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Welcome to the Workgroup Addendum

The AGCC Workgroup functionality provides additional options for organizing your data. If you install AGCC 3.0 on a computer running Windows Server 2003 Standard R2, the Workgroup functionality allows you to connect to AGCC Portal on that computer from any computer running a compatible browser. This enables you to register arrays and organize data using a computer on a different operating system or on a different domain.

**NOTE:** AGCC Workgroup refers to a flexible configuration of AGCC computers, not to the Windows concept of workgroups or domains. “Workgroup” is intended to distinguish the multiple computer configuration from the single machine “Standalone” configuration.

This addendum covers the workgroup functionality which is available when the AGCC software is installed on a computer running Windows Server 2003 Standard R2 with IIS 6.


Chapter 3, *Upgrading to AGCC 3.0 on Windows Server 2003* on page 23 describes the process of upgrading AGCC 1.0, 1.1, or 2.0 to AGCC 3.0.

Chapter 4, *Workgroup Operation* on page 29 describes the differences in operation between AGCC Workgroup and AGCC Standalone.

See the *AGCC User Manual* for more general information on using the AGCC software.

### Conventions Used in This Guide

This addendum provides detailed instructions for installing AGCC on a computer running Windows 2003 Standard R2 (AGCC Workgroup). It also provides information on the differences between using AGCC Portal on Windows XP and using AGCC Portal on Windows Server 2003.

Various conventions are used throughout the manual to help illustrate the procedures described. Explanations of these conventions are provided below.

### Steps

Instructions for procedures are written in a step format. Immediately following the step number is the action to be performed. Following the response additional information pertaining to the step may be found and is presented in paragraph format. For example:

1. Click Yes to continue.
   - The Delete task proceeds.
   - In the lower right pane the status is displayed.
   - To view more information pertaining to the delete task, right-click Delete and select View Task Log from the shortcut menu that appears.

### Font Styles

Bold fonts indicate names of commands, buttons, options or titles within a dialog box. When asked to enter specific information, such input appears in italics within the procedure being outlined. For example:

1. Click the Find button or select Edit → Find from the menu bar.
   - The Find dialog box appears.

2. Enter AFFX-BioB-5_at in the Find what box, then click Find Next to view the first search result.
3. Continue to click **Find Next** to view each successive search result.

**Screen Captures**

The steps outlining procedures are frequently supplemented with screen captures to further illustrate the instructions given. The screen captures depicted in this manual may not exactly match the windows displayed on your screen.

**Additional Comments**

![TIP: ](image)

**TIP:** Information presented in Tips provide helpful advice or shortcuts for completing a task.

![NOTE: ](image)

**NOTE:** The Note format presents important information pertaining to the text or procedure being outlined.

![IMPORTANT: ](image)

**IMPORTANT:** The Important format presents important information that may affect the accuracy of your results.

![CAUTION: ](image)

**CAUTION:** Caution notes advise you that the consequence(s) of an action may be irreversible and/or result in lost data.

![WARNING: ](image)

**WARNING:** Warnings alert you to situations where physical harm to person or damage to hardware is possible.

**Resources**

**Online Documentation**

This manual is available in Adobe Acrobat format (as *.pdf files) on the CD or download package for AGCC and is readable with the Adobe® Acrobat Reader® software, available at no charge from Adobe at [http://www.adobe.com](http://www.adobe.com).

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Installing AGCC 3.0 on Windows Server 2003

If AGCC software is installed on a computer running Windows Server 2003 Standard R2 with IIS 6, the computer can be connected to a Windows network to provide AGCC Workgroup functionality. Workgroup Functionality allows remote operation of AGCC Portal for sample registration and data location via an HTTPS connection, in addition to the network functionality available to AGCC on Windows XP.

AGCC with Workgroup Functionality cannot be used to control instruments or track gridding.

NOTE: AGCC Workgroup refers to a flexible configuration of AGCC computers, not to the Windows concept of workgroups or domains. “Workgroup” is intended to distinguish the multiple computer configuration from the single machine “Standalone” configuration.

Examples of different configurations for AGCC with Windows network are given in Sample Configuration for AGCC on Windows Server 2003 on page 9

Installing and configuring AGCC on a computer running Windows Server 2003 Standard R2 with IIS 6 requires the following sets of steps:

1. Installing the software.
   See Installing AGCC 3.0 on Windows Server 2003 on page 11.

2. Configuring AGCC Workgroup functionality and making sure the network connections and permissions are set up properly.
   See Configuring AGCC with Workgroup Functionality on page 18.

3. Setting up a remote data root.
   See Adding a Remote Data Root on page 21.

After installing and configuring the software, you can connect to AGCC Portal installed on Windows Server 2003 from a remote computer. For more information, see Connecting to AGCC Portal on a Server on page 21.

NOTE: Instructions for upgrading from AGCC 1.0, 1.1, or 2.0 to AGCC 3.0 are given in Chapter 3, Upgrading to AGCC 3.0 on Windows Server 2003 on page 23.

Sample Configuration for AGCC on Windows Server 2003

This configuration provides network data storage, and uses AGCC on Windows Server 2003 Standard R2 to allow remote users to create sample files and locate data.

If a computer with AGCC on Windows Server 2003 with IIS 6 is connected to the network data storage, remote computers can link to AGCC on Windows Server 2003 using HTTPS to:

- Create and edit Sample (.ARR) files
- Search the data on the network data storage
- Perform other data management tasks
Computer Roles for Network Storage with AGCC on Windows Server 2003

Network Storage with AGCC on Windows Server 2003 configuration supports the following additional computer roles:

- **AGCC on Windows Server 2003**
- **Remote Computer**
- Other computer roles are described in Appendix A, *Network Functionality for AGCC on Windows XP and Windows Vista* on page 291 of the *AGCC User Manual*.

**AGCC on Windows Server 2003**

AGCC on Windows Server 2003 requires:

- Microsoft Windows Server 2003
- Microsoft IIS v. 6.0
- AGCC Portal software for remote access
- Connected through Windows Network to network data storage
- Have necessary Domain and User Permissions settings to allow Read/Write access to the network data storage.
- Have network data storage set up as a data root for the AGCC Portal
- Have IIS 6 configured to allow remote computers to link in.
Remote computers connected through HTTPS can:
- Create and edit Sample (.ARR) files on the AGCC Workgroup computer or the network data storage.
- AGCC Portal can index and search the AGCC Workgroup computer or the network data storage.
- Perform other data organization tasks.

Remote Computer
Requirements:
- Running a supported browser.
- Connected through HTTPS to AGCC Portal on the workgroup computer.

Remote computers connected through HTTPS can:
- Create and edit Sample (.ARR) files on the AGCC Workgroup computer or the network data storage.
- Index and search the AGCC Workgroup computer or the network data storage.
- Perform other data organization tasks.

Installing AGCC 3.0 on Windows Server 2003
This section gives procedures for installing AGCC on Windows Server 2003:
- Requirements, below
- Software Installation on page 11

Requirements

**IMPORTANT:** If you have installed a previous beta version of AGCC on your computer, you will need to uninstall AGCC and Microsoft SQL Server 2005 before installing AGCC. See Appendix A, Uninstalling Previous Beta Versions of AGCC on page 63 in the AGCC Installation Instructions for more information. If the removal of the earlier Beta version is done incorrectly, you may disable other applications, including GCOS.

Software Installation
The AGCC Installer installs the following software for a computer running Windows Server 2003 Standard R2:
- Microsoft SQL Server Express 2005 SP2
- Microsoft IIS 6
- AGCC on Windows Server 2003 (SP2 recommended)

**NOTE:** You must be logged in as a user with local administrative rights to install AGCC.

**NOTE:** The screen captures depicted in this guide may not exactly match the windows displayed on your screen.

**NOTE:** IIS 6 is not installed on Windows Server 2003 by default. The AGCC install will prompt you to install IIS if it is not installed on your server. You will need your original Windows Operating System disc to install IIS 6.
At least 500 MB of available disk space is recommended for the installation.

**NOTE:** Do not rename the machine after the install is completed. The name is used by AGCC Workgroup and changing it after installation will cause problems.

**IMPORTANT:** If you have installed a previous beta version of AGCC on your computer, you will need to uninstall AGCC and Microsoft SQL Server 2005 before installing AGCC. See *Appendix A, Uninstalling Previous Beta Versions of AGCC on page 63* in the *AGCC Installation Instructions* for more information. If the removal of the earlier Beta version is done incorrectly, you may disable other applications, including GCOS.

To install the Command Console software:

1. Unzip the AGCC install package by right-clicking on the install package and selecting **Extract All**.
2. Browse to the AGCCSetup folder in the unzipped install package.
   - The self-extraction runs (*Figure 2.2*).
   
   ![Figure 2.2 Self-extraction running](image)

   If a warning message about “Unknown Publisher” appears, click the **Run** button in the warning message to proceed with the install.
   - The AGCC splash screen appears (*Figure 2.3*).

   ![Figure 2.3 AGCC splash screen](image)
If MSSQL is not installed on your computer, the Requirement window opens (Figure 2.4).

**Figure 2.4** Requirement window

4. Click **OK** to install MSSQL.
   The Setup window displays the progress of the MSSQL install (Figure 2.5).

**NOTE:** Do not click the Cancel button while installing Microsoft SQL Server 2005 Express.

**Figure 2.5** Setup window for MSSQL installation

The AGCC Welcome window opens (Figure 2.6).
5. Click Next.
   The Notice of IIS Install window opens (Figure 2.7).

Click Next.
The software will prompt you for your Windows CD (Figure 2.8).
After the initial installation process for IIS is finished, the Registering IIS notice appears (Figure 2.9).

When the registration process is finished, the License Agreement window opens (Figure 2.10).

6. Select the button to accept the terms and click Next. The Customer Information window opens (Figure 2.11).
7. Enter the customer information, including the serial number, and click **Next**.
   The Destination window opens (Figure 2.12).

8. Change the destination for AGCC (not recommended) and click **Next**.
   The Review Install window opens (Figure 2.13).
9. Review the installation options and click **Next**.

   The Setup Status window opens (Figure 2.14).

   When the install is finished, the InstallShield Complete window opens (Figure 2.15).
To finish the installation, you need to restart the computer.

NOTE: Do not rename the machine after the install is completed. The name is used by AGCC Workgroup and changing it after installation will cause problems.

Configuring AGCC with Workgroup Functionality

Setting up a server with AGCC to provide remote access to the network data share involves configuring the following areas:

- Configuring the Authentication options (setting the default domain).
- Folder permissions
- Making sure remote users are given the proper permissions on the server.


Configuring the Authentication Options

To set the default domain:

1. Select **Start → Settings → Control Panel**.

The Control panel opens (Figure 2.16).
2. Open Administrative Tools.
3. Open the IIS Configuration manager in Administrative tools.
   This will list the available web sites (Figure 2.17).

4. Highlight AffyWeb and select Properties from the context menu.
   The Properties dialog box opens (Figure 2.18).
5. Select the Directory Security tab and click **Edit**. This will show the authentication options (Figure 2.19).

6. Enter the Default domain if desired. This will simplify the login process required to access the AGCC Portal web pages.

7. Click **OK** to accept the changes and close the Authentication Methods dialog box.

8. Click **OK** in the AffyWeb properties dialog box (Figure 2.18) to close it.
Adding a Remote Data Root

When using a server and IIS 6, it is possible to access data on a remote data root from the Portal web pages on the server.

- In order to add a remote data root, a share needs to be setup on the network data storage.
- The share permissions need to include all users who will be accessing the data, including remote users who will be accessing the data through the AGCC on Windows Server 2003.
- Once the share is setup, a user should be able to add the data root in the same manner as any other UNC path.
- The computer running IIS and Portal needs to have the remote data root added, but only once - it will exist for all users who access that Portal installation. If a user is on another portal installation, they would need to add that data root as well.
- The same configuration settings need to be applied to the windows services running on the server (AGCCIndexer, AGCCAuditLogger, and AGCCTaskManager) so the server can index and access the remote data. These are the same settings described in Appendix A, Network Functionality for AGCC on Windows XP and Windows Vista on page 291 of the AGCC User Manual.

**NOTE:** You will not need to change the configuration for AGCC WebServer when using Windows 2003.

These settings will allow remote users to index and search the network data storage.

Connecting to AGCC Portal on a Server

Once configured, the system should be accessible from any supported web browser.

**NOTE:** Affymetrix recommends that you use Windows® Internet Explorer® 7 to run AGCC Portal. See the Release Notes for a list of other supported operating systems and browsers.

The URL is:
https://servername/AffyWeb/Default.aspx

You will see a security certificate error when connecting to the server. Click through to connect.

**NOTE:** See Security Issues on page 22 for more information about the security certificate error and what you can do about it.

The user should see a basic authentication challenge (Figure 2.20):
If the default domain was entered properly in the configuration dialog, all that should be necessary is the username and password. This will allow access to the portal web pages.

You can also manually enter the domain and username.

Operation of Sample registration and search is basically the same as with AGCC on Windows XP. See Chapter 4, Workgroup Operation on page 29 for more information about the differences between AGCC Standalone and AGCC Workgroup.

Security Issues

By default, the AGCC web server on Windows 2003 supports only HTTPS (secure HTTP) connections. This is to protect the user from having passwords compromised, since they are sent in clear text when using Basic Authentication, another element of the AGCC security model. At the users' discretion, they can use HTTP instead. This can be switched through IIS configuration.

Also by default, a self-signed certificate is installed to allow use of HTTPS. This certificate, since it does not have a trusted root, will cause browsers to display a security warning upon connection to the server. To avoid seeing the warning:

- The user can either install this certificate on their client machine, or
- The system administrator can create a certificate with a trusted root, by purchasing one through a trusted certificate provider, such as Verisign.

When logged into the 2003 server, the user may encounter an additional issue, related to a Windows component called "Internet Explorer Enhanced Security Configuration." This component provides extra protection for the server system when users are browsing locally using Internet Explorer. One impact this has is to suppress some of the AGCC web content, by default. In order to avoid this problem, the user can either:

- Uninstall this component through Add/Remove Windows components.
- Add the AGCC website to the list of Trusted Sites, through Internet Explorer security settings.
Upgrading to AGCC 3.0 on Windows Server 2003

This chapter has instructions for upgrading AGCC 1.0, 1.1, or 2.0 software to AGCC 3.0 on a computer running Windows Server 2003.

NOTE: You must be logged in as a user with local administrative rights to upgrade AGCC.

NOTE: The screen captures depicted in this guide may not exactly match the windows displayed on your screen.

At least 500 MB of available disk space is recommended for the installation.

NOTE: Do not rename the machine after the upgrade is completed. The name is used by AGCC Workgroup and changing it after installation will cause problems.

To upgrade the Command Console software:
1. Unzip the AGCC install package by right-clicking on the install package and selecting Extract All.
2. Browse to the AGCC Setup folder in the unzipped install package.
   A. Click on the Unzip button.
      The self-extraction runs (Figure 3.1).

   ![Figure 3.1 Self-extraction running](need new shot)

If a warning message about “Unknown Publisher” appears, click the Run button in the warning message to proceed with the install.

The AGCC splash screen appears (Figure 3.2).
4. **Click Next.**
   
   An Upgrade Notice appears to inform you that AGCC 1.0, 1.1, or 2.0 is installed on your computer (Figure 3.3).

5. **Click Yes** to upgrade the software.
   
   The AGCC Welcome window opens (Figure 3.4).

6. **Click Next.**
   
   The License Agreement window opens (Figure 3.5).
7. Select the button to accept the terms and click Next. The Customer Information window opens (Figure 3.6).

8. Enter the customer information, including the serial number, and click Next. The Review Install window opens (Figure 3.7).
9. Review the installation options and click Next. The Setup Status window opens (Figure 3.8).

When the upgrade is finished, the InstallShield Complete window opens (Figure 3.9).
To finish the upgrade, you need to restart the computer.

**NOTE:** Do not rename the machine after the install is completed. The name is used by AGCC Workgroup and changing it after installation will cause problems.
Workgroup Operation

This chapter describes the differences between using AGCC on Windows XP (Standalone configuration) and AGCC on Windows Server 2003 (Workgroup Configuration).

NOTE: Affymetrix recommends that you use Windows® Internet Explorer® 7 to run AGCC Portal. See the Release Notes for a list of other supported operating systems and browsers.

In AGCC Workgroup the Instrument Control components are not available. Other differences are listed here and described in more detail in the AGCC User Manual. There are also differences in the appearance of the Portal interface that indicate which type of system you are using.

AGCC Portal Interface Differences

When connected to AGCC Portal for Workgroup using a remote computer, there are some differences in the display of the AGCC Portal pages (Figure 4.1).

The Page Content section has a red frame, instead of a blue frame, and the server and user names are displayed at the top of the Page Content section.

The AGCC Workgroup functionality provides additional tools for consolidating data when AGCC is installed on a computer running Windows Server 2003. AGCC Workgroup allows you to:

- Register arrays if you are using an operating system other than Windows XP.
- Register arrays to a machine outside of the user’s domain.
- Perform other data organization tasks.
IMPORTANT: You need to keep in mind that when you are connected to AGCC Workgroup using an HTTPS connection, that the local and remote Data Roots are displayed relative to their relationship to the AGCC Workgroup computer, not to the computer you are using.

Folder and File Locations

A data root on a local drive is indicated as a local drive path: C:\Command Console\Data for example.

Data roots on networked computers are specified using Universal Naming Convention (UNC) paths as \server\share\filepath.

NOTE: When you are using a remote computer connected to a computer running AGCC Workgroup, local drive paths will be used to display the data roots on drives on the AGCC Workgroup computer.