Members tab, click Add user or group. The Search Users and Groups dialog box opens.

5 Type the user name in the Enter search string box, and click Search.
6 In the Search results box, select the name and click Add.
7 Click OK.
8 Repeat this procedure to assign the appropriate instrument roles, listed in the following table, for each VWorks role.

<table>
<thead>
<tr>
<th>VWorks role</th>
<th>Instrument roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>VWorks Administrator</td>
<td>Instrument Administrator</td>
</tr>
<tr>
<td></td>
<td>Instrument User</td>
</tr>
</tbody>
</table>

VWorks Standard Configuration and Administration Guide
Configuring users, groups, and roles

For imported groups, you will also assign permissions for a given project and a given instrument in subsequent procedures of this guide.

Changing a password and managing user data

Requirements
You may use the following procedures if:
• Your system is configured for Internal authentication
• You have Everything privileges

Note: Users who do not have Everything privileges may log in to change their own password, but they will have limited access to other Control Panel features.

Changing your password

To change your password:
1 In the Control Panel navigation pane, click Administration > My Settings.
2 In the ribbon, click Change My Password. The Change My Password dialog box opens.
3 Type the Old password, New password, and Confirm new password.
4 Click OK.

Editing user data and resetting user passwords

To edit a user’s data and reset their password:
1 In the Control Panel navigation pane, click Administration > Users.
2 In the Users page, select the user.
3 In the ribbon, click Edit User. The Edit User dialog box opens.
   • In the General tab, you may change the user password. For example, to reset the user password:
     – Select Change password.
     – Clear the remaining password check boxes, and then select User must change password at next logon.
   • In the Group Membership tab, you may change the user’s group assignment.
   • In the Role Membership tab, you may change the user’s role assignment.
4 Click OK.

Removing users

To remove a user:
1 In the Control Panel navigation pane, click Administration > Users.
2 In the Users page, select the user.
3 In the ribbon, click Remove User.
Configuring the software

Configuring VWorks project settings

The VWorks project folder is configured automatically during the VWorks software installation at /VWorks Projects/VWorks

The project folder stores the VWorks labware entries, liquid classes, pipetting techniques, device files, protocols, forms, runsets, and other miscellaneous files for your protocols.

No additional projects are required.

Workflow to configure VWorks project settings

<table>
<thead>
<tr>
<th>Step</th>
<th>For this task...</th>
<th>See...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>View the VWorks project settings.</td>
<td>&quot;Viewing VWorks project settings&quot; on page 29</td>
</tr>
<tr>
<td>2</td>
<td>Windows Domain authentication only. Assign project privileges to any imported groups.</td>
<td>&quot;Assigning project privileges to imported groups (Windows Domain)&quot; on page 30</td>
</tr>
<tr>
<td>3</td>
<td>Determine if you want to restrict file saving to the fourth level folder to maintain future compatibility with legacy ECM servers.</td>
<td>&quot;About the VWorks project folder structure&quot; on page 31</td>
</tr>
</tbody>
</table>

Viewing VWorks project settings

To view the VWorks project settings:

1. If you have not already done so, log in to the Control Panel.
2. In the Projects page, click VWorks Projects, and then click VWorks.
Assigning project privileges to imported groups (Windows Domain)

By default, the roles of users or user groups are globally set for all project groups and projects. The role settings are inherited from the root node *Projects*.

- If users are assigned to one of the predefined VWorks groups, the project privileges are already set globally. No additional project privileges are required.
- If users are part of an imported Windows group, perform the following procedure to assign global project privileges for the group.

**To assign global project privileges for an imported group:**

1. In the *Projects* page select the *Projects* icon in the navigation pane, as the following figure shows.

2. In the ribbon, click *Edit Privileges*. The Edit Privileges dialog box opens.

3. In the *Edit Privileges* dialog box, click *Add User or Group*. The Search Users and Groups dialog box opens.
4 Use the Search Users and Groups dialog box to add the groups for the projects. Click OK after you finish adding groups.

5 Click OK to close the Edit Privileges dialog box. If you have multiple projects, you may assign specific users or user groups to each project or project group using the following procedure.

**To assign privileges for a specific project:**

1 In the Projects page, select the relevant project in the navigation pane, and then click Edit Privileges in the ribbon.

2 In the Edit Privileges dialog box, clear the Inherit privileges from parent check box. Click Remove in the confirmation message.

3 In the Edit Privileges dialog box, click Add User or Group.

4 In the Search Users and Groups dialog box, locate and add the users or groups for the given project. Click OK after you finish adding groups.

**About the VWorks project folder structure**

By default, the Shared Services storage for VWorks Standard is on the local drive at: C:/OLSS Projects/VWorks Projects/VWorks/

An administrator can create additional folders under the /VWorks Projects/VWorks/ folder to meet the needs of your organization, for example, /VWorks Projects/VWorks/General/Protocols/
The legacy OpenLab ECM 3.x servers do not allow files to be saved in folders above or below the fourth level in a project. If compatibility with legacy OpenLab ECM 3.x servers is required, make sure you select the **Restrict file saving to 4th level folders** option in the VWorks software. For detailed instructions on setting this option, see the *VWorks Automation Control Setup Guide*.

**Understanding the instrument configuration**

**Instrument defined**

In the context of OpenLab for VWorks, an *instrument* is either the VWorks computer that is physically connected to an automation device, such as the Bravo Platform, or the VWorks computer that is used for creating protocols, which is not necessarily connected to an automation device.

A configured instrument and project are required to log in to the VWorks software. Typically, only one instrument is configured in OpenLab Control Panel for the VWorks software.

**Optional) Editing instrument properties**

You can use the following procedure if you want to edit the instrument properties, for example, to change the instrument name.

*To edit instrument properties in Control Panel:*

1. In the Control Panel, click **Instruments** in the navigation pane to display the Instruments page.
2. Select the instrument in the navigation pane, and then click **Edit Instrument**.

The *Edit* page displays.
3. Edit the properties per the following table.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>By default, the software uses the computer name. You can type a different name for the instrument. For example, if this computer controls a Bravo Platform, you might type Bravo.</td>
</tr>
<tr>
<td>Description</td>
<td>Optional. Provides a description of the instrument.</td>
</tr>
<tr>
<td>Application</td>
<td>Fixed value. VWorks Workstation</td>
</tr>
<tr>
<td>Instrument controller</td>
<td>Fixed value. Computer name</td>
</tr>
<tr>
<td>Instrument type</td>
<td>VWorksInstrDriver</td>
</tr>
<tr>
<td>Contact</td>
<td>Optional. Specifies the name or title of the contact for this instrument.</td>
</tr>
</tbody>
</table>
Assigning instrument privileges for imported user groups (Windows Domain)

By default, the roles of users or user groups are globally set for all instruments. The role settings are inherited from the root node *Instruments*.

- If users are assigned to one of the predefined VWorks groups, the instrument privileges are already set globally. No additional instrument privileges are required.
- If users are part of an imported Windows group, perform the following procedure to assign global instrument privileges for the group.

**To assign instrument privileges for imported user groups:**

1. In the *Instruments* page select the *Instruments* icon in the navigation pane, as the following figure shows.
2. In the ribbon, click *Edit Privileges*. The Edit Privileges dialog box opens.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default project</td>
<td>During the software installation, the instrument is created and configured automatically and the default project is set to VWorks Projects/VWorks. If a default project is not specified, the software will require a project selection each time the user logs in to the VWorks software.</td>
</tr>
<tr>
<td>Always use Default project</td>
<td>Prevents users from storing data for this instrument to a project other than the specified Default project.</td>
</tr>
</tbody>
</table>
3 In the **Edit Privileges** dialog box, click **Add User or Group**. The Search Users and Groups dialog box opens.

4 Use the **Search Users and Groups** dialog box to add the groups for the projects. Click **OK** after you finish adding groups.

5 Click **OK** to close the Edit Privileges dialog box.
About configuring automation devices in VWorks

To communicate with and to control Agilent automation devices, the VWorks software uses a device file, which contains the relevant devices. A device can be a robot (for example, automated liquid handler or microplate handler) or a location on the lab automation workstation that can hold a piece of labware. The following are examples of devices:

- BenchCel Microplate Handler
- Bravo Platform
- PlateLoc Sealer
- Microplate Labeler
- Labware MiniHub
- Platepad
- Waste Bin

For details on how to configure VWorks devices, see the VWorks Automation Control User Guide in the VWorks Knowledge Base.
Configuring the email server

If you want to allow the VWorks software to send email notifications, for example, when a run error occurs, the Control Panel must be connected to an email server.

Requirements

Work with your IT organization to meet these requirements.

- The computer running the VWorks software must be able to communicate with your outgoing email server (SMTP server). The email server settings must be configured in the Control Panel.
- After connecting to an email server in the Control Panel, you must also enable email notifications in the VWorks software Options dialog box. For details, see the VWorks Automation Control User Guide.

Procedure

To connect an email server to the Control Panel:

1. In the Control Panel Administration page, select System Configuration in the navigation pane, and then click Edit Email Server in the ribbon.

2. In the Edit Email Server dialog box, set the following properties.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Address</td>
<td>The name of a valid email account on your mail server that will be used to send the notifications.</td>
</tr>
<tr>
<td>Host</td>
<td>The URL of the mail server.</td>
</tr>
<tr>
<td>Port</td>
<td>The TCP port used for outgoing mail.</td>
</tr>
<tr>
<td>Authorization</td>
<td>The option to specify that authorization is required.</td>
</tr>
<tr>
<td>TLS</td>
<td>Transfer Layer Security connection.</td>
</tr>
<tr>
<td>User Name</td>
<td>If authorization is required, the user name.</td>
</tr>
</tbody>
</table>
### Property Description

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Password</td>
<td>If authorization is required, the password.</td>
</tr>
</tbody>
</table>

3. To send a test message, click **Test**. Enter an email address of a potential recipient and message, and then click **Send**.

4. Click **OK**.
4 System maintenance

This chapter includes the following topics:

- "Control Panel activity log and administrative reports" on page 40
- "Shared Services Maintenance utility" on page 42
- "Disaster recovery planning" on page 43
- "Software backup and recovery" on page 44
- "Data backup" on page 45
- "Data recovery" on page 47
Control Panel activity log and administrative reports

This section describes the System Activity Log and Administrative Reports pages in the Control Panel.

For a description of license management, see "Licensing the software" on page 5. For a description of the authentication provider, security policy, and user management, see "Configuring the software" on page 13.

System Activity Log

Note: For information on activity logs in the VWorks software, see the VWorks Automation Control User Guide in the VWorks Knowledge Base.

The System Activity Log contains information on the various events associated with Shared Services. You can filter the list in order to view only events of a specific type, in a specific time range, created by a specific user, or containing a specific description.

The following types of events are recorded:

- System
- Instrument
- Project Management
- User
- Group
- Security
- License

The messages can come from other components, such as the user management, system messages, or event messages. The System Activity Log records these events irrespective of whether you have been alerted to them or not.

To display the System Activity Log:
In the Control Panel navigation pane, click Administration > System Activity Log.
Administrative Reports view

In the Administrative Reports view, you can additionally create and export various XML or PDF reports related to the system configuration, including:

- **Instruments Report**. Provides detailed information about configuration and access privileges for all online instruments on the system. Typically, one online instrument is configured for VWorks Standard.

- **Projects Report**. Provides detailed information about configuration and access privileges for all projects on the system.

- **Roles and Privileges Report**. Describes all roles defined on the system, including details of all privileges included in each role.

- **System Report**. Provides a consolidated view of the system, which includes projects, roles, users, and groups.

  Note: Reports about instrument controllers and instruments are not applicable for the VWorks software.

- **User's and Group's Role Assignment Report**. Provides an overview of all users and groups with their assigned roles.

To display the Administrative Reports view:

In the Control Panel navigation pane, click Administration > Administrative Reports.
Shared Services Maintenance utility

The Shared Services Maintenance utility is automatically installed with VWorks Standard to help administrators manage the system.

To open the Shared Services Maintenance utility:
Select **Start ( ) > All Apps > Agilent Technologies > Shared Services Maintenance.**
A user must have Windows administrator rights to access this utility.

Backup and Restore tab

The Shared Services database contains information that is accessed by the Control Panel, such as users, roles, permissions, and projects. The Backup and Restore tab provides a simple interface for backing up and restoring the Shared Services database.
For details, see “Data backup” on page 45 and “Data recovery” on page 47.

Windows Domain tab

In the Shared Services Maintenance utility, the Windows Domain tab is relevant if you use Windows domain authentication to identify your VWorks Standard users.
VWorks Standard must be given access to the server where these credentials are stored. In the Windows Domain tab, you specify or change the credentials that VWorks Standard will use to access your Windows domain server.

Server Settings tab

Although the Server Settings tab can be used to manage different server connections, VWorks Standard typically connects only to the local host computer.
Disaster recovery planning

Prepare a recovery plan for the unlikely case of VWorks Standard becoming inoperable due to a hardware or software failure. This plan must include information and procedures for completely restoring the operating system, software, and data. Make sure that the disaster recovery plan has been tested and confirmed to be working.

The Disaster Recovery Plan must include the following:

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer specifications</td>
<td>CPU, memory, and hard disk configuration information</td>
</tr>
<tr>
<td>Computer identity</td>
<td>• Computer name, IP, domain, URI, and so forth</td>
</tr>
<tr>
<td></td>
<td>• Computer administrator information: user name and passwords for logging in to the server</td>
</tr>
<tr>
<td></td>
<td>• If applicable, user names and passwords for the database</td>
</tr>
<tr>
<td>Software</td>
<td>OS version and build</td>
</tr>
<tr>
<td>Installation parameters</td>
<td>• Installation folder</td>
</tr>
<tr>
<td></td>
<td>• Project folder</td>
</tr>
<tr>
<td></td>
<td>• Installation log files</td>
</tr>
<tr>
<td></td>
<td>• Shared Services language</td>
</tr>
<tr>
<td></td>
<td>• Shared Services database name</td>
</tr>
<tr>
<td>Installed licenses</td>
<td>–</td>
</tr>
<tr>
<td>Registered applications</td>
<td>–</td>
</tr>
<tr>
<td>Third-party software</td>
<td>Applications and their revisions and installation paths</td>
</tr>
<tr>
<td>information</td>
<td></td>
</tr>
<tr>
<td>Backup and restore</td>
<td>• Backup procedures</td>
</tr>
<tr>
<td></td>
<td>• Backup media location and organization details</td>
</tr>
<tr>
<td></td>
<td>• Restore procedures</td>
</tr>
</tbody>
</table>

Ensure the following:

- **Regular backups.** Administrators should perform periodic full backups and differential backups between the full backups. These backups are the only way to restore a system in the event of a hardware or software failure.
- **Tested procedures.** Make sure your disaster recovery plan and restore procedures are tested to confirm that the backups are sufficient to restore your system.
Software backup and recovery

Software backup workflow

<table>
<thead>
<tr>
<th>Step</th>
<th>For this task...</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Exit any running applications.</td>
<td>Close the VWorks software, Control Panel, and any other open applications.</td>
</tr>
<tr>
<td>2</td>
<td>Stop Windows Services.</td>
<td>In Microsoft Windows, open Services and stop the following service: Agilent OpenLab Shared Services</td>
</tr>
<tr>
<td>3</td>
<td>Create an image of the current system.</td>
<td>See Microsoft Windows documentation.</td>
</tr>
<tr>
<td>4</td>
<td>Start Windows Services.</td>
<td>In Microsoft Windows, open Services and start the following service: Agilent OpenLab Shared Services</td>
</tr>
</tbody>
</table>

See Microsoft Management Console help for more information on stopping and starting services.

About software recovery

See the Windows Installation documentation for detailed information on how to perform software recovery using a Windows Recovery DVD.
## Data backup

This section describes how to create backup copies of the Shared Services data and the VWorks data.

### Data backup workflow

<table>
<thead>
<tr>
<th>Step</th>
<th>For this task...</th>
<th>See...</th>
</tr>
</thead>
</table>
| 1    | In the VWorks software, use the **Backup Manager > Backup** command to create a backup file (.vbk) of the following:  
- Existing state of the labware inventory database  
- Labware definitions and liquid classes  
- Pipette techniques | **VWorks Automation Control User Guide** (Backing up and restoring files) |
| 2    | If applicable, create a backup of the Experiments database by exporting all the experiment IDs to a backup file (.expTags file).  
Also make a backup copy of any archived experiment ID files. | **VWorks Automation Control Setup Guide** (Archiving, exporting and importing experiment data) |
| 3    | Close OpenLab Control Panel and the VWorks software. | – |
| 4    | In Microsoft Windows, open Services and stop the following service:  
Agilent OpenLab Shared Services | **Microsoft Management Console (MMC) help** |
| 5    | Perform a Shared Services database backup to back up the user management information. | “Performing Shared Services database backup” on page 46 |
| 6    | Create a backup copy of the VWorks Projects folder.  
Store the backup copy in a secure location. | “Creating a backup copy of VWorks Projects folder” on page 47 |
| 7    | In Microsoft Windows, open Services and start the following service:  
Agilent OpenLab Shared Services | **Microsoft Management Console (MMC) help** |
Performing Shared Services database backup

The Shared Services database contains information that is accessed by the Control Panel, such as users, roles, permissions, and projects. The Backup and Restore tab in the Shared Services Maintenance utility provides a simple interface for backing up and restoring the Shared Services database.

**IMPORTANT**

The Shared Services Maintenance utility automatically generates file names for the backup files. Do not change these file names, as the utility relies on a specific naming convention.

**To create a backup copy of the Shared Services database:**

1. Select **Start ( ) > All Apps > Agilent Technologies > Shared Services Maintenance.**
2. In the **Backup and Restore** tab, specify the following:
   - **Backup Directory.** Make sure you use a safe location as the backup directory, for example, a USB drive, a network location, or an external storage device.
   - **Retention Time (days).** When a new backup is performed, the currently set retention time is used to delete any files older than specified.
3. Select the type of backup: **Full** or **Differential**.
4. Click **Backup.**
Creating a backup copy of VWorks Projects folder

Note: The VWorks software has features that provide backups of only a subset of the VWorks files. For information on these features, see the VWorks Automation Control User Guide.

To make a backup of the VWorks Projects folder:
Copy the VWorks Projects folder specified during installation (for example, c:/olssprojects/vworks projects/) and any additional VWorks project folders that you created.
Back up the copy to a safe location, for example, a network location or an external storage device.

Data recovery

Data recovery workflow

Before running the recovery procedures, ensure that the OpenLab Control Panel and the VWorks software are closed.

<table>
<thead>
<tr>
<th>Step</th>
<th>For this task...</th>
<th>See...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In Microsoft Windows, open Services and stop the following service: Agilent OpenLab Shared Services</td>
<td>Microsoft Management Console (MMC) help</td>
</tr>
<tr>
<td>2</td>
<td>Restore the VWorks projects folder.</td>
<td>“Restoring the VWorks project content” on page 48</td>
</tr>
<tr>
<td>3</td>
<td>Restore the Shared Services database from a backup.</td>
<td>“Restoring Shared Services database” on page 48</td>
</tr>
<tr>
<td>4</td>
<td>In Microsoft Windows, open Services and start the following service: Agilent OpenLab Shared Services</td>
<td>Microsoft Management Console (MMC) help</td>
</tr>
</tbody>
</table>
| 5    | In the VWorks software, use the Backup Manager > Restore command to restore a backup (.vbk file) of the following:  
  - Existing state of the labware inventory database  
  - Labware definitions and liquid classes  
  - Pipette techniques | VWorks Automation Control User Guide (Backing up and restoring files) |
| 6    | In the VWorks software, if applicable, restore the Experiments database from an exported backup file (.expTags file) and any archived experiment ID file. | VWorks Automation Control Setup Guide (Archiving, exporting and importing experiment data) |
Restoring the VWorks project content

Note: The VWorks software has backup and restore features for only a subset of the VWorks files. For information on these features, see the VWorks Automation Control User Guide.

To restore the content in the VWorks Projects folder:
Copy the contents from the previously saved backup copy of the VWorks Projects folder to the location used at the moment of backup, for example:
c:/olssprojects/vworks projects

Restoring Shared Services database

IMPORTANT
The Shared Services Maintenance utility automatically generates file names for the backup files. Do not change these file names, as the utility relies on a specific naming convention.

To restore the Shared Services database:
1. Select Start ( ) > All Apps > Agilent Technologies > Shared Services Maintenance.
2. In the Backup and Restore tab, click Browse, and then select the folder that contains the previously created backups.
3. Select the backup that you want to restore, and click Restore.
A Optional configuration

This appendix provides procedures that are not required:

- "About Control Panel projects" on page 50
- "Optional instrument configuration" on page 52
About Control Panel projects

By default, the VWorks software is automatically configured to use the project /VWorks Project/VWorks
No other projects are required.

The Control Panel enables you to create additional projects using the following procedure. However, the following should be considered:

- The VWorks shortcuts on the desktop and in the Windows start menu are configured for the default VWorks project. If you create another project, see “About the Create VWorks Desktop Shortcuts feature” on page 52.
- Any project edits (for example, project privileges) apply only to the project you are editing.

Creating a project in Control Panel (optional)

To create a project:

1. In the Control Panel navigation pane, click Projects.
2. In the Projects page select one of the following:
   - Projects. To create a project at the same level as /VWorks Projects.
   - VWorks Projects. To create a project under /VWorks Projects.
3. Click Create in the ribbon, and then click Create Project or click Create Project Group.
   Note: A project group is a collection of projects, for example, VWorks Projects is a project group that contains the VWorks project.
4. Specify the following in the Properties tab.
### Optional configuration

**About Control Panel projects**

1. **Name**
   - Type the name of the project.

2. **Project folder path**
   - Click **Browse** to specify the path.
   - In the Select Project Folder dialog box, specify the folder.
   - The folder path must be at the root level of the Shared Services storage repository.

3. **Description**
   - *Optional.* Type any comments about this instrument.

4. **Application**
   - Select the **VWorks Workstation** check box.

5. **Click OK** to save the project.
Optional instrument configuration

About configuring an instrument

When you install the VWorks software, an instrument is created and configured automatically using the name of the computer as the instrument name. No additional instrument configuration is required in Control Panel. The following procedure is provided for reference only.

To configure an instrument

1. In the Control Panel Instruments page, select the instrument in the navigation pane, and click Configure Instrument in the ribbon.

2. In the VWorks Instrument Configuration dialog box, type the name of the Workstation Folder, for example, Workstation.

   The Workstation Folder stores the VWorks global option settings, the device profiles, the log activity files, and so forth that are specific to this VWorks instrument.

   ![VWorks Instrument Configuration dialog box]

   For details on instrument properties, see "(Optional) Editing instrument properties" on page 32.

About the Create VWorks Desktop Shortcuts feature

The VWorks installer automatically places a VWorks shortcut on the Windows desktop. This shortcut specifies the default instrument and VWorks project when starting the VWorks software.

The Control Panel includes a Create VWorks Desktop Shortcuts feature that allows you to create additional shortcuts. If you have created projects in addition to the VWorks project in the Control Panel, you may want to have different shortcuts for those projects.

To create a VWorks desktop shortcut:

1. In the Control Panel, click Instruments to display the Instruments page.

2. Select the instrument in the navigation pane. The corresponding instrument information appears in the Instrument page.

3. If you want to create this shortcut for a specific instrument-project combination, select the Project.
Note: If the Instrument properties specify the **Always use Default project** option, the project selection is already set.

If the shortcut does not include the project selection, the software will prompt for a project selection each time the shortcut is used.

4. In the ribbon, click **Create VWorks Desktop Shortcuts**.

5. Notice that two shortcuts appear, one labeled online and the other offline. Delete the offline shortcut, which is not relevant to VWorks.

6. Click the online shortcut to start the VWorks software, the Control Panel login window appears.

After you enter your login credentials, the VWorks software opens. If the shortcut does not include the project association, the software prompts for the project selection before the VWorks software opens.
In This Guide

This guide provides configuration and administration instructions for VWorks Standard edition, including:

• License generation with SubscribeNet
• Configuring and managing user access
• Software and data backup and restore procedures