

# **Configure and Maintain Your Agilent ChemStation Computer**



**For Agilent ChemStation Rev.  
B.04.02**



**Agilent Technologies**

# Notices

© Agilent Technologies, Inc. 2004,  
2005-2009

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Agilent Technologies, Inc. as governed by United States and international copyright laws.

## Manual Part Number

G2170-90134

## Edition

07/09

Printed in Germany

Agilent Technologies  
Hewlett-Packard-Strasse 8  
76337 Waldbronn

## Research Use Only

**Not for use in Diagnostic Procedures.**

Microsoft ® is a U.S. registered trademark of Microsoft Corporation.

Windows, Windows Vista, SQL Server, and Visual Studio are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Oracle ® is a U.S. registered trademark of Oracle Corporation.

## Software Revision

This guide is valid for B.04.xx revisions of the Agilent ChemStation software, where xx refers to minor revisions of the software that do not affect the technical accuracy of this guide.

## Warranty

**The material contained in this document is provided “as is,” and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Agilent disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Agilent shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Agilent and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.**

## Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

## Restricted Rights Legend

If software is for use in the performance of a U.S. Government prime contract or subcontract, Software is delivered and licensed as “Commercial computer software” as defined in DFAR 252.227-7014 (June 1995), or as a “commercial item” as defined in FAR 2.101(a) or as “Restricted computer software” as defined in FAR 52.227-19 (June 1987) or any equivalent agency regulation or contract clause. Use, duplication or disclosure of Software is subject to Agilent Technologies’ standard commercial license terms, and non-DOD Departments and Agencies of the U.S. Government will

receive no greater than Restricted Rights as defined in FAR 52.227-19(c)(1-2) (June 1987). U.S. Government users will receive no greater than Limited Rights as defined in FAR 52.227-14 (June 1987) or DFAR 252.227-7015 (b)(2) (November 1995), as applicable in any technical data.

## Safety Notices

### 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.

### 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.

## In This Guide...

Agilent-delivered ChemStation PC Bundle systems are delivered with the supported Windows operating system pre-installed and are configured for optimum ChemStation performance. Non-Agilent PC Bundle systems require some manual configuration changes in order to provide optimum performance. This manual describes how to configure a non-Agilent PC Bundle system.

### **1 How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher**

This chapter identifies and describes all parameters necessary to configure a non-Agilent Windows XP SP 3 system for use with Agilent ChemStation Rev. B.04.02 or higher. It also covers important settings like Internet Security.

### **2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher**

This chapter identifies and describes all parameters necessary to configure a non-Agilent Windows Vista SP1 system for use with Agilent ChemStation Rev. B.04.02 or higher.

### **3 Security Settings**

This chapter summarizes all security settings for LC/MSD, CE/MSD, LC/MSD Trap, GC 7890A, IO Library Suite 15, and Agilent Bootp Service.

### **4 Additional Modifications**

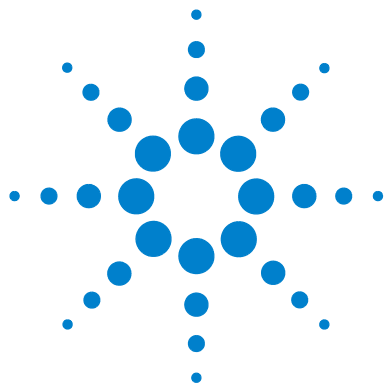
These modifications can only be performed using an Administrator user account

### **5 Maintaining the PC's File System**

To help to optimize the performance of your ChemStation system it is important that you schedule routine maintenance (e.g. deleting unnecessary files). The following instructions should be used as a part of your routine maintenance schedule.

# Contents

- 1 How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher 5**
  - Install Windows XP 6
  - Configure Windows XP Settings 7
- 2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher 21**
  - Install Windows Vista 22
  - Configure Windows Vista Settings 23
- 3 Security Settings 41**
  - Security Settings for LC/MSD and CE/MSD Systems 42
  - Security Settings for LC/MSD Trap Systems 46
  - Security Settings for GC 7890A Systems 51
  - Security Settings for IO Library Suite 15 54
  - Security Settings for Systems using Agilent Bootp Service 58
- 4 Additional Modifications 61**
  - Install ChemStation 62
  - Profiles and Group Policies to run ChemStation as PowerUser/User 62
- 5 Maintaining the PC's File System 63**
  - Scanning and Repairing NTFS Volumes 64
  - Defragmenting an NTFS Volume 66
  - Scanning for Viruses 68
  - Cleaning up Left-Over Temporary Files 69
  - Performing Backups 71



# 1

## **How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher**

Install Windows XP 6

Configure Windows XP Settings 7

This chapter identifies and describes all parameters necessary to configure a non-Agilent Windows XP SP 3 system for use with Agilent ChemStation Rev. B.04.02 or higher. It also covers important settings like Internet Security.



## Install Windows XP

### NOTE

Keep your PC disconnected from the internet until you have installed the appropriate security patches and hot fixes. It is strongly recommended to install the latest security fixes as supported from Agilent and virus definitions prior to connecting to a network.

---

- 1 Install Windows XP from recovery CD or Windows XP Professional CD-ROM. During the setup of Windows XP provide the Computer Name, Administrator password and network settings. Select to either join an existing domain or set up the system in workgroup mode.
- 2 Check the Windows version by typing  
**winver**  
at the **Start > Run** command prompt: If necessary, install Service Pack 3 for XP. Ignore the option to archive current files and reboot the system.
- 3 To secure your system against viruses please install an AntiVirus program. Running AntiVirus programs might influence the behavior and performance of your computer. Agilent ChemStation was tested to run with Symantecs Norton Antivirus. See [“Scanning for Viruses”](#) on page 68 for more details.

## Configure Windows XP Settings

Some changes within this document are mandatory for the ChemStation to work properly on a Windows XP system. Some changes will optimize application performance. Other changes will have a graphical or minor impact.

### NOTE

To indicate the relative importance of individual settings, each item is categorized as:

**MUST:** These changes must be applied.

**PERFORMANCE:** These changes will improve system performance.

**OPTIONAL:** Most of these changes will affect the graphical display of the application.

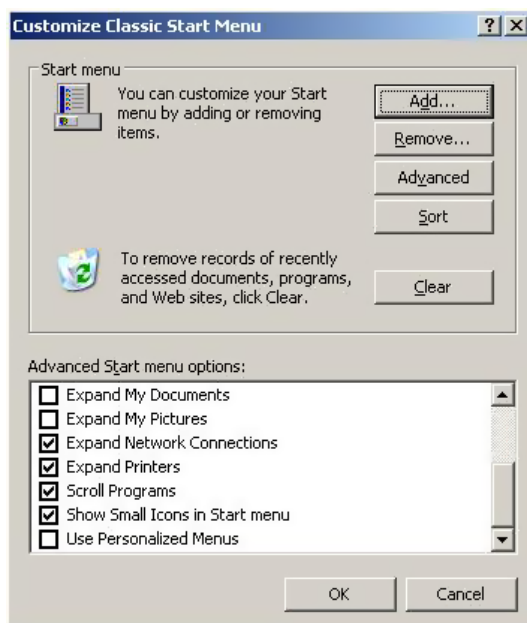
- 
- [OPTIONAL]    **1** General Layout: (**Start** Menu, right-click > **Properties**)
- a** **Start Menu** Tab: Select **Classic Start Menu**

## 1 How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows XP Settings

b Start Menu > **Customize** button (See [Figure 1](#) on page 8): In **Advanced Start menu options**: Disable the following option:

- **Use Personalized Menus**



**Figure 1** Customize Classic Start Menu Dialog

c Enable in the following options:

- **Display Administrative Tools**
- **Display Favorites**
- **Display Log Off** (for Workgroup Systems, this option is only available after configuration step 6)
- **Display Run**
- **Enable dragging and dropping**
- **Expand Control Panel**
- **Expand Network Connections**
- **Expand Printers**
- **Scroll Programs**
- **Show Small Icons in Start menu**



- [MUST] 2 Folder Options: (right-click **Start > Explore**)
- Set **View** to **Details**
  - Choose **Tools > Folder Options**
  - General** tab: for Tasks select **Use Windows classic folders**
  - View** tab: Disable the following options:
    - Use simple file sharing**
    - Hide extensions for known file types**
  - Enable the following option:
    - Display the full path in the title bar**
  - Apply these settings to all folders by selecting the **Apply to All Folders** button

- [MUST] 3 Internet Explorer: (**Start > Programs > Internet Explorer**) (See Figure 2 on page 9)

- a **Tools > Windows Update**: Apply all critical security patches.

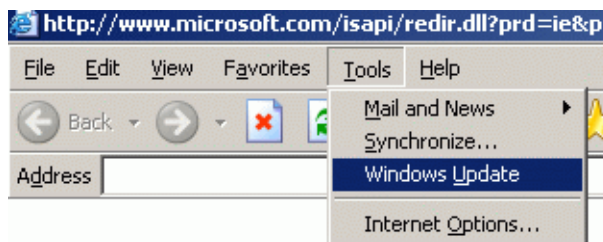


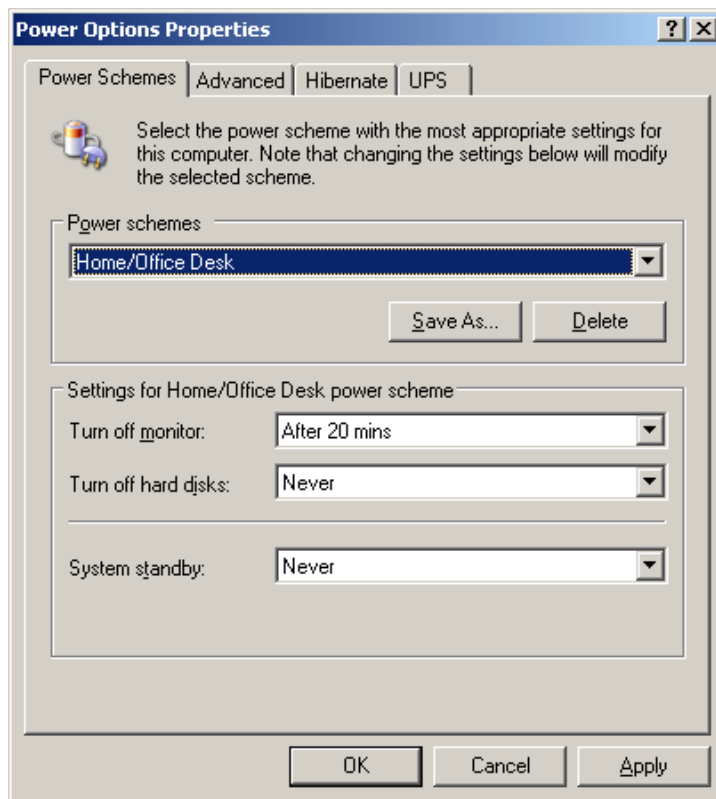
Figure 2 Downloading Critical Security Updates

- [MUST] 4 Register Windows XP Professional with Microsoft.
- [MUST] 5 Windows Logon Options: (For Workgroup Systems, only) (**Start > Settings > Control Panel > User Accounts**)
- Select **Change the way users log on or off**
  - Disable **Use the Welcome Screen**
  - Disable **Use Fast User Switching**
- [MUST] 6 Power Options: (**Start > Settings > Control Panel > Power Options**) (See Figure 3 on page 10)
- Select the **Power Schemes** tab
  - From **Power Schemes** drop down box select one of the power schemes

## 1 How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows XP Settings

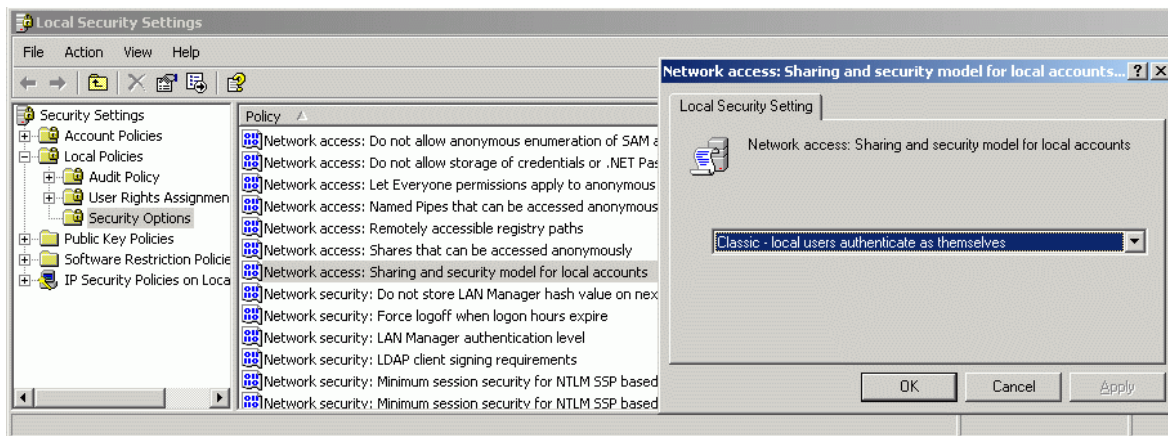
- c Set the drop down boxes **Turn off hard disks** and **System standby** to **Never**.
- d Select the **Hibernate** tab: disable **Enable hibernation**.



**Figure 3** Power Options Properties Dialog, **Power Schemes** Tab

- [MUST] 7 Local Security Policy: (**Start > Programs > Administrative Tools > Local Security Policy**)
- a In the **Security Settings** tree open **Local Policies** folder, then **Security Options** folder
  - b Double-click the following policy listed in the right hand panel: **Network Access: Sharing and security model for local accounts**

- c In the displayed dialog select the following item from the drop down list:  
**Classic - local users authenticate as themselves**



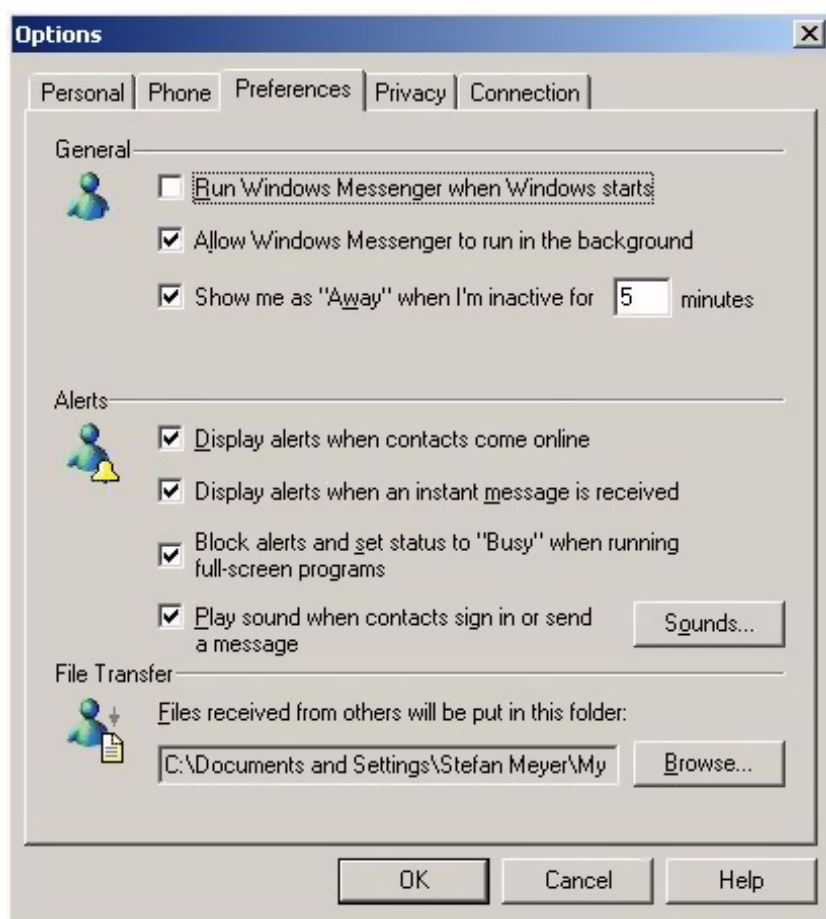
**Figure 4** Local Security Settings Dialog

- [MUST] 8 Disable Automatic Startup of Windows Messenger: (**Start > Programs > Windows Messenger > Tools > Options**):
- a Select the **Preferences** tab (See [Figure 5](#) on page 12)
  - b In the **General** section disable **Run Windows Messenger when Windows starts**.

## 1 How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows XP Settings

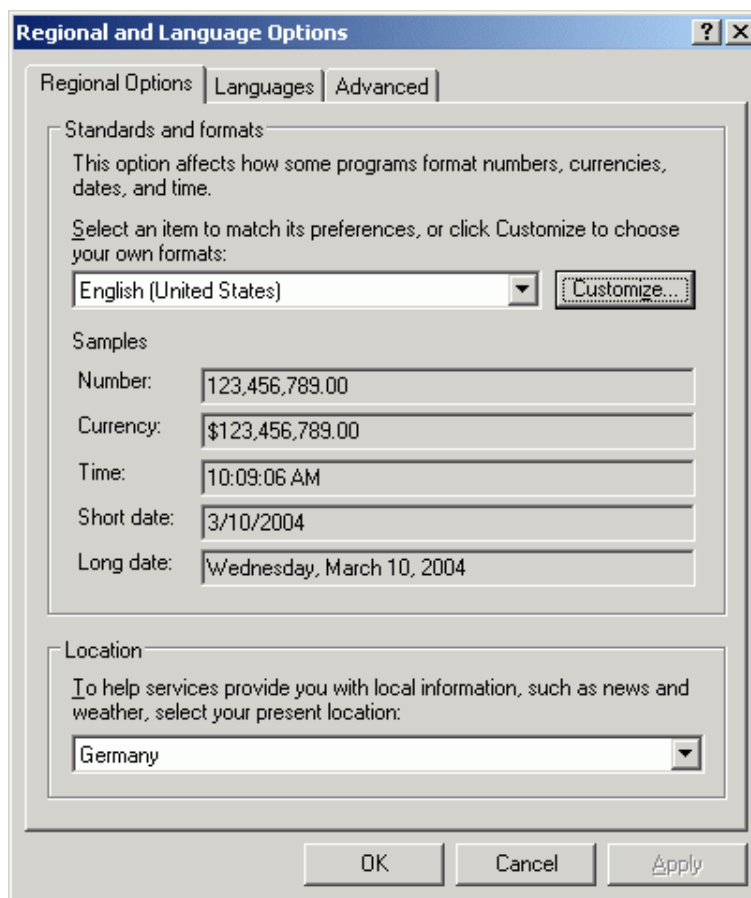
- c Select **OK** and reboot the system.



**Figure 5** Options Dialog, Preferences Tab

- [MUST] 9 Regional and Language Options: (**Start > Settings > Control Panel > Regional and Language Options**) (See [Figure 6](#) on page 13)

- a Set **Regional Options** to **English (United States)** from the drop down list.

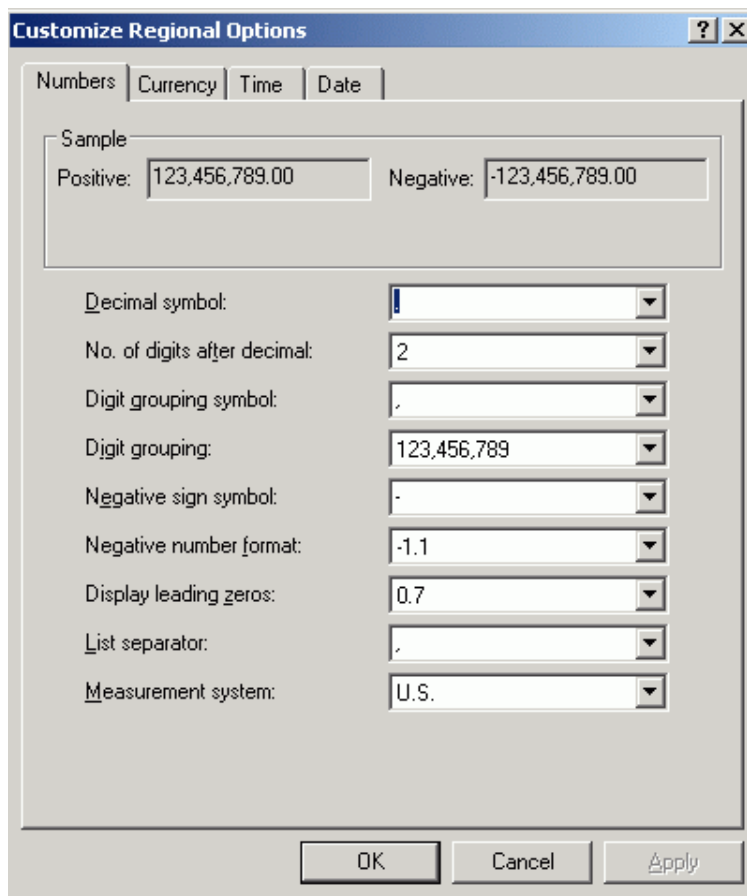


**Figure 6** Regional and Language Options Dialog, Regional Options Tab

## 1 How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows XP Settings

- b If regional format other than **English (United States)** is used, the following settings are mandatory. The settings can be defined by clicking the **Customize** button (See [Figure 7](#) on page 14):
- Decimal symbol = . (point)
  - Digit grouping symbol = , (comma)
  - List separator = , (comma)



**Figure 7** Customize Regional Options Dialog, Numbers Tab

- c Language for non-Unicode programs: On the **Advanced** Tab select **English (United States)** from the drop down list (See Figure 8 on page 15).

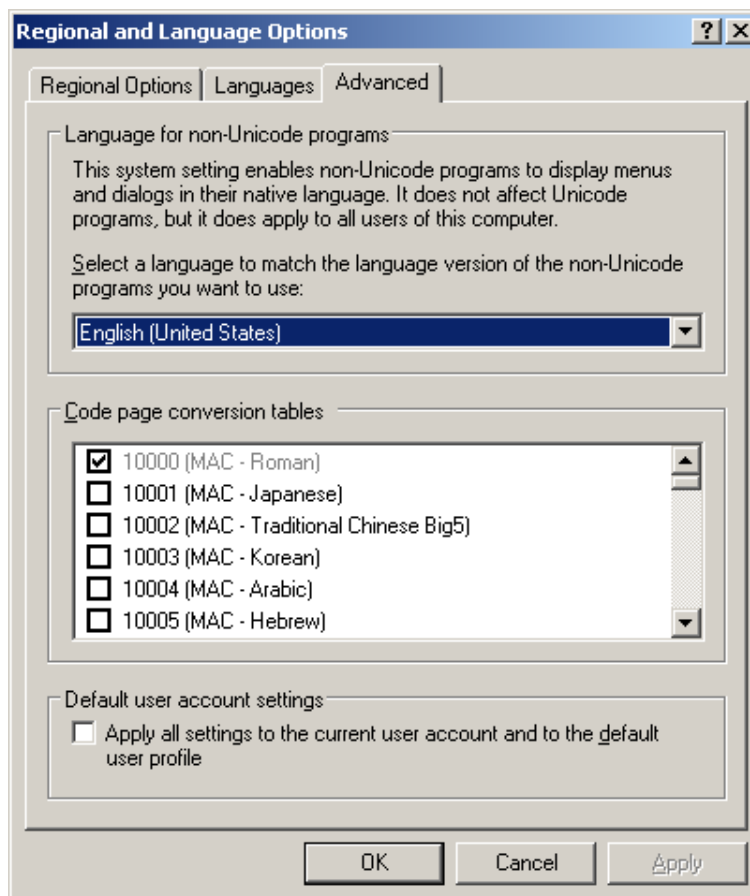


Figure 8 Regional and Language Options Dialog, Advanced Tab

- [PERFORMANCE] 10 Hard disk Properties: (right-click **Start > Explore**, right-click on **Local Disk (C:) > Properties**).
- a In the **General** tab, disable **Allow Indexing Service to index this disk for fast file searching** (See Figure 9 on page 16)
  - b Apply the changes by selecting **OK**.
  - c In the selection screen, enable the option **Apply changes to C:\, subfolders, and files**.

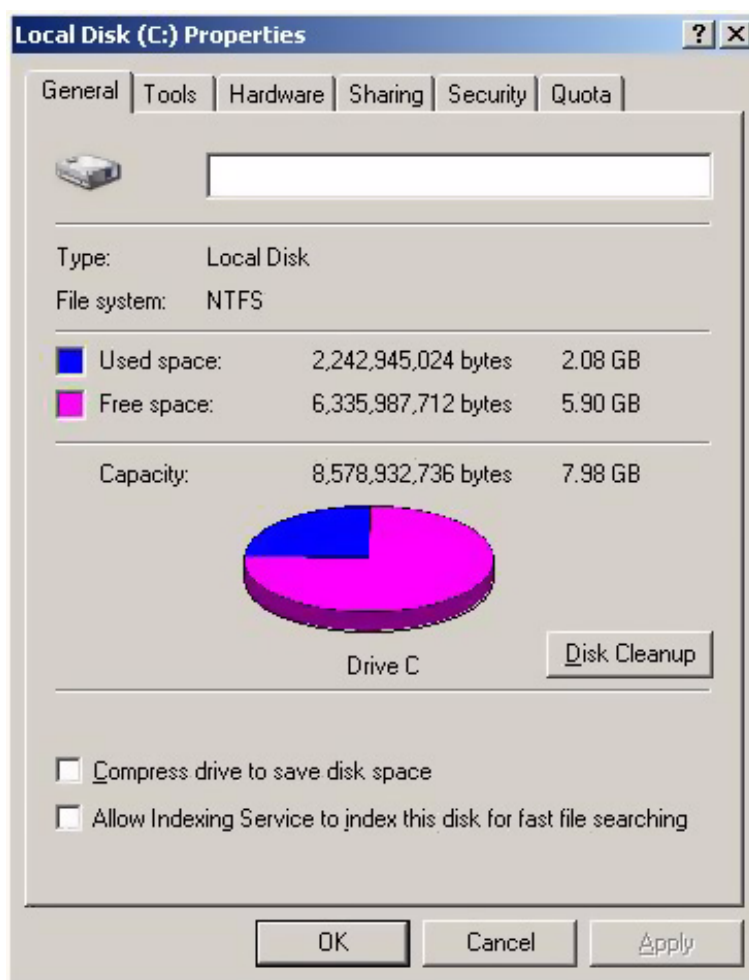
## 1 How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows XP Settings

- d Disable this setting for all non-removable drives.

#### NOTE

Microsoft applies special sets of permissions to certain folders, such as the \$NTUninstallKB... folders which relate to Windows HotFixes and Patches. These folder permissions result in error messages when applying new settings for the Indexing Service. Select **Ignore**, when these messages appear.

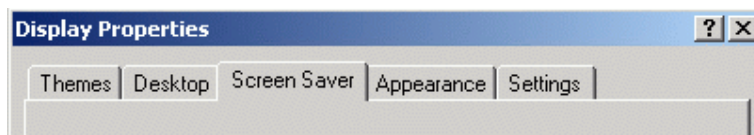


**Figure 9** Local Disk (C:) Properties Dialog, General Tab

[PERFORMANCE] 11 Screen layout: (right-click **desktop** > **Properties**):



- a Please change the following items in the **Display Properties** dialog (See [Figure 9](#) on page 16):
- **Themes** tab: Change **Windows XP** to **Windows Classic**
  - **Desktop** tab **Customize Desktop** button:
    - **General** tab: Enable all 4 desktop icons (My Documents, My Computer, My Network Places, Internet Explorer)
    - **General** tab: Disable **Run Desktop Cleanup Wizard every 60 days**
  - **Screen Saver** tab: Change Screen Saver from **Windows XP** to **none**
  - **Appearance** tab > **Effects** button: disable all items, except for
    - **Hide underlined letters for keyboard navigation....**
  - **Settings** tab: 1280 by 1024 resolution, 32 bit color, 75 Hertz refresh or higher. (Please note: some old monitors may only work with 60 Hz.)



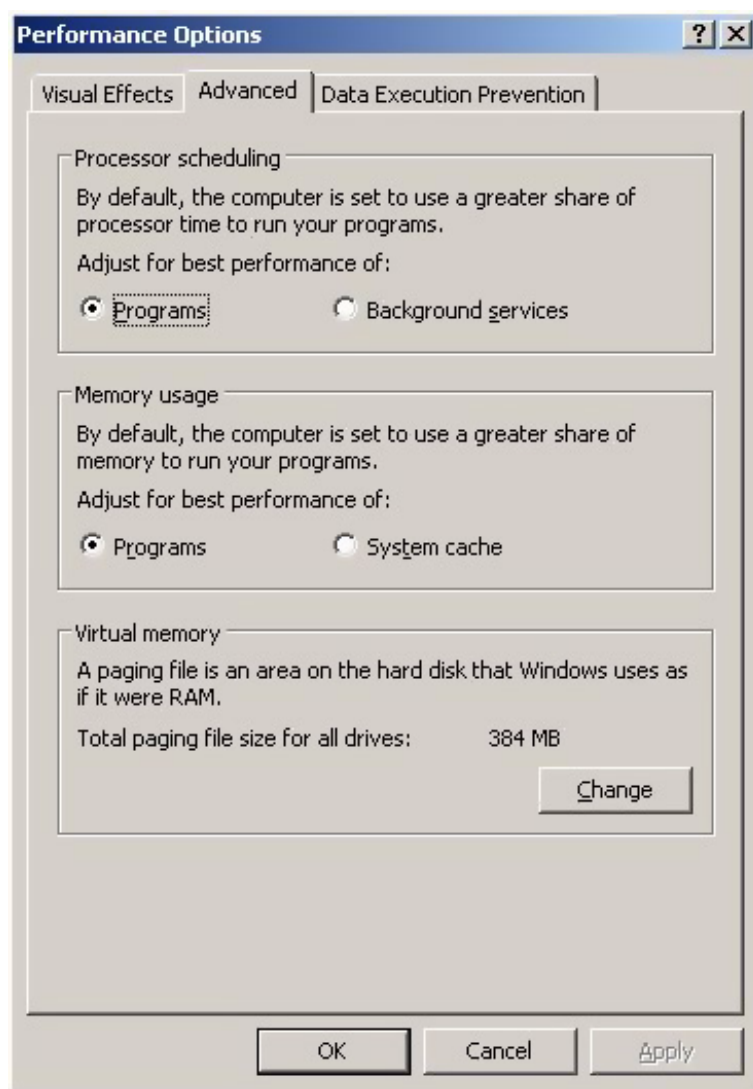
**Figure 10** Tabs in **Display Properties** Dialog

**[PERFORMANCE]** 12 System Properties: **Start > Settings > Control Panel > System**

- a **Advanced** tab > **Performance** > **Settings** button (See [Figure 11](#) on page 18):
- **Visual Effects** tab: Set **Visual Effects** to **Adjust for best performance**.
  - **Advanced** tab > **Virtual Memory**: For optimum performance use the **Change** button to adjust the paging file size to a value of 2 to 3 times of the physical RAM of the PC.
  - **Data Execution Prevention** tab: Enable **Turn on DEP for essential Windows programs and services only**.

## 1 How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows XP Settings



**Figure 11 Performance Options Dialog, Advanced Tab**

**b Advanced tab > Startup and Recovery > Settings** button (See [Figure 12](#) on page 19):

- **System startup** section: Change both **Time to display...** fields from 30 to 3 sec.

- **System failure** section: Set **Write debugging information** to **none**

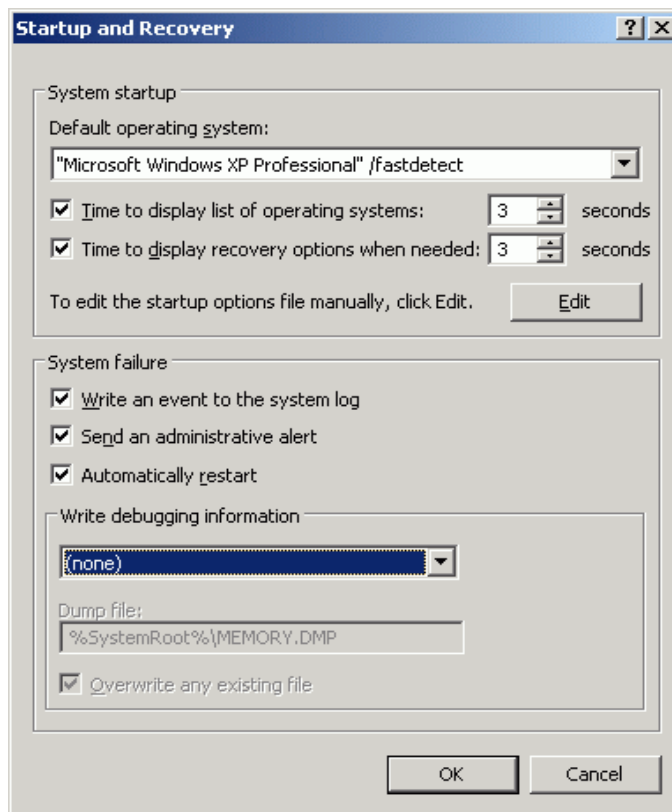


Figure 12 Startup and Recovery Dialog

- c **Advanced** tab > **Error Reporting** button: Select **Disable error reporting** and **But notify me when critical error occur**.
- d **Remote** tab: Disable **Allow Remote Assistance** invitations to be sent from this computer and **Allow users to connect remotely to this computer**.
- e **System Restore** tab: Enable **Turn off System Restore** on all drives.
- f Reboot the system after enabling this setting.

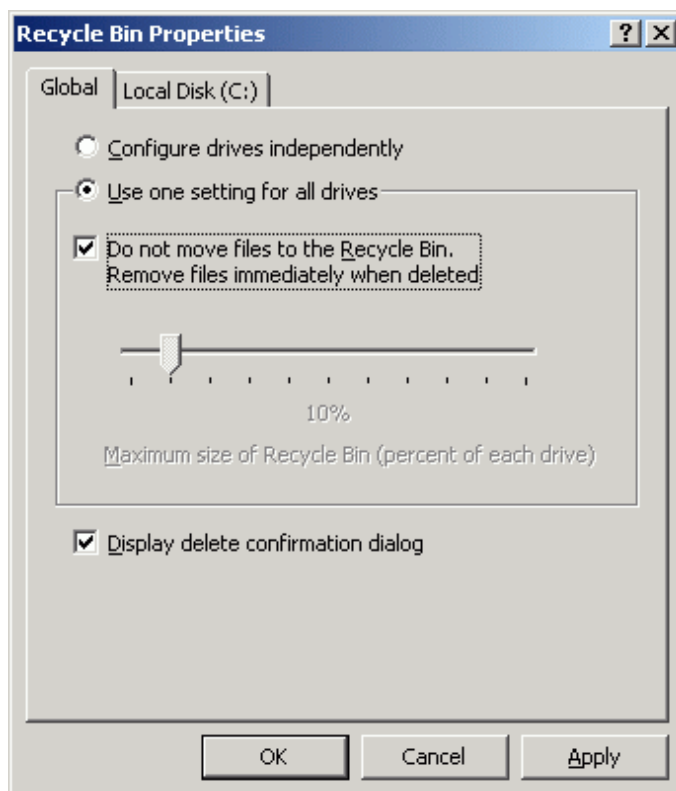
[OPTIONAL] **13 Recycle Bin Properties:** (right-click on desktop icon Recycle Bin) Enable the following options (See Figure 13 on page 20):

- a **Use one setting for all drives**
- b **Do not move files to the Recycle Bin. Remove files immediately when deleted**

## 1 How to configure Windows XP SP 3 for use with Agilent ChemStation Rev. B.04.02 or higher

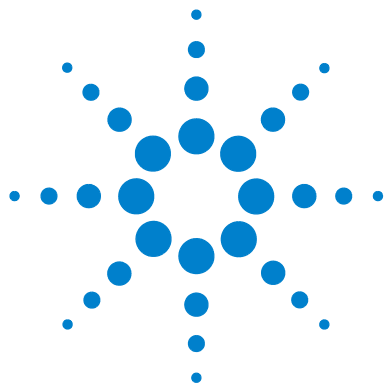
### Configure Windows XP Settings

#### c Display delete confirmation dialog



**Figure 13** Recycle Bin Properties Dialog, Global Tab

[OPTIONAL] 14 Screen layout: (right-click desktop > **arrange icons by**) Disable **Align to grid**.



## 2

# How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher

Install Windows Vista 22

Configure Windows Vista Settings 23

This chapter identifies and describes all parameters necessary to configure a non-Agilent Windows Vista SP1 system for use with Agilent ChemStation Rev. B.04.02 or higher.



## Install Windows Vista

### NOTE

Keep your PC disconnected from the internet until you have installed the appropriate security patches and hot fixes. It's strongly recommended to install the latest security fixes as supported from Agilent Technologies and virus definitions prior to connecting to a network.

- 1 Install Windows Vista from recovery DVD or Windows Vista Business DVD. During the setup of Windows Vista provide the Computer Name, Administrator password and network settings. Select to either join an existing domain or set up the system in workgroup mode.
- 2 Check the Windows version by typing  
**winver**  
at the **Start > Start Search** command prompt: If necessary, install Service Pack 1 for Vista. Ignore the option to archive current files and reboot the system.
- 3 To secure your system against viruses please install an AntiVirus program. Running AntiVirus programs might influence the behavior and performance of your computer. Agilent ChemStation was tested to run with Symantecs Norton Antivirus. See ["Scanning for Viruses"](#) on page 68 for more details.

## Configure Windows Vista Settings

Some changes within this document are mandatory for the ChemStation to work properly on a Windows Vista system. Some changes will optimize application performance. Other changes will have a graphical or minor impact.

### NOTE

To indicate the relative importance of individual settings, each item is categorized as:

**MUST:** These changes must be applied.

**PERFORMANCE:** These changes will improve system performance.

**OPTIONAL:** Most of these changes will affect the graphical display of the application.

### NOTE

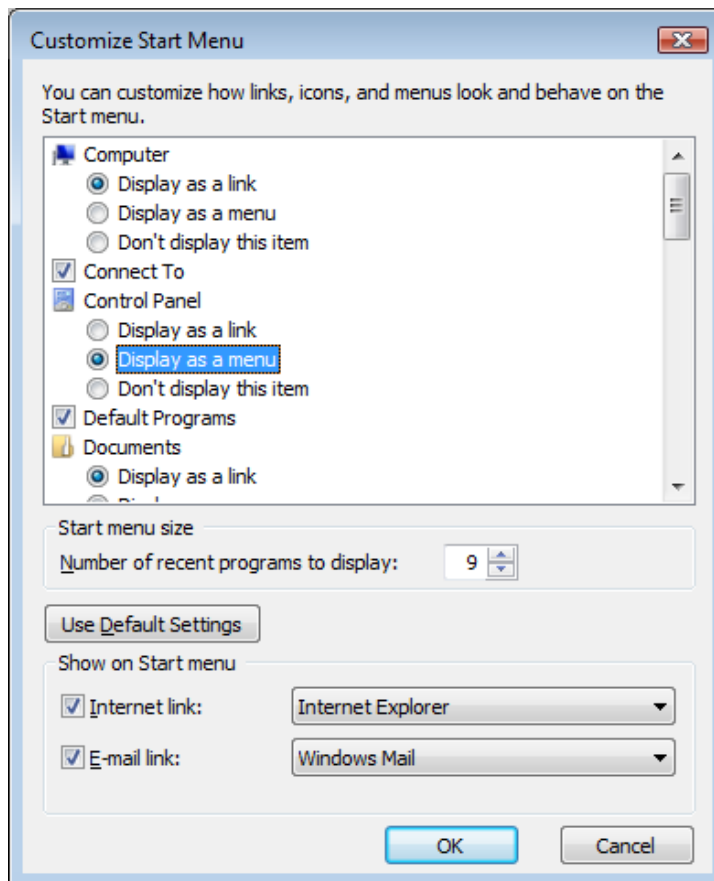
If User Account Control (UAC) is switched on, some configuration steps will require active confirmation to continue.

- [OPTIONAL] 1 General Layout: (right-click **Start > Properties**)
- a **Start Menu** Tab:
    - Select **Start Menu**
    - In the **Privacy** section select both items
  - b **Start Menu** Tab > **Customize** button: In **Customize Start Menu** dialog: Disable the following option:
    - **Favorites menu**
  - c Enable in the following options:
    - Computer **Display as a link**
    - **Connect To**
    - Control Panel: **Display as a menu**
    - **Default Programs**
    - Documents: **Display as a link**
    - **Enable context menus and dragging and dropping**
    - Games: **Don't display this item**
    - **Help**

## 2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows Vista Settings

- **Highlight newly installed programs**
- Music: **Don't display this item**
- **Network**
- **Open submenu when I pause on them with the mouse pointer**



**Figure 14** 'Customize Start Menu' Dialog

- Personal folder: **Display as a link**
- Pictures: **Display as a link**
- **Printers**
- **Run command**



- **Search communications**
- **Search favorites and history**
- Search Files: **Search this user's files**
- **Search programs**
- **Sort All Programs menu by name**
- System administrative tools: **Display on the All Programs menu and in the Start menu**
- **Use large icons**

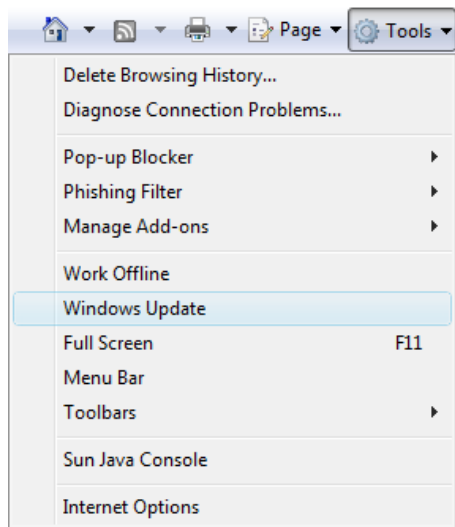
**[MUST]**    **2** Folder Options: (right-click **Start > Explore**)

- a** Set **View** to **Details**
- b** Choose **Organize > Layout**
  - Enable **Menu Bar**
- c** Choose **Tools > Folder Options**
  - **General** tab: for Tasks select **Use Windows classic folders**
  - **View** tab: Disable the option: **Hide extensions for known file types**; Enable the option: **Display the full path in the title bar (classic folders only)**
- d** Apply these settings to all folders by selecting the **Apply to Folders** button

## 2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows Vista Settings

- [MUST] 3 Got to **Start>All Programs>Internet Explorer**. Perform Windows Update via **Tools > Windows Update** to check for updates and apply all critical security patches (see Figure 15 on page 26).



**Figure 15** Downloading Critical Security Updates

- [MUST] 4 Register Windows Vista with Microsoft.
- [MUST] 5 Windows Logon Options: (**Start > search for gpedit.msc**)
- a Navigate to **Local Computer Policy > Computer Configuration > Administrative Templates > System Logon** (see Figure 16 on page 27)
    - Enable **Hide entry points for Fast User Switching** and **Always use classic logon**

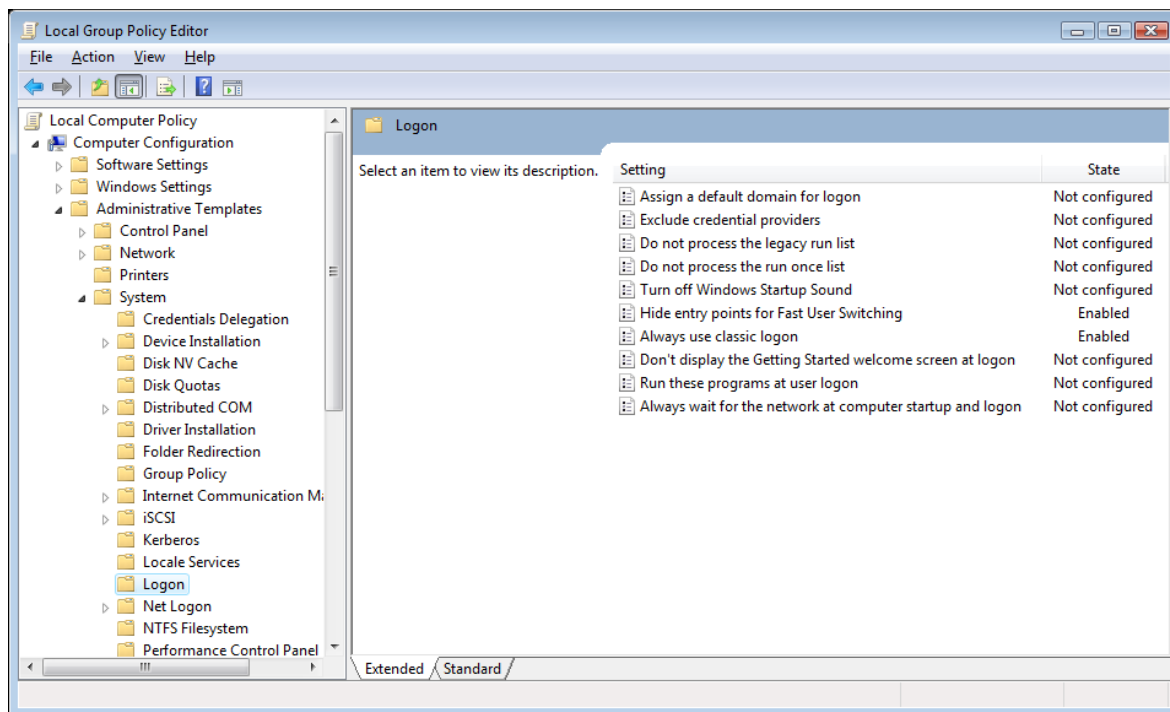
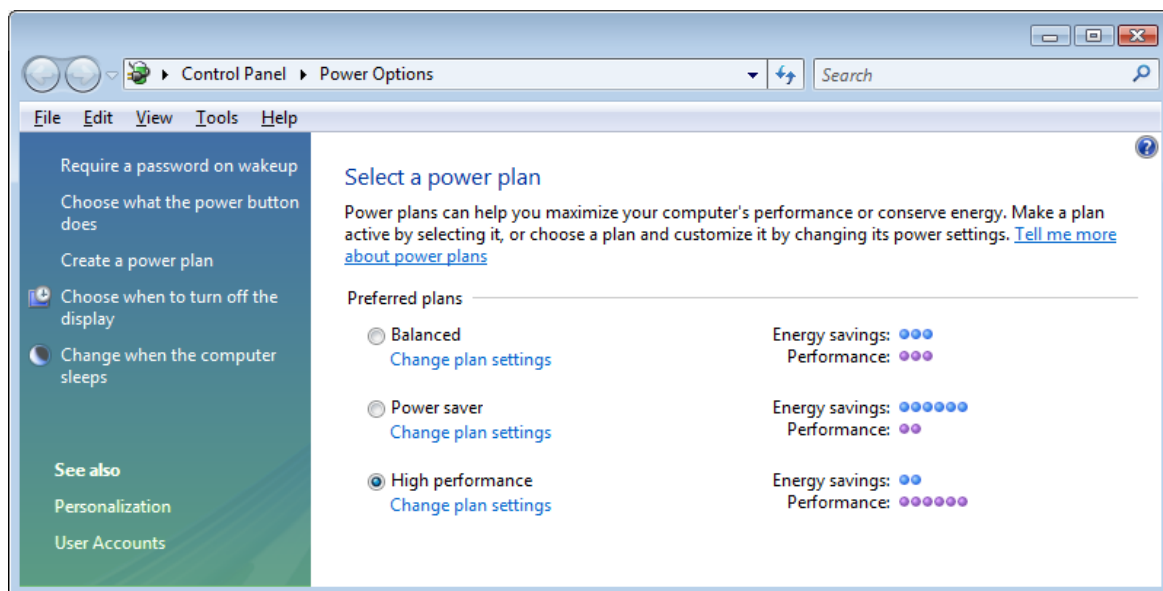


Figure 16 Local Group Policy Editor Dialog

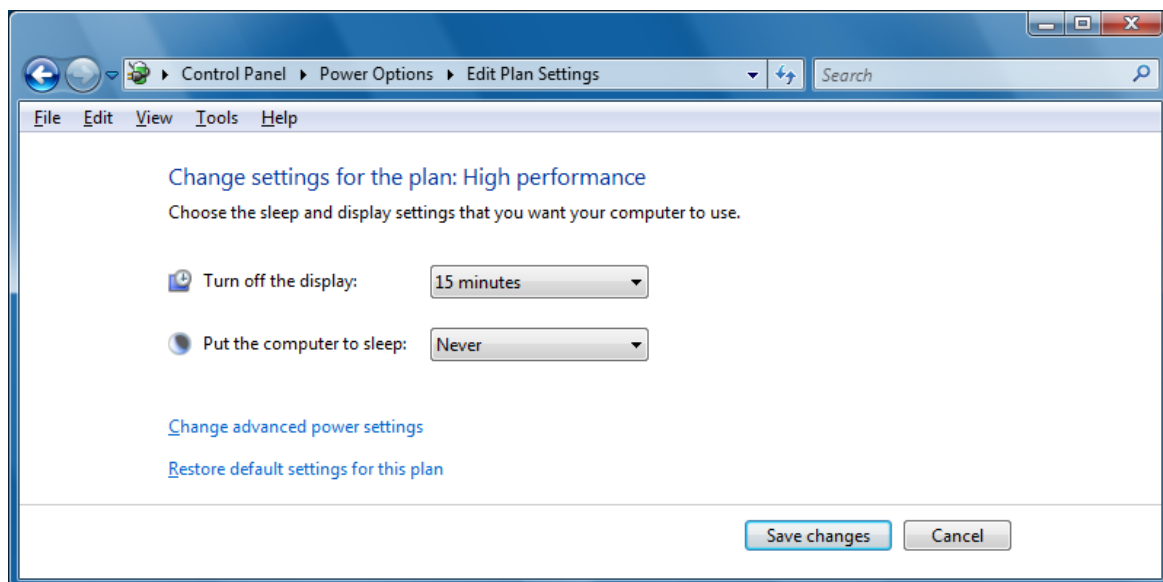
- [MUST] 6 Power Options: **Start > Control Panel > Power Options** (see [Figure 17](#) on page 28)
- a Enable power plan **High performance**
  - b Click **Change Plan settings** (see [Figure 18](#) on page 28)
  - c Set the option **Put the computer to sleep** to **Never**
  - d Click **Change advanced power settings** (see [Figure 19](#) on page 29)
  - e Save the changes.

## 2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows Vista Settings



**Figure 17** Selecting a power Plan



**Figure 18** Changing Settings for the Plan: High Performance

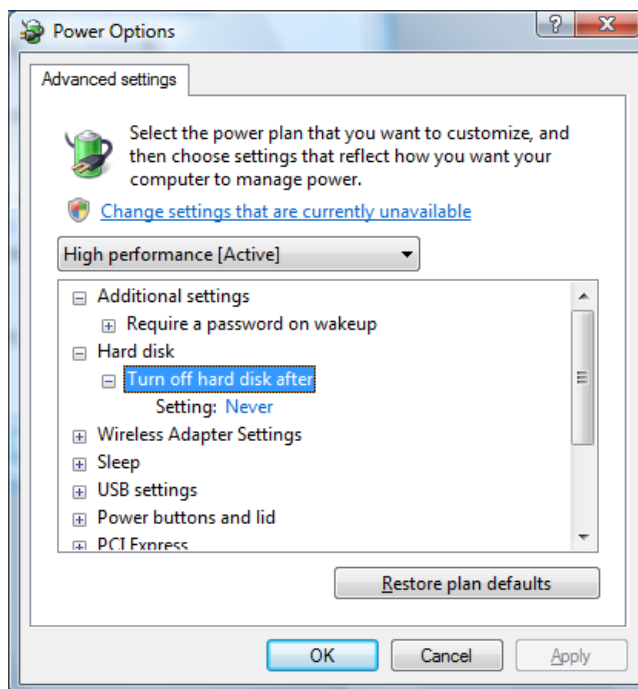


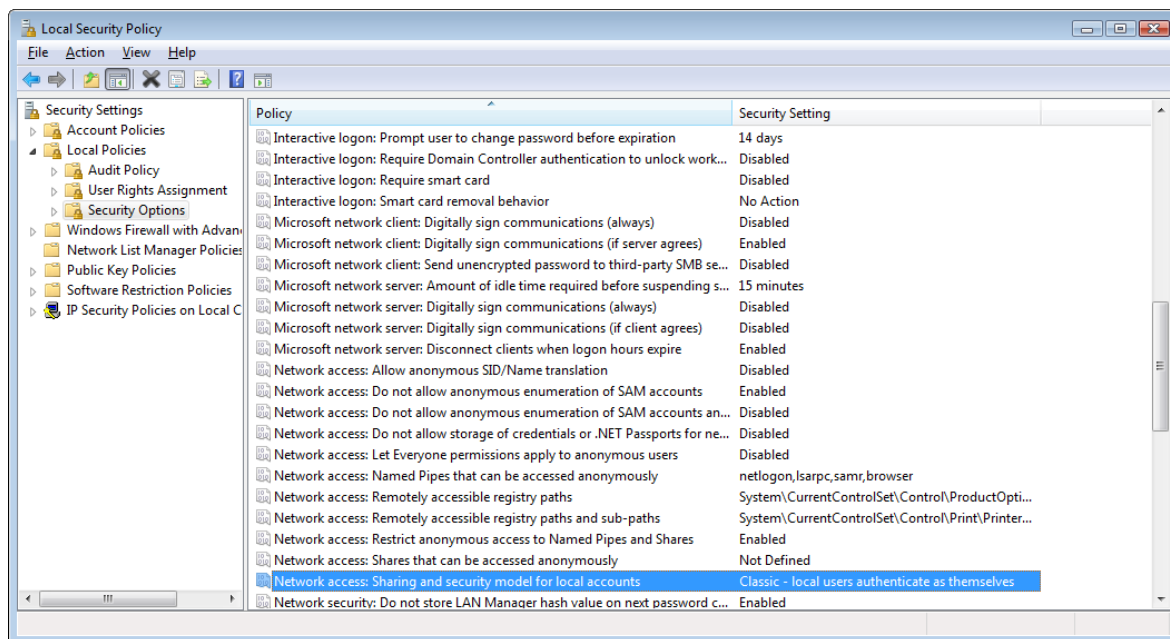
Figure 19 Power Options

- [MUST] 7 Local Security Policy: (**Start > Programs > Administrative Tools > Local Security Policy**)
- a Navigate to **Security Settings > Local Policies > Security Options**
  - b Double-click the following policy listed in the right hand panel: **Network Access: Sharing and security model for local accounts**

## 2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows Vista Settings

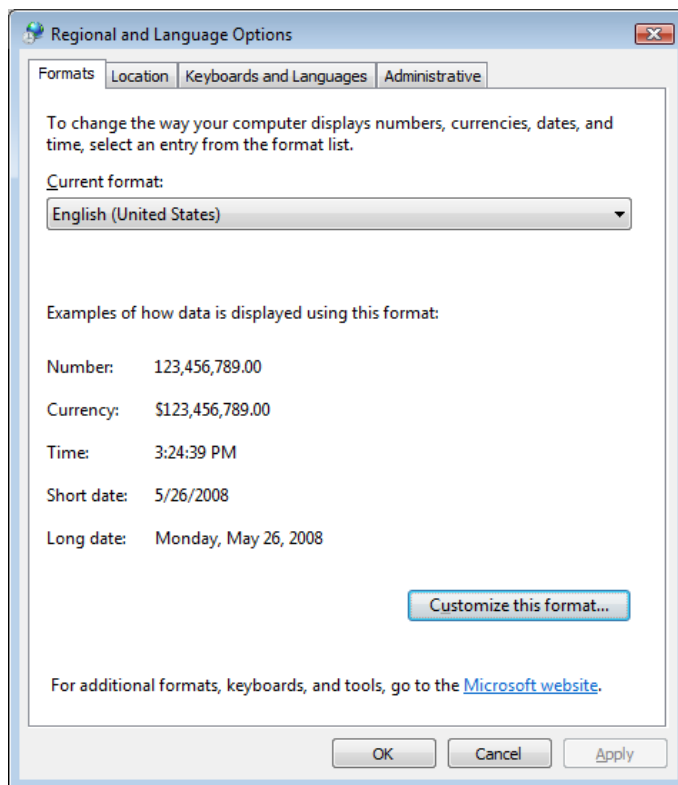
- c In the displayed dialog select the following item from the drop down list:  
**Classical - local users authenticate as themselves**



**Figure 20 Local Security Policy Dialog**

- [MUST] 8 Regional and Language Options: (**Start > Control Panel > Regional and Language Options**) (see [Figure 21](#) on page 31)

- a Regional options should be set to **English (United States)** from the drop down list.



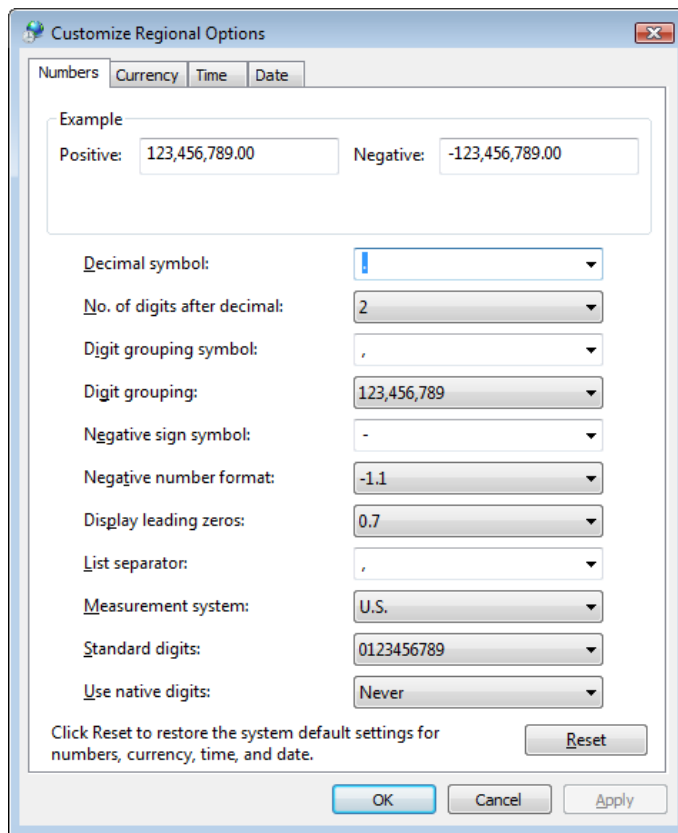
**Figure 21** Regional and Language Options Dialog

## 2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows Vista Settings

**b** If regional format other than **English (United States)** is used, the following settings are mandatory. The settings can be defined by clicking the **Customize this format** button (See [Figure 22](#) on page 32):

- Decimal symbol = . (point)
- Digit grouping symbol = , (comma)
- List separator = , (comma)



**Figure 22** Customize Regional Options Dialog



- c Language for non-Unicode programs: On the **Administrative** Tab click **Change system locale....** From the drop down list, select **English (United States)** (see Figure 23 on page 33).

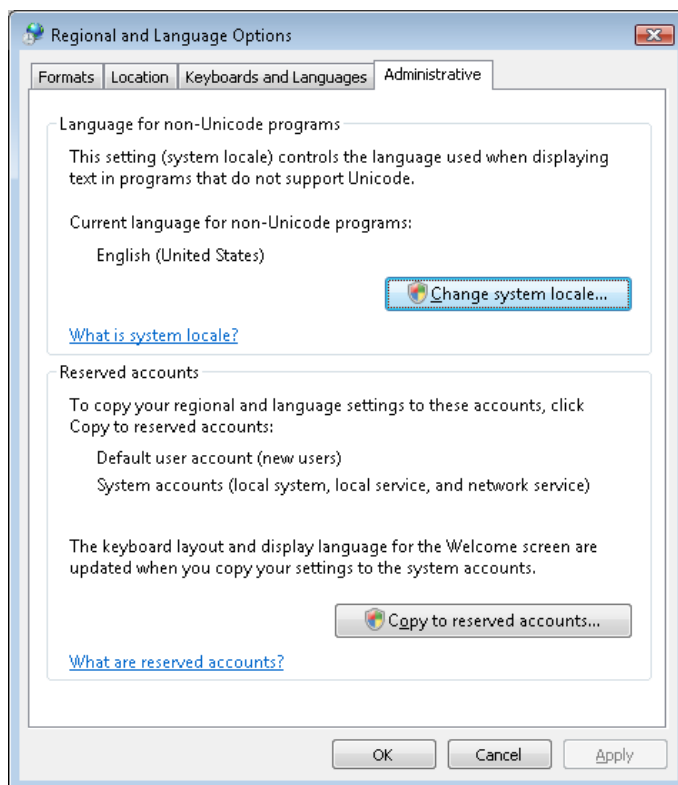


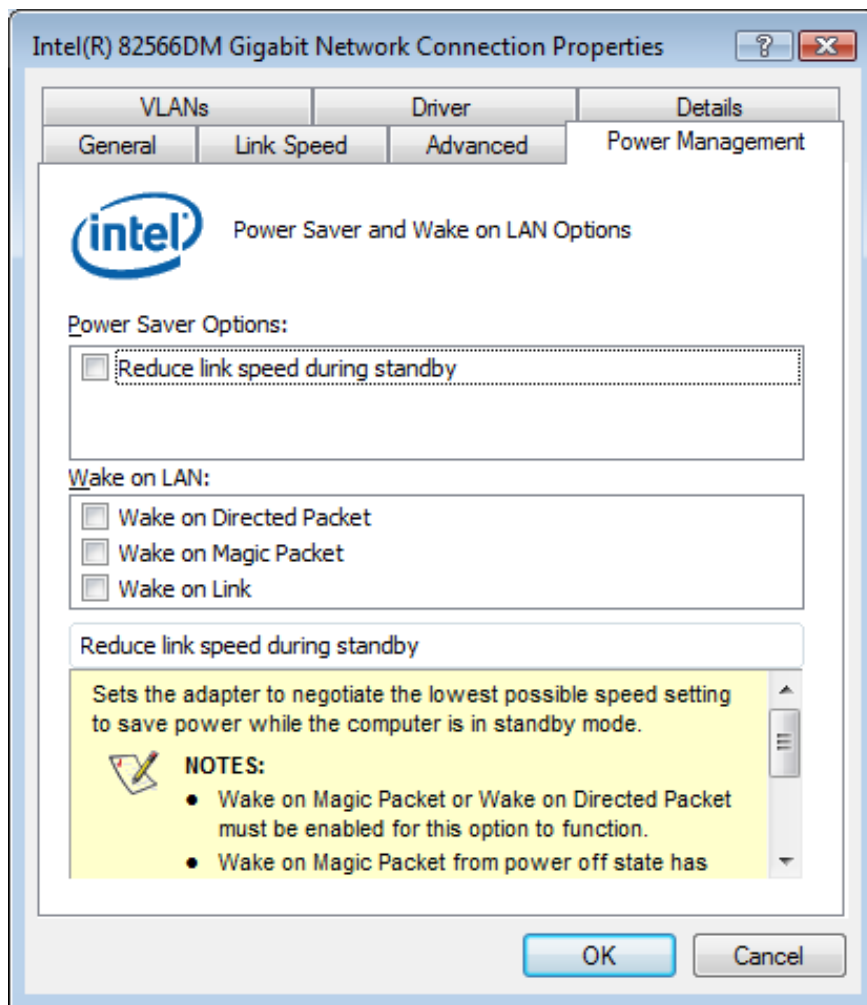
Figure 23 Regional and Language Options Dialog, Administrative Tab

- [MUST] 9 Power Management for network devices (From **Start** right-click **Network** > **Properties** > **Manage network connections** right-click **Local Area Connection** > **Properties** > **Configure**)

## 2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows Vista Settings

- a On the **Power Management** tab, disable all items (see Figure 24 on page 34).



**Figure 24** Network Connection Properties Dialog, **Power Management** Tab

[PERFORMANCE] 10 Screen layout: (right-click on **desktop** > **Personalize**):

- a Click on **Window Color and Appearance**
- b Click on **Open classic appearance properties for more color option.**

- c Press **Effects**. Disable all three items.

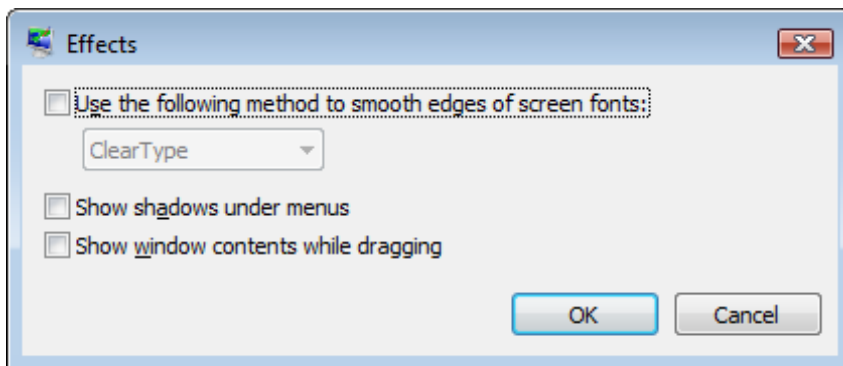
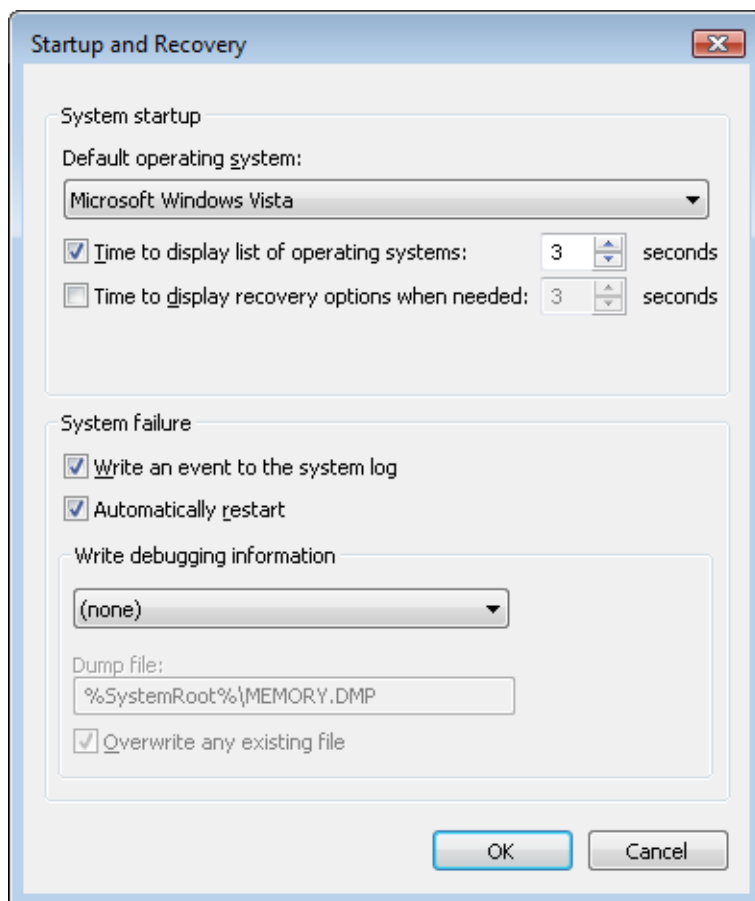


Figure 25 Effects Dialog

- [PERFORMANCE] 11 System Properties: **Start > Control Panel > System**: click **Advanced system settings**.
- a On the **Advanced** tab > **Performance** hit the **Settings** button
- **Advanced** tab > **Virtual Memory**: For optimum performance use the **Change** button to adjust the paging file size to a value of 2 to 3 times of the physical RAM on the PC.
  - **Data Execution Prevention** tab: Enable **Turn on DEP for essential Windows programs and services only**.
- b **Advanced** tab > **Startup and Recovery** > **Settings** button (see [Figure 26](#) on page 36):
- **System startup** section: Change both **Time to display ...** fields from **30** to **3** sec.
  - **System failure** section: Set **Write debugging information** to **none**

## 2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher

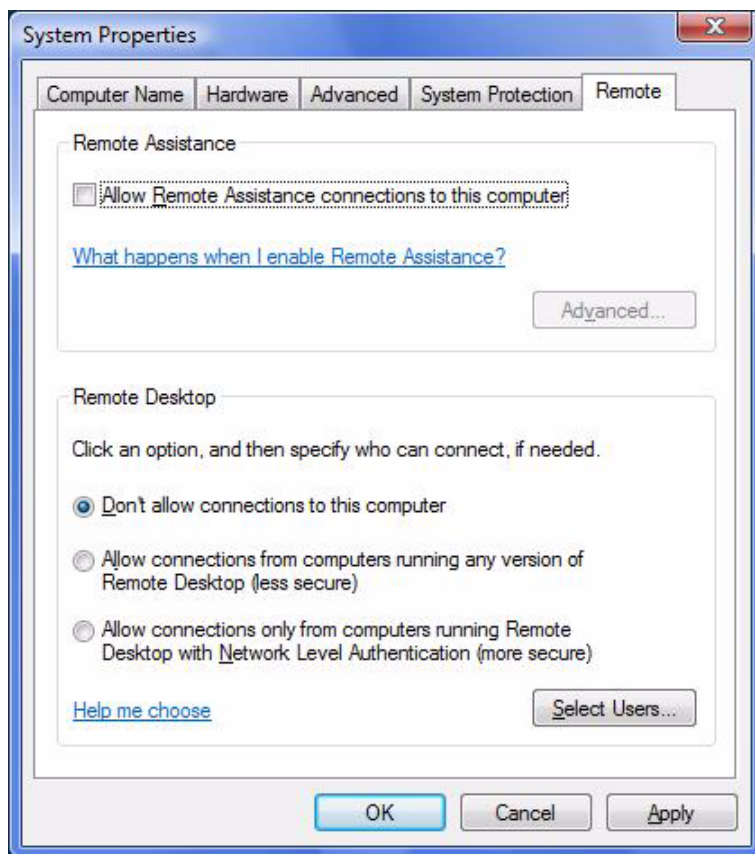
### Configure Windows Vista Settings



**Figure 26** Startup and Recovery Dialog

#### c Remote tab

- In the **Remote Assistance** section, disable **Allow Remote Assistance connections to this computer**.
- In the **Remote Desktop** section, enable **Don't allow connections to this computer**.



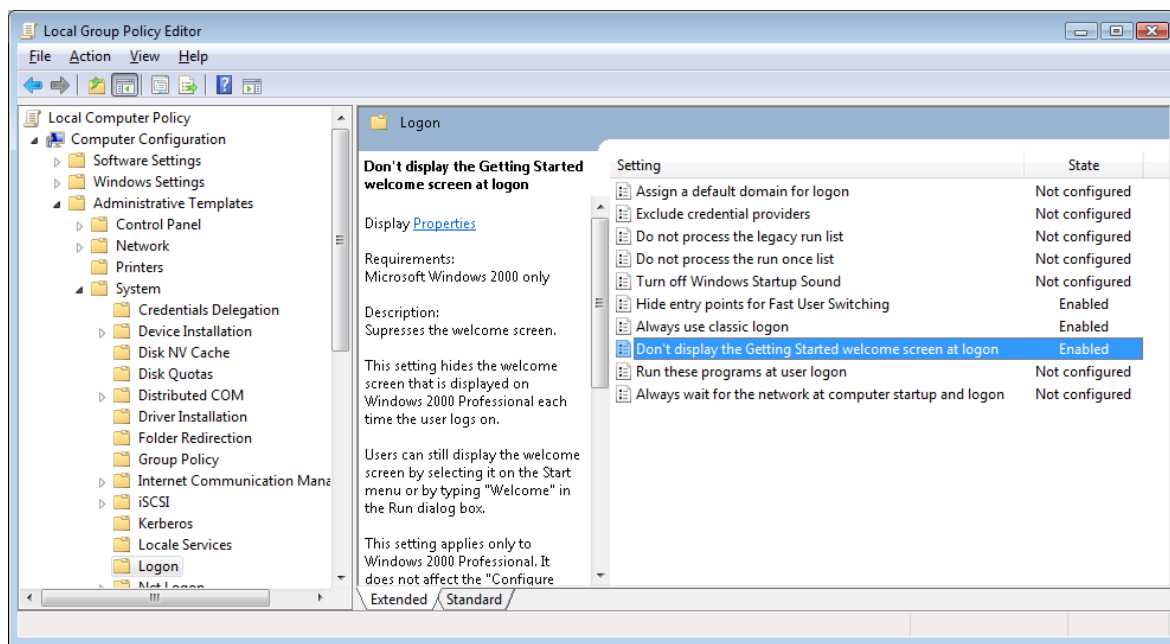
**Figure 27** System Properties Dialog

**12 Welcome Center (Start > search for 'gpedit.msc')**

- Navigate to **Local Computer Policy > Computer Configuration > Administrative Templates > System > Logon** (see [Figure 28](#) on page 38)
- Enable **Don't display the Getting Started welcome screen at logon**.

## 2 How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher

### Configure Windows Vista Settings



**Figure 28 Local Group Policy Editor Dialog**

#### [OPTIONAL]

- a Recycle Bin Properties: (right-click on desktop icon Recycle Bin) Enable the following options (See Figure 13 on page 20):
- **Custom size**; select a size corresponding to approximately 10% of the complete disk space for the drive
  - **Check Display delete confirmation dialog**

- b Repeat these steps for all drives of your computer.

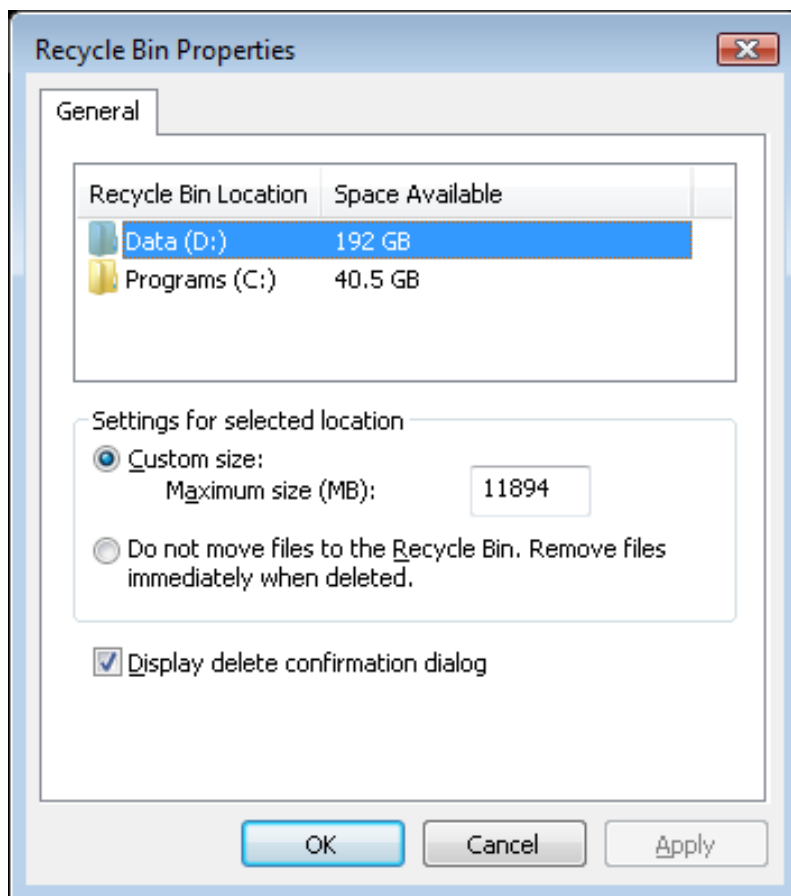


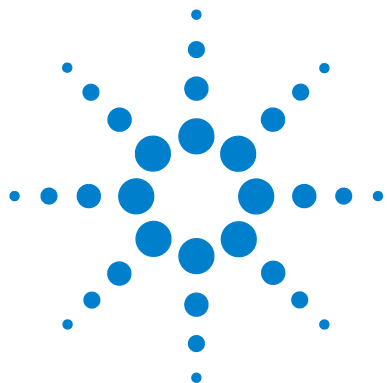
Figure 29 Recycle Bin Properties Dialog, General Tab

- [OPTIONAL] 13 Screen layout: (right-click on desktop > **View**) Disable **Align to grid**.

## **2    How to configure Windows Vista SP1 for use with Agilent ChemStation Rev. B.04.02 or higher**

### **Configure Windows Vista Settings**





## 3 Security Settings

Security Settings for LC/MSD and CE/MSD Systems	42
Internet Security Settings:	42
Advanced Network Settings:	44
Security Settings for LC/MSD Trap Systems	46
Internet Security Settings	46
Security Settings for GC 7890A Systems	51
Internet Security Settings	51
Security Settings for IO Library Suite 15	54
Internet Security Settings	54
Security Settings for Systems using Agilent Bootp Service	58
Internet Security Settings	58

This chapter summarizes all security settings for LC/MSD, CE/MSD, LC/MSD Trap, GC 7890A, IO Library Suite 15, and Agilent Bootp Service.



## Security Settings for LC/MSD and CE/MSD Systems

The MSD part of LC/MSD and CE/MSD systems requires exceptions for the Windows Firewall in case the firewall is enabled. Additionally, the communication with the MSD is sensitive to the order NICs in the **Adapters and Bindings** dialog. These settings are described in the following passages.

### NOTE

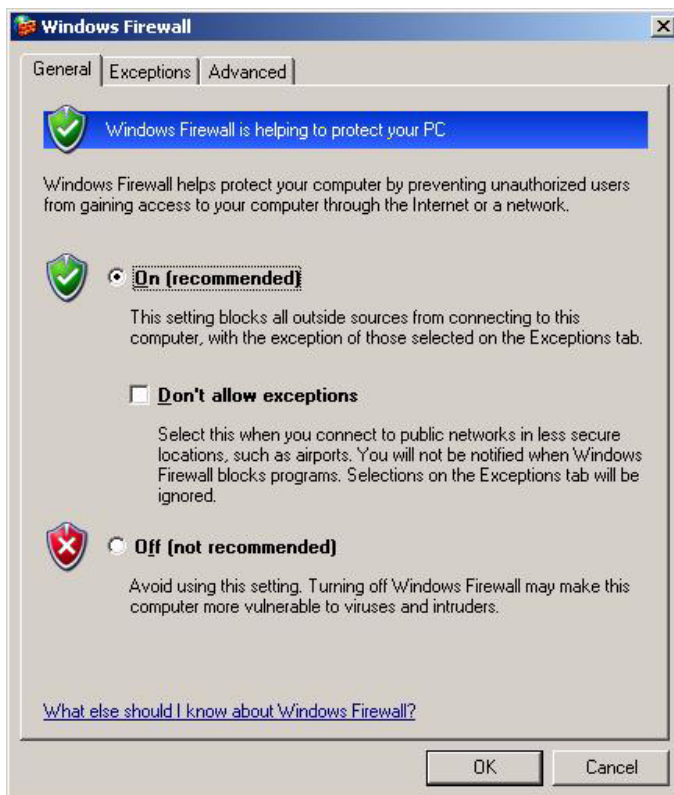
These settings should only be applied on PCs controlling LC/MSD or CE/MSD systems.

### Internet Security Settings:

**Start > Settings > Control Panel > Security Center**

- 1** Click **Manage security settings for Windows Firewall**
- 2** **General** tab (See [Figure 30](#) on page 43)
  - a** Select option **On (recommended)**

**b** Disable option **Don't allow exceptions**



**Figure 30** Windows Firewall Dialog, **General** Tab

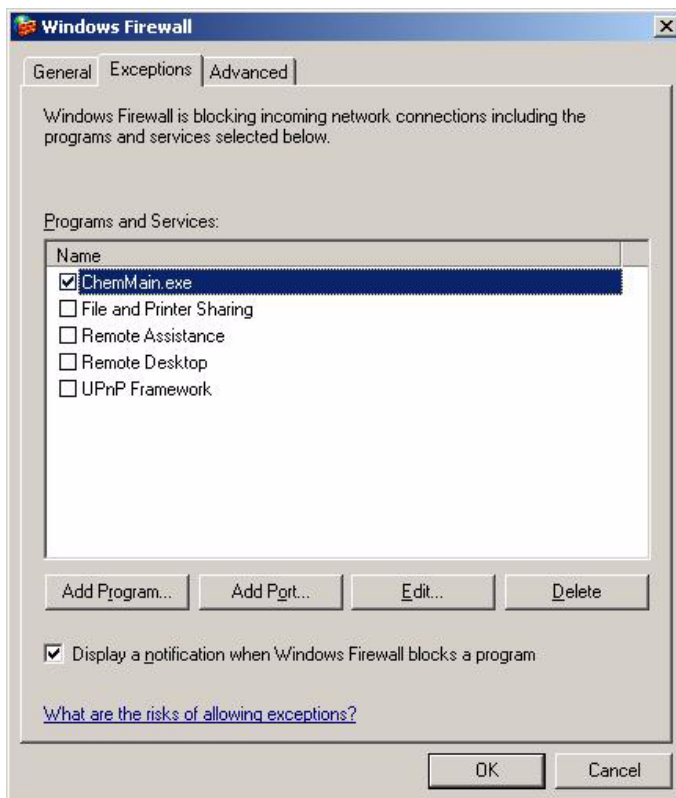
**3** **Exceptions** tab (See [Figure 31](#) on page 44)

- a** Select option **Display a notification when Windows Firewall blocks a program.**
- b** Add **ChemMain.exe** to the list of **Programs and Services**
- c** Enable an exception for this program.

### 3 Security Settings

#### Security Settings for LC/MSD and CE/MSD Systems

- d Disable exceptions for all other programs listed by default.



**Figure 31** Windows Firewall Dialog, **Exceptions** Tab

## Advanced Network Settings:

**Start > Settings > Control Panel > Network Connections**

- 1 Select menu **Advanced > Advanced Settings**

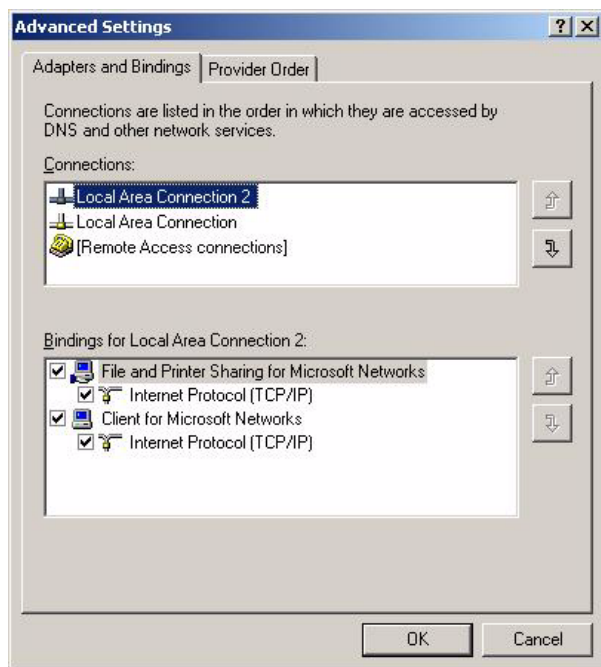
**2 Adapters and Bindings** tab (see [Figure 32](#) on page 45)

- a** Make sure that the Local Area Connection pertaining to the **LC/MS** or **CE/MS** NIC is the first item in the list of connections

**NOTE**

The names of your LAN cards may differ from those shown in the example. You can tell which LAN card is the Instrument LAN by comparing the IP addresses assigned to the LAN cards.

The LAN pertaining to the company intranet > internet will typically have an IP address assigned by organizations Static IP policy or by a DHCP server. Check with your network administrator.



**Figure 32** Advanced Settings Dialog, Adapters and Bindings Tab

## Security Settings for LC/MSD Trap Systems

The MSD part of LC/MSD Trap systems requires exceptions for the Windows Firewall in case the firewall is enabled. These settings are described in the following passages.

### NOTE

These settings should only be applied on PCs controlling LC/MSD Trap systems.

---

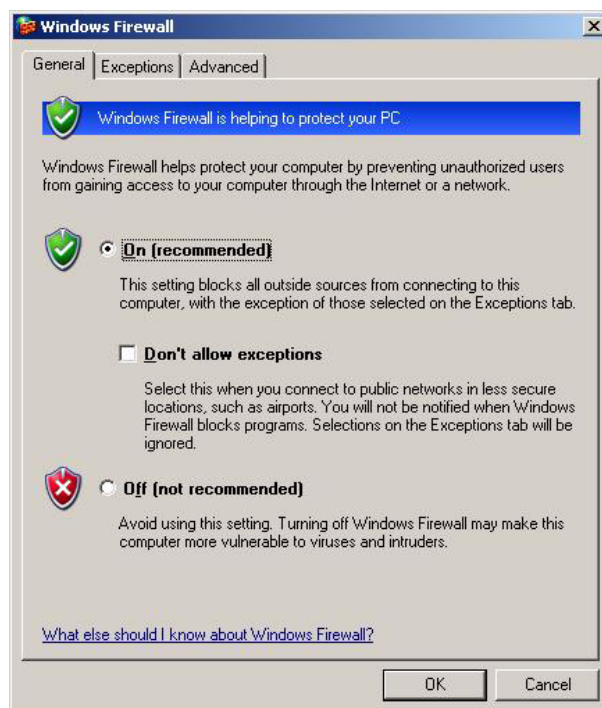
### Internet Security Settings

**Start > Settings > Control Panel > Security Center**

**1**   Click **Manage security settings for Windows Firewall**

2 On the **General** tab (See below):

- Select option **On (recommended)**
- Disable option **Don't allow exceptions**

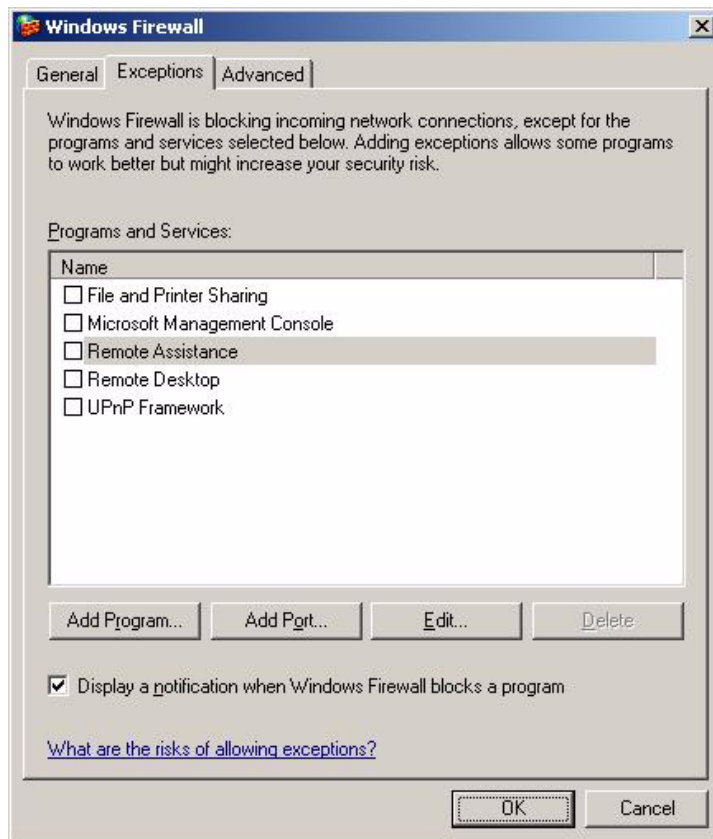


### 3 Security Settings

#### Security Settings for LC/MSD Trap Systems

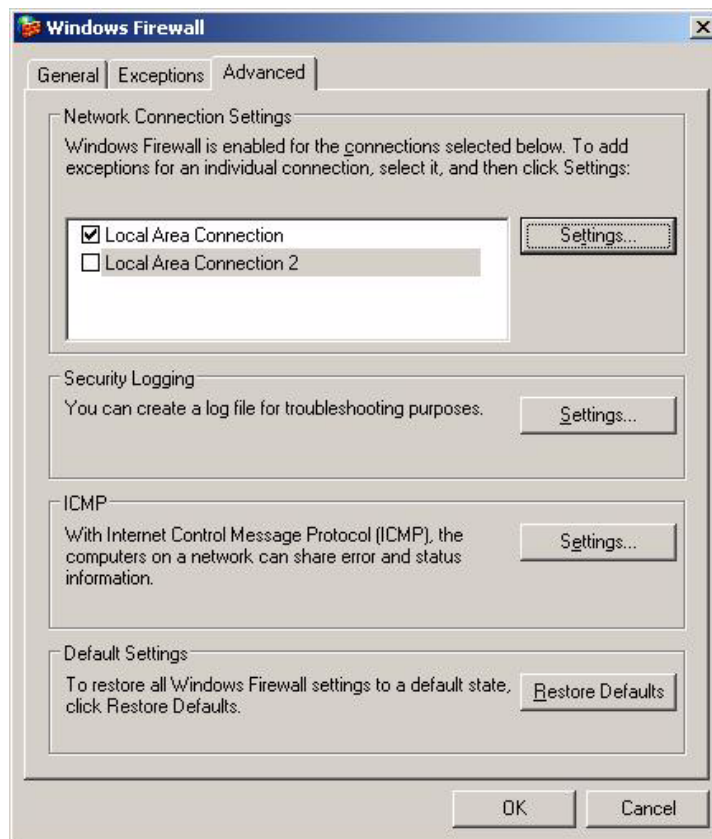
3 On the **Exceptions** tab (See below):

- Select option **Display a notification when Windows Firewall blocks a program.**





- 4 On the **Advanced** tab (see below): In the **Network Connection Settings** section, de-select the Local Area Connection pertaining to the LC/MS NIC. Typically, this is **Local Area Connection 2**.



### 3 Security Settings

#### Security Settings for LC/MSD Trap Systems

- 5 From the list of Resources select **Change the way Security Center alerts me** (See below)
- Disable **Automatic Updates**
  - Disable **Firewall**
  - Enable **Virus Protection**



#### NOTE

With these settings, you will not receive any alerts regarding the state of Windows Firewall. Be sure that you monitor the state of Windows Firewall yourself

## Security Settings for GC 7890A Systems

GC 7890A systems require exceptions for the Windows Firewall in case the firewall is enabled. These settings are described in the following sections.

### NOTE

These settings should only be applied on PCs controlling GC 7890A systems.

---

### Internet Security Settings

**Start > Settings > Control Panel > Security Center**

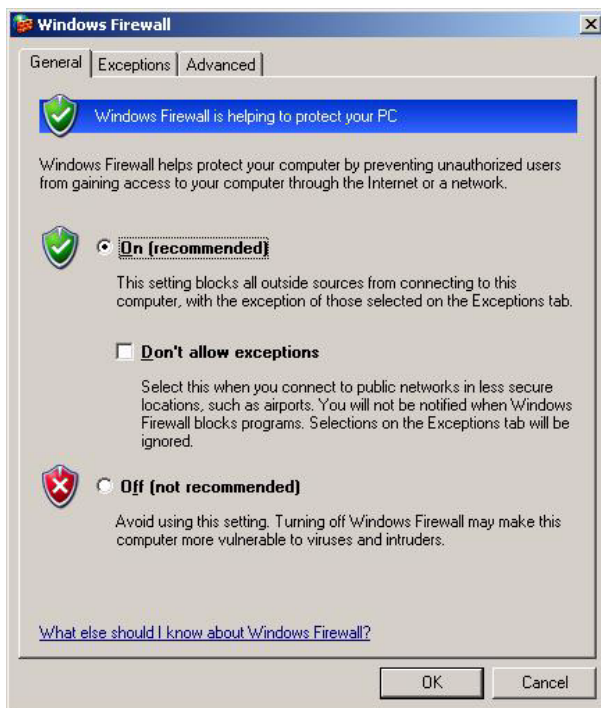
**1 Click Manage security settings for Windows Firewall**

### 3 Security Settings

#### Security Settings for GC 7890A Systems

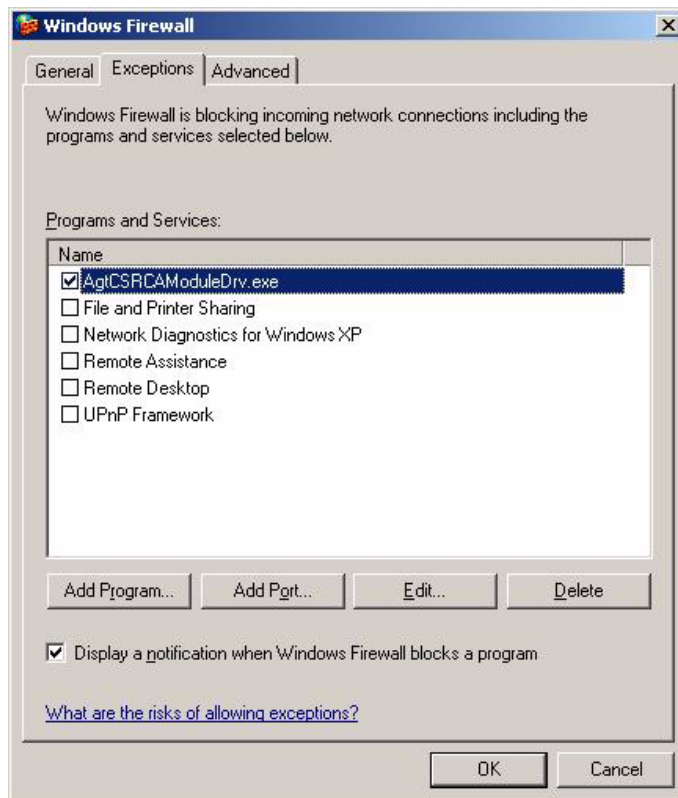
2 On the **General** tab (See below):

- Select option **On (recommended)**
- Disable option **Don't allow exceptions**



**3** On the **Exceptions** tab (See below):

- Select option **Display a notification when Windows Firewall blocks a program.**
- Add **AgtCSRCAModuleDrv.exe** to the list of **Programs and Services** and enable an exception for this program.
- Disable exceptions for all other programs listed by default.



## Security Settings for IO Library Suite 15

Using the IO Library Suite 15.0 requires exceptions for the Windows Firewall in case the firewall is enabled. These settings are described in the following sections.

### NOTE

These settings should only be applied on PCs having the IO Library Suite 15.0 installed.

---

### Internet Security Settings

**Start > Settings > Control Panel > Security Center**

**1**   Click **Manage security settings for Windows Firewall**

2 On the **General** tab (See below):

- Select option **On (recommended)**
- Disable option **Don't allow exceptions**



#### 3 Exceptions tab (See below)

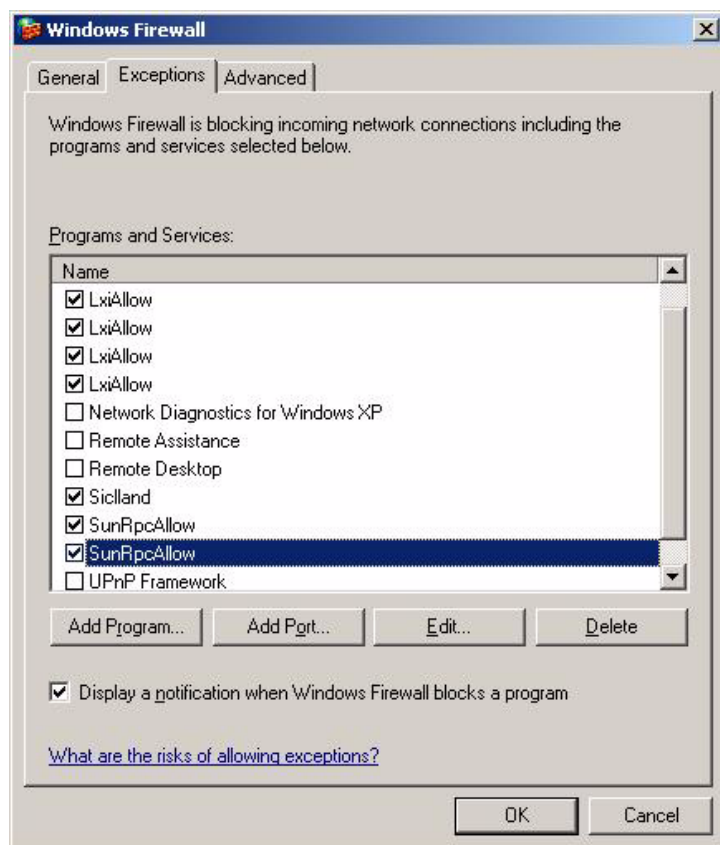
- Select option **Display a notification when Windows Firewall blocks a program.**
- Add **Siclland.exe** to the list of **Programs and Services**
- Enable an exception for this program.
- Add the following ports to the list of **Programs and Services**:
  - LxiAllow: 5044 (UDP)
  - LxiAllow: 5044 (TCP)
  - LxiAllow: 320 (UDP)
  - LxiAllow: 319 (UDP)
  - SunRpcAllow: 111 (UDP)
  - SunRpcAllow: 111 (UPD)
- Enable exceptions for these ports.
- Disable exceptions for all other programs listed by default.

#### NOTE

The above listed programs and ports are added to the list of exceptions for the firewall during installation of the IO Library Suite 15.0 per default.

---





### 3 Security Settings

#### Security Settings for Systems using Agilent Bootp Service

## Security Settings for Systems using Agilent Bootp Service

If you use Agilent Bootp Service for administration of IP addresses for Agilent instruments on a LAN, your system requires exceptions for the Windows Firewall in case the firewall is enabled. These settings are described in the following passages.

#### NOTE

These settings should only be applied on PCs using Agilent Bootp Service.

---

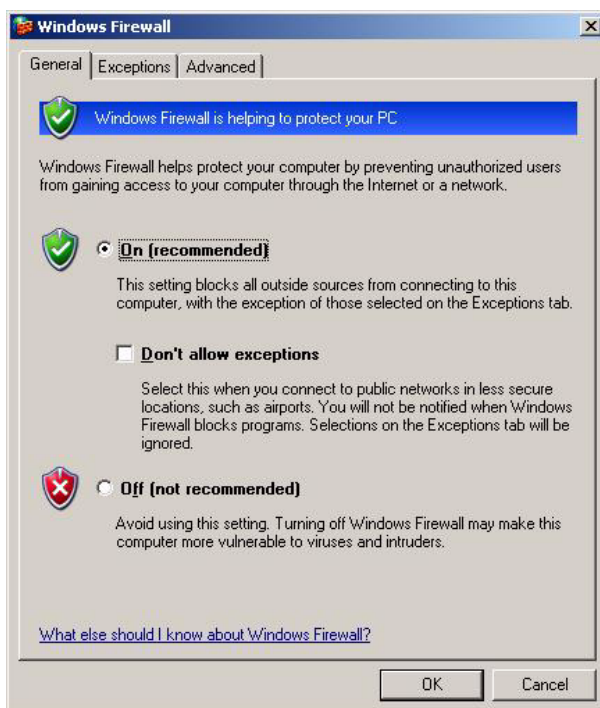
### Internet Security Settings

**Start > Settings > Control Panel > Security Center**

**1 Click Manage security settings for Windows Firewall**

**2** On the **General** tab (See below):

- Select option **On (recommended)**
- Disable option **Don't allow exceptions**

**3** On the **Exceptions** tab (See below):

- Select option **Display a notification when Windows Firewall blocks a program.**
- Add **bootpwin.exe** to the list of Programs and Services and enable an exception for this program.

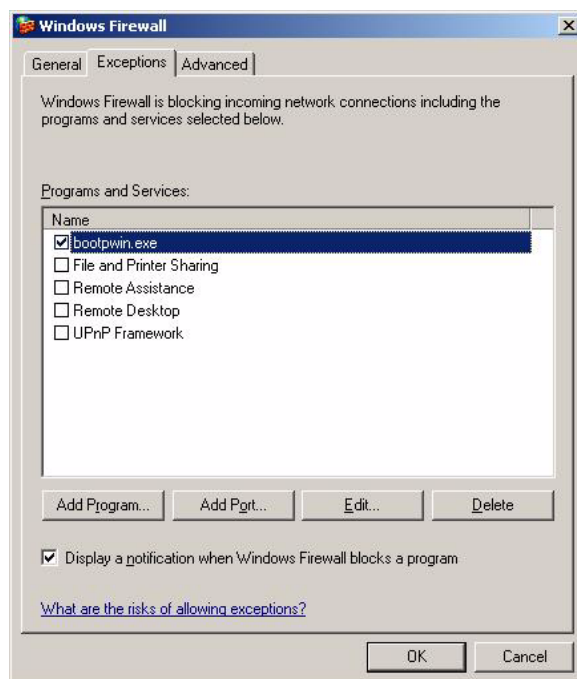
**NOTE**

The bootpwin.exe can be found in the folder c:\Program Files\Common Files\Agilent Shared\BootP\bin.

### 3 Security Settings

#### Security Settings for Systems using Agilent Bootp Service

- Disable exceptions for all other programs listed by default.





## 4 Additional Modifications

Install ChemStation [62](#)

Profiles and Group Policies to run ChemStation as PowerUser/User [62](#)

These modifications can only be performed using an Administrator user account



## Install ChemStation

- 1 Install the ChemStation Software to C:\Chem32 (logged on with **Administrator** user account).

## Profiles and Group Policies to run ChemStation as PowerUser/User

The ChemStation system needs to be installed using an operating system Administrator user account. To run the system with the configured options outlined in this document, all Users and PowerUsers should use the same settings.

Some of the outlined settings can be simplified by using the Windows Group Policy or by copying user profiles in order to simplify the User/PowerUser setup. But some changes (e.g. performance settings) can only be set manually using the Administrator account.



## 5 Maintaining the PC's File System

Scanning and Repairing NTFS Volumes	64
Defragmenting an NTFS Volume	66
Scanning for Viruses	68
Cleaning up Left-Over Temporary Files	69
Performing Backups	71
Windows XP Backup	71
Automating and Scheduling Windows XP Backup	71
Travan Tape Drives	72
Digital Audio Tape (DAT) Drives	72
Magneto-Optical (MO) Disk Drives	72
Recordable CD-ROM	73
Recordable DVD	73
Network Servers	73

To help to optimize the performance of your ChemStation system it is important that you schedule routine maintenance (e.g. deleting unnecessary files). The following instructions should be used as a part of your routine maintenance schedule.

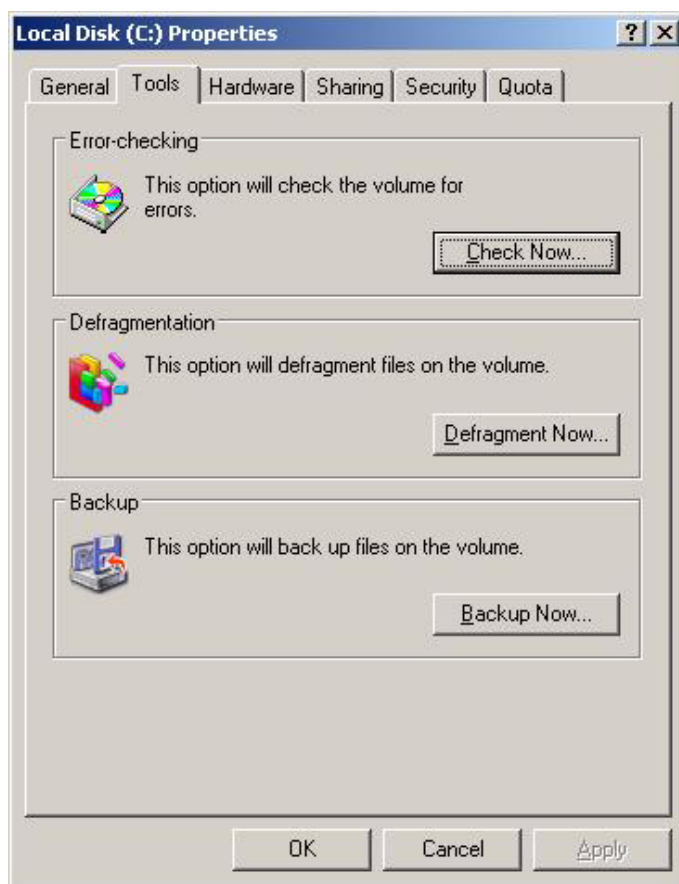
### NOTE

You will need Administrator capabilities to perform these tasks.



## Scanning and Repairing NTFS Volumes

- 1 Double-click **My Computer** on the desktop.
- 2 Select the C: drive.
- 3 Select **File > Properties**.
- 4 From the **Tools** tab, click **Check Now** in the **Error-checking** section.



- 5 Select both **Check disk** options **Automatically fix file system errors** and **Scan for and attempt recovery of bad sectors**.



- 6 Click the **Start** button.



- 7 The warning message **The disk check could not be performed because the disk check utility needs exclusive access to some Windows files on the disk. These files can be accessed only by restarting Windows. Do you want to schedule this disk check to occur the next time you restart the computer?** is displayed. Press **Yes**.



- 8 Restart the computer. During startup, **Check Disk** will be performed.
- 9 Repeat the steps outlined above for the other drives on your computer.

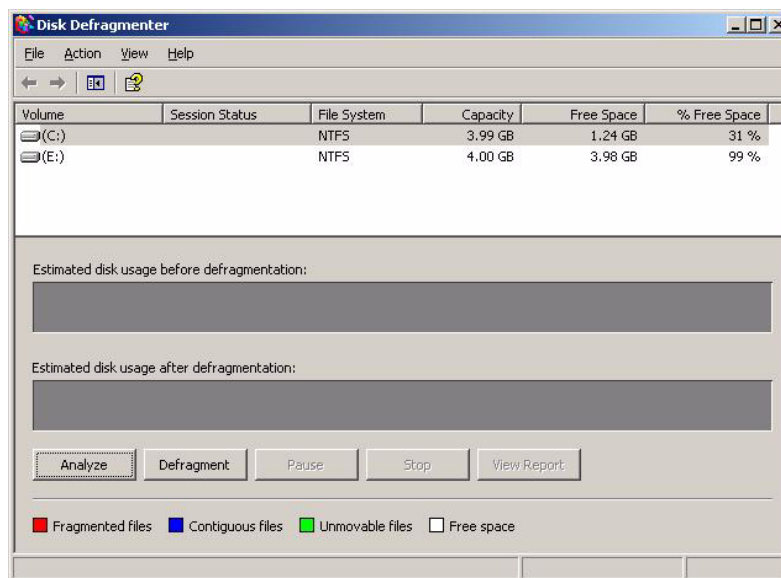
## Defragmenting an NTFS Volume

Compared to the FAT file system, fragmentation of files on an NTFS volume is greatly reduced. By design, fragmentation only occurs on an NTFS volume if a file increases in size after it is on the drive. This means that backing up a volume to tape and restoring it from tape will result in an unfragmented volume.

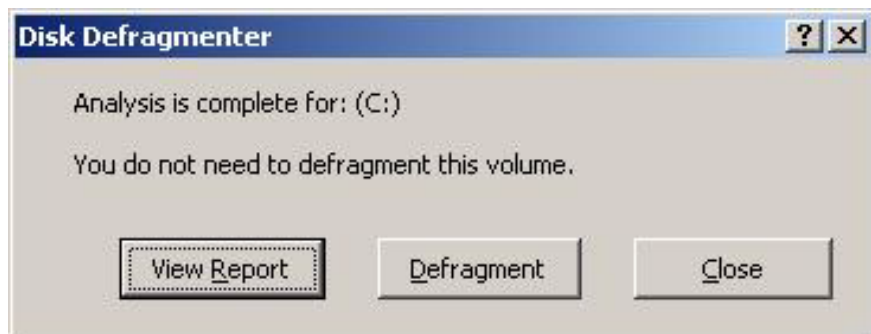
Windows XP Professional includes a defragmentation utility.

Perform the following steps to use the defragmentation utility provided by Microsoft Windows:

- 1 Select **Start > Programs > Accessories > System Tools > Disk Defragmenter**.
- 2 Select the drive (e.g. C:) you want to analyze and click the **Analyze** button.



- 3 If the result of the analysis indicates that the drive needs defragmentation, click **Defragment**. Otherwise, defragmentation is not necessary at this time, and you can click **Close**.



**CAUTION**

Defragmentation of your harddisk while ChemStation is acquiring data can cause loss of data.

→ Never defragment your hard disk drive during data acquisition

- 4 Repeat these steps for the other drives on your system.

## Scanning for Viruses

If the Agilent ChemStation computer is connected to the network in order to communicate with other systems (LAN, modem, BBS, etc.) or if you share files with other computer users, we recommend scanning the drives for computer viruses. If you download programs from the internet or exchange documents or programs through e-mail or flexible disks, a virus-check utility is mandatory.

Many different utilities are available for virus scanning. Many of these utilities also come with periodic updates as new viruses are discovered. You have to be aware that these utilities will degrade the performance of the hard disk when scanning for viruses. Additionally, other side effects may influence the behavior of your system.

Agilent ChemStation was tested to work together with Symantecs Norton Antivirus. We recommend that you scan all disks of your ChemStation computer at least once per week for viruses. It is essential that you perform the LiveUpdate to obtain the latest virus definitions as provided by Symantec as reaction on new viruses.

---

### NOTE

Never perform a virus scan during data acquisition, as this will degrade the performance of the hard disk and the acquired data might not be written to the hard disk fast enough, causing a power fail or buffer overrun message in the instrument log book and possible loss of data.

---

### NOTE

With Norton AntiVirus versions prior to Norton Antivirus 2005, Windows Security Center will be aware that you have Norton AntiVirus installed, but it will not be able to determine its working status. Please either refer to Windows for help on how to disable the Security Alert for Virus Protection and monitor Norton AntiVirus yourself or refer to Symantec support to obtain an update which adds compatibility to Windows Security Center.

---

## Cleaning up Left-Over Temporary Files

Occasionally, temporary files may accumulate in the directory specified by the TEMP environment variable. These files generally are left open when Windows is abnormally terminated, for example, by powering your computer down without closing Windows first. The Windows temporary files are named ~XXXXXXX.TMP, where XXXXXXXX are characters and numbers produced by the program that created the temporary file. To recover the temporary space, you should delete these files after closing all currently running applications.

To determine which directory is currently being used for temporary files, type **SET**

at the command prompt. This will echo back the current settings for all user and system environmental variables.

- 1 Select **Start > Programs > Accessories > System Tools > Disk Cleanup**.
- 2 Select the drive (e.g. C:) you want to clean up.

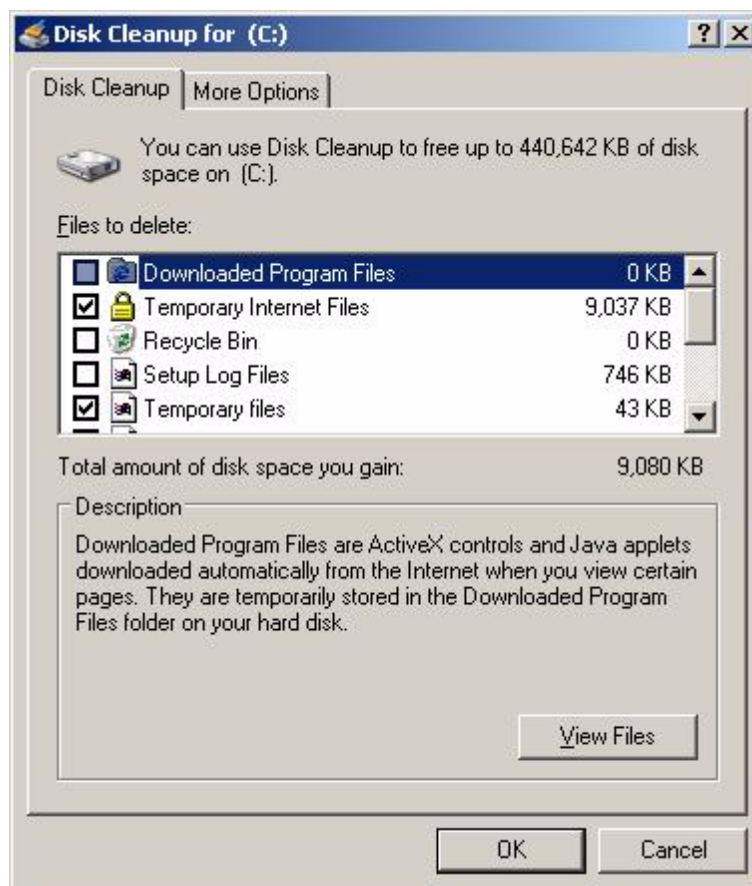


- 3 Select **Temporary Files** and **Temporary Internet Files**. You may select other types of files to delete, depending on your understanding of these file types and the way you use your PC. It is possible to delete vital files with the Disk

## 5 Maintaining the PC's File System

### Cleaning up Left-Over Temporary Files

Cleanup utility, so do not delete file types that you do not understand. Do not select the option **Compress old files** on a ChemStation computer. Press **OK**.



- 4 Repeat these steps for the other drives on your system.

## Performing Backups

In order to protect your valuable data, an appropriate backup strategy is mandatory. We recommend to archive your data files in regular intervals. If your data is no longer required to be available online, you should also archive them and remove them from your hard disk. This will free up valuable storage space on your computers hard disk as data acquired from a diode array or mass spectrometer detector may easily exceed several megabytes in size.

### Windows XP Backup

Windows XP Professional includes compatible backup programs that support many standard tape devices. The backup utility also allows for backing up to a single file, which can then be placed on an offline medium. Both backup utilities allow the Windows Registry to be backed up as well as data.

### Automating and Scheduling Windows XP Backup

Windows XP allows automation and scheduling of Backup jobs through the use of batch files and the Scheduler service. The Scheduler is available by default for Windows XP.

#### CAUTION

Do not perform a backup while ChemStation is acquiring data.

This will degrade the performance of the hard disk and the acquired data might not be written to the hard disk fast enough, causing a power fail or buffer overrun message in the instrument log book and possible loss of data. It may also result in inconsistencies in the file structure stored on the backup medium.

→ Be sure to perform any backup with a Windows-based backup utility during times where no data acquisition is scheduled.

## Travan Tape Drives

Tape drives are the most common backup devices available today. The IDE tape drives combine lowest initial hardware cost with acceptable performance (up to 4 GB > hour). Travan tapes are a reasonable backup solution for most laboratories that run their Agilent ChemStation on single workstation PCs. The minimum storage capacity per tape is currently around 2.5 GB of uncompressed data.

You will need an appropriate backup utility that supports the drive.

### NOTE

Never run an MS-DOS-based tape backup utility from Windows. This may result in corrupt file information on the tape.

---

## Digital Audio Tape (DAT) Drives

Digital audio tape (DAT) drives are suited to handle large amounts of data (storage capacity is typically 2 to 6 GB or more), but require a SCSI interface installed in the PC.

## Magneto-Optical (MO) Disk Drives

MO disk drives are high storage capacity devices (at least 1.3 GB) connected externally to a SCSI interface that must be installed in your PC. MO disk drives are capable of reading and writing *write-once* media and rewritable disks.

No specific backup software is required. The supporting drivers are shipped with the operating system or the device and allow for accessing the additional MO disk as if it was a floppy disk.

### NOTE

If the rewritable disk is formatted with NTFS, it cannot be hot-swapped, i.e. ejected and exchanged while the system is running. To change disks, you need to shut down Windows.

---



## Recordable CD-ROM

CD-R (CD-Recordable) systems allow you to record up to 700 > 800 MB of data on a single CD-R disk. The CD reader > recorder is usually connected to your PC the IDE interface. The CD-R media have a very long life, making them ideally suited to archiving. The CD-R disks can be read by other computers fitted with CD-ROM drives and appropriate software.

## Recordable DVD

Recordable DVDs are available in several formats, e.g. DVD+R and DVD-R. They allow you to record up to 4.7 GB (Single Layer) > 8.5 GB (Double Layer) of data on a single DVD. The DVD reader > recorder is usually connected to your PC the IDE interface. DVD±R disks have life times comparable to CD-ROM disks. In contrast to some other DVD formats, DVD±R disks are not rewritable and thus are especially suited for long-term archiving. The DVD±R disks can be read by other computers fitted with DVD drives and appropriate software.

## Network Servers

Network servers can also be used for data backup purposes, provided that the network system administrator has implemented an appropriate backup strategy for data stored on the servers disk. One strategy is to allocate a portion of the servers hard disk space for your Agilent ChemStation. This portion on the server is called a *share* which you can use for your standard file operations (access, copy, evaluate files) within Windows.

The advantage of this approach is that backup will be performed centrally by a system administrator for all users that have accounts (logon capabilities) on the system.

### NOTE

Using a 3.5-inch floppy disk drive is not a reasonable backup solution for the Agilent ChemStation.

# Index

## A

anti virus 6, 22, 68

## B

backup  
strategy 71

## C

CD-ROM  
recordable 73  
configure settings  
Windows Vista 23  
Windows XP 7

## D

defragmentation 66  
digital audio tape drives 72  
disc clean-up 69  
drives  
for backup 71

## F

folder options  
Windows Vista 25  
Windows XP 9

## M

magneto-optical disk drives 72

## N

network  
server 73  
NTFS volumes 64

## P

Power Options  
Windows XP 9  
power user 62

## R

recordable CD-ROM 73  
repairing  
NTSF 64

## S

security settings  
Bootp service 58  
GC 7890A 51  
LC/MSD and CE/MSD 42  
security settings  
IO library 54  
LC/MSD trap 46  
security 6  
server  
network 73

## T

temporary files 69  
travan tape  
drive 72

## U

user profiles 62

## V

virus  
scan 68

## W

Windows Vista  
configure 23  
installation 22  
Windows XP  
configure 7  
installation 6  
write-once media 72



## **In This Book**

This manual describes how to configure a non-Agilent PC Bundle system.

The first two chapters of this document, identify and describe all parameters necessary to configure a non-Agilent PC Bundle system as well as important settings such as Internet Security.

The third and fourth chapter, describe instrument specific security settings and additional configuration tasks, respectively.

The last chapter, describes how to maintain your computer to keep its performance in an optimal status.

© Agilent Technologies 2004, 2005-2009

Printed in Germany  
07/09



G2170-90134



**Agilent Technologies**