Integritest® 4N Integrity Test Instrument Central Instrument Management Tool Installation and Operators Manual

MILLIPORE

Contents

Preface

This manual contains the information needed to install and operate the Integritest 4N Central Instrument Management Tool (IMT) software in a network environment. It assumes that the software has already been installed and the network is properly configured.

About this Manual

This publication includes instructions on how to install the software for use on a network or domain, but it does not provide details on connecting instrument(s) to a network. These instructions are provided in the *Integritest 4N Integrity Test Instrument Network and Administrator Manual*.

This document is intended as a reference for Millipore software. It is not intended as a reference source for the Microsoft® software Windows® operating system or any other software not manufactured by Millipore.

This manual also assumes a basic understanding of the operation of filter integrity testing instruments. Knowledge of basic filter test operations, such as running a filter test or transferring a report, is recommended. These operations are described in the *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual*.

Chapter 1
Software Installation

Domain Mode Network Configuration

Prior to installing and configuring the Integritest 4N Central IMT software, the network and domain must be configured to meet the requirements for the instrument(s) and software to operate properly in Domain mode.

The following sections outline the steps needed to configure the network and install the Central IMT software from the CD. These steps should be performed by a Network Administrator.

For instructions on configuring the instrument(s) for use on the domain, see *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual.*.

Evaluating Network Infrastructure

Domain Requirements

A domain supporting instruments that will be managed via the Central IMT software must have the following three components.

- Domain Controller
- Role Server
- Service PC

Important: The functions performed by each of these components can be performed by multiple computers, or a single computer can provide all of the functionality required.

Each of the components is explained in more detail below.

Domain Controller

An existing corporate network will have a computer functioning as a Domain Controller. A Domain Controller is used to create and manage users. This provides the Central IMT and instrument(s) with all the required security, user ID, and password verification information. The instrument(s) will verify this information at every connected domain login.

> **Important:** The Domain Controller must use a Windows Server 2003 operating system.

Role Server

The Role Server is a computer that stores information about instruments, instrument groups, and their users. The Role Server also stores test definitions and all configured parameters that are programmed using the Central IMT. The instrument(s) will download this information at every connected domain login.

It is expected that the Role Server will always be available over the network to provide instrument updates. If the Central IMT cannot connect to the Role Server, the information downloaded at the last successful connection will be used.

> **Important:** The Role Server must use either the Windows XP® Professional or Windows 2003 Server operating system.

Service PC

At the Service PC, authorized users use the Central IMT to define tests, setup instruments, and assign roles and instruments to users. Changes made from the Service PC update the Role Server, to which the Integritest 4N instrument(s) are connected. (The instrument(s) receive updates from the Role Server, not the Service PC.)

The Service PC needs to be connected to the network and needs to be part of the domain. A single computer may function as both the Role Server and Service PC. Alternatively, the Central IMT software might be installed on a separate Service PC, or there may be multiple Service PCs that update the same Role Server.

> **Important:** The Service PC must use either the Windows XP Professional or Windows 2003 Server operating system.

Report Transfer and Remote Backup

In addition to the above three requirements, if an instrument is configured for report transfer or remote backup, it must also have a defined Central Repository or a Backup Location, respectively. There are no inherent requirements for these file locations, though they must be available over the network for the instrument to perform the related functions successfully.

Once the setup of the network and the instrument(s) is complete, the instrument(s) should be connected to the domain, configured, and tested to verify that all setup steps were completed correctly..

Integrated, Partially Integrated, and Isolated Networks

There are three primary network configurations the Central IMT will support in domain mode: isolated, integrated, and partially integrated networks.

- An **integrated network** assumes that all three components are installed on the same machine.

- A **partially integrated network** assumes that two of the required components are installed on one machine and the third component is installed on a separate machine. For example, the Domain controller might be installed on the first machine, with the Role Server and Central IMT software installed on a separate machine.

- An **isolated network** assumes that all three components of Central IMT software will be installed on separate machines.

While there are several possible ways a network can be configured to support the Central IMT installation, this guide provides sample instructions for the most common configurations.

Installing the Central IMT Software on a Network Domain

This section provides instructions for installing the Central IMT software on to a network domain and configuring the network so it will operate properly. Step-by-step procedures are provided for the following configurations:

- Configuration A - Central IMT Software, Role Server, and Domain Controller are set up on the same machine (integrated network).

- Configuration B - Central IMT Software and Role Server are set up on machine #1 and Domain Controller is set up on machine #2 (partially integrated network).

- Configuration C - All three components are set up on separate machines (isolated network).

Important: The procedures described in this section provide examples of how to install the Central IMT software for use on a network domain. The specific network and security configuration employed will depend on the requirements and capabilities of the user organization.

The steps in this chapter are required for the instrument(s) to operate securely in domain mode. By completing all of the steps, the Network Administrator configures the domain to ensure that only authorized groups of users can perform certain Central IMT functions (e.g., test management, user management, or instrument management).

Once the setup of the network and the instrument(s) is complete and the Central IMT software is installed, the instrument(s) should be connected to the domain, configured, and tested to verify that all setup steps were completed correctly.

Configuration A: Setting Up the Central IMT on One Computer that functions as the Domain Controller, Role Server and Service PC

Use the procedure below to install the Central IMT software on a single computer that will function as the Domain Controller, Role Server, and Service PC.

> **Important:** The Domain Controller must use a Windows Server 2003 operating system.

1. At the machine that will function as the Domain Controller, Role Server and Service PC, log on as Domain Administrator.

   > **Note:** Contact your MIS department for assistance with performing steps as Domain Administrator.

2. Insert the Central IMT installation CD. The Main Menu screen appears.
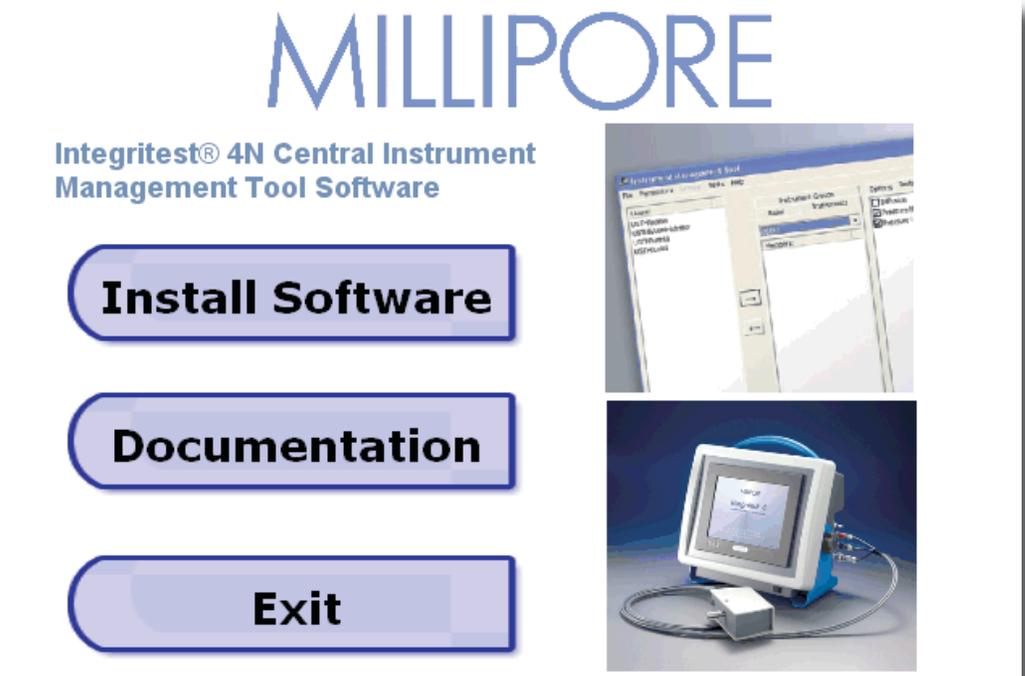
> **Note:** The Documentation button provides a link to user manuals and technical literature related to the software.

To obtain links for the User Manuals and technical literature associated with setting up and using the Integritest 4N Central IMT Software, click the following URL

www.millipore.com/integritest4

Return

3. Click the **Install Software** button. The Welcome screen appears.

4. At the Welcome screen, click **Next**. The End-User License Agreement screen appears.
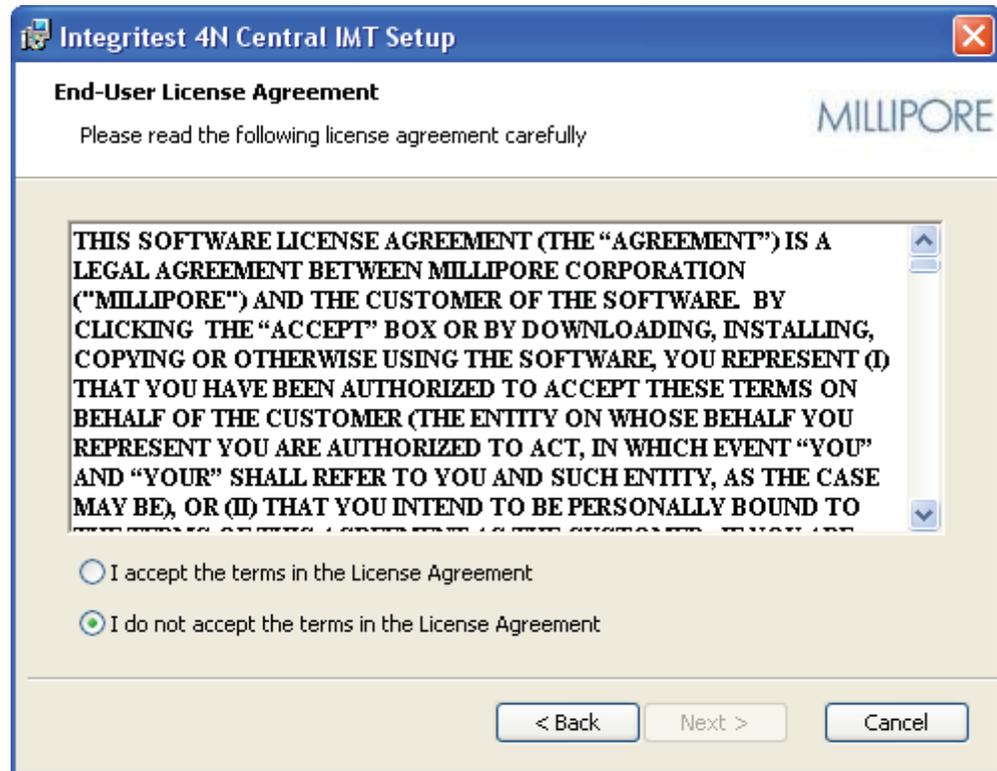
5. Review the license agreement terms then select the option **I accept the terms in the License Agreement**.

6. Click **Next**. The Choose Setup Type screen appears.
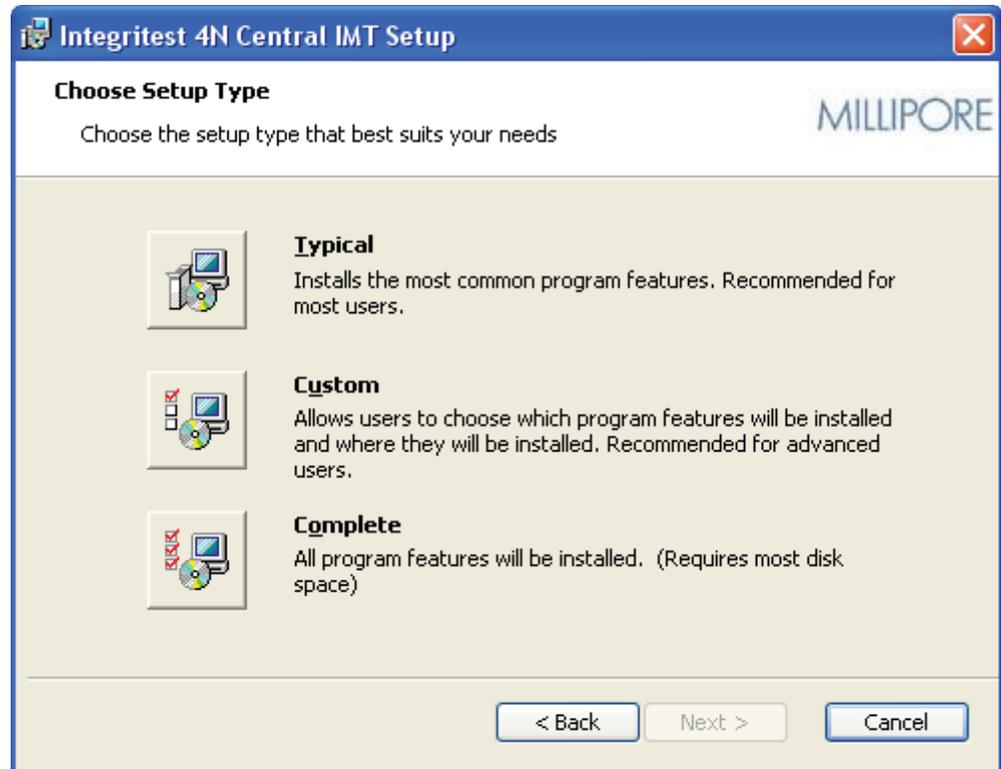
7. Click the **Complete** button. The Ready to Install screen appears.
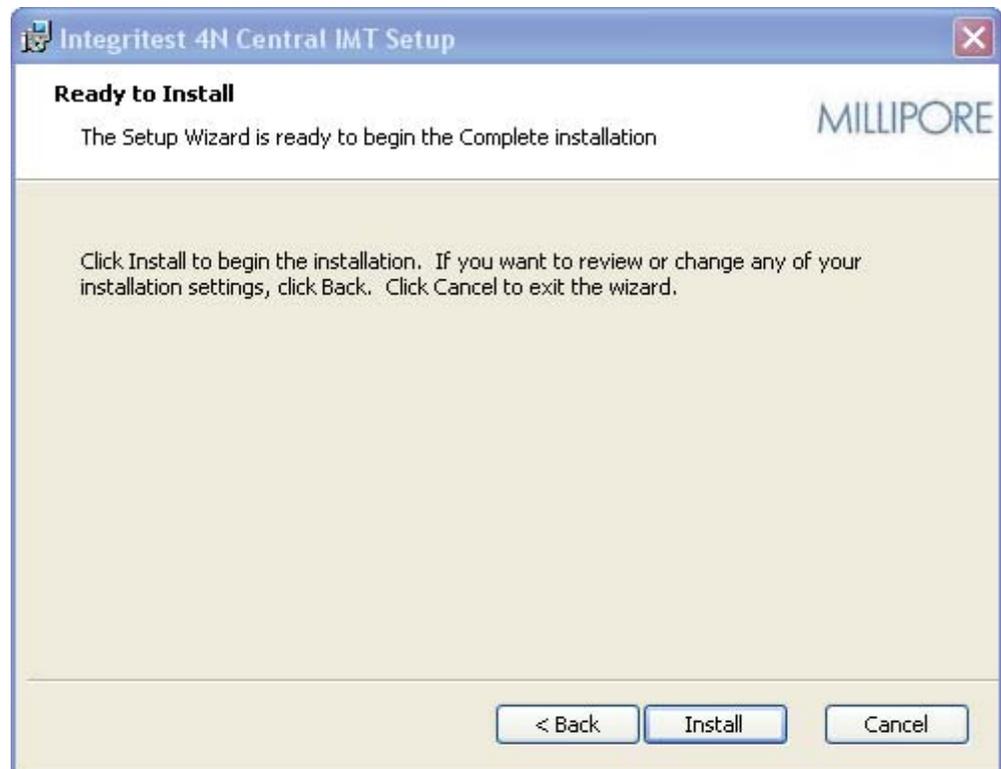
8. Click **Install**. The required components are installed and the Finish screen appears.

The following takes place during installation:

- The software is installed in the directory C:\Program files\Millipore\ IT4N.

- The directory C:\Program Files\Millipore\IT4NMaster is shared as IT4NMaster.

- The directory C:\IT Temp is created. This directory is required by the software for the storage of log and configuration files.

- ITX ID Server service is installed and started.

- The following permission groups are created:
    ○ ITXConfigI - to manage instrument configuration
    ○ ITXConfigT - to manage test definitions
    ○ ITXConfigU - to manage users and roles

- ITXConnect and ITXRoleServer users are added to the Administrators permission group.

- Current user (i.e., Administrator) is added to the permission groups.

- The following user IDs are created:

  ○ User name: ITXConnect, Password ITXConnect00

  ○ User name: ITXRoleServer, Password: ITXRoleServer00

Note: These are virtual user IDs used by the software; they are not assigned to any group or person.

Important: During installation, the virtual group names and user IDs above are created automatically and are used by the software in domain mode. Depending on your organization's security policy, the above IDs/passwords may not be allowed. If this is the case, you can assign the IDs/passwords in accordance with your organization's policy using the ID Mapper Tool. (See "Using the ID Mapper Tool" for more information.)

- The icons described in the table below are placed on the desktop.

Icon	Label	Description
Integritest 4N Central IMT	Integritest 4N Central IMT	Used to launch the Central IMT (after domain mode setup is complete).
Integritest 4N ID Mapper	Integritest 4N ID Mapper	Used to launch the Integritest 4N ID Mapper Tool. This utility is used to map user names and passwords used by the software to the user organization's preferred passwords, if required.

9. Click **Finish** to exit the installation program.

10. Double click on **Integritest 4N Central IMT** icon to the launch the Central IMT software. Verify that you can create an instrument and assign one or more users to the instrument. If you encounter problems, refer to the section "Confirming Settings after Installation."

Configuration B: Setup Up the Central IMT on Two Computers, where the First Computer is a Domain Controller and the Second Computer will function as Role Server and Service PC

Domain Controller Configuration

Important: The Domain Controller must use a Windows Server 2003 operating system.

1. At the Domain Controller computer, log on as Domain Administrator.

   Note: Contact your MIS department for assistance with performing steps as Domain Administrator.

2. Create the following permission groups:

   - ITConfigI - to manage instrument configuration
   - ITConfigT - to manage test definitions
   - ITConfigU - to manage users and roles

3. To each group, add the User IDs (Domain Users) of the Instrument Administrators selected to perform the related functions (instrument configuration, test definition, and user management).

4. Create the following users with **Password never expires** option set:

   - User: ITXConnect, Password ITXConnect00
   - User: ITXRoleServer, Password: ITXRoleServer00

   Note: These are virtual user IDs used by the software; they are not assigned to any group or person.

   Important: These virtual group names and user IDs are used by the software in default mode. Depending on your organization's security policy and password complexity requirements, the above IDs/passwords may not be allowed. If this is the case, assign the IDs/passwords in accordance with your organization's policy and make a note of the IDs/passwords used. If IDs/passwords cannot be set as above, you must use the ID Mapper Tool at the Role Server computer to map the IDs/passwords. (See "Using the ID Mapper Tool" for more information.)

Role Server/Service PC

1. At the computer that will function as the Role Server and Service PC, log on as an Administrator.

2. Insert the Central IMT installation CD. The Main Menu screen appears.
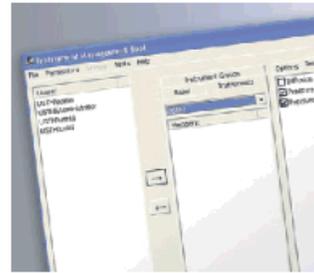
3. Click **Install Software**. The Welcome screen appears.

4. Click **Next**. The End-User License Agreement screen appears.
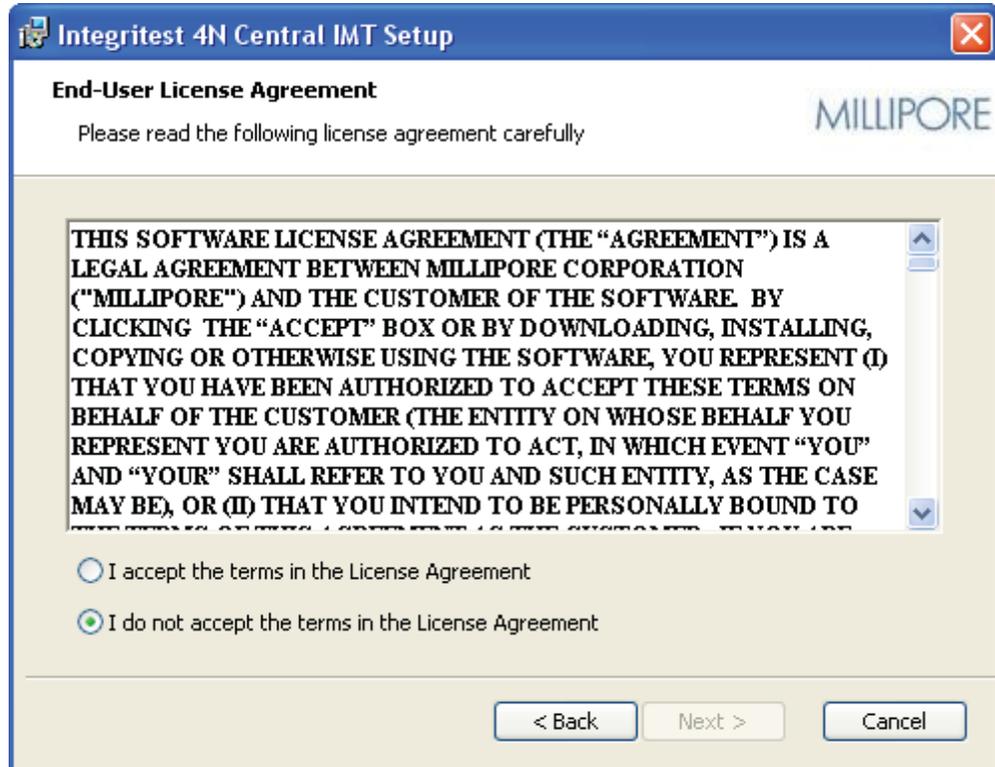
5. Review the license agreement terms then select the option **I accept the terms in the License Agreement**.

6. Click **Next**. The Choose Setup Type screen appears.
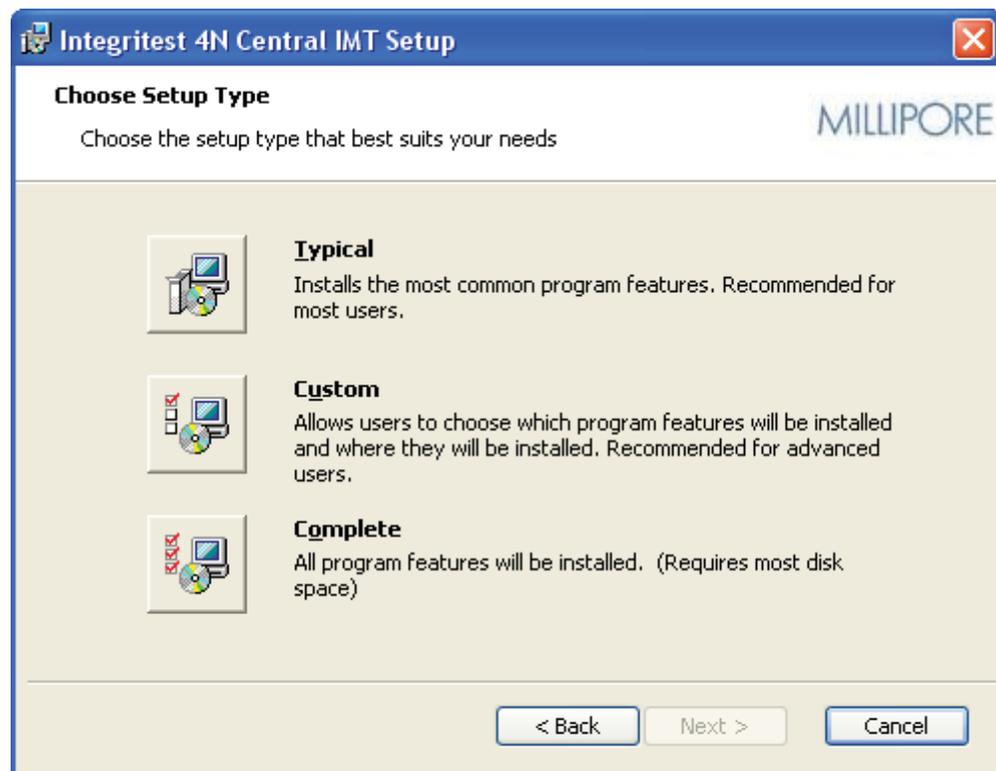
7. Click the **Typical** button. The Ready to Install screen appears.
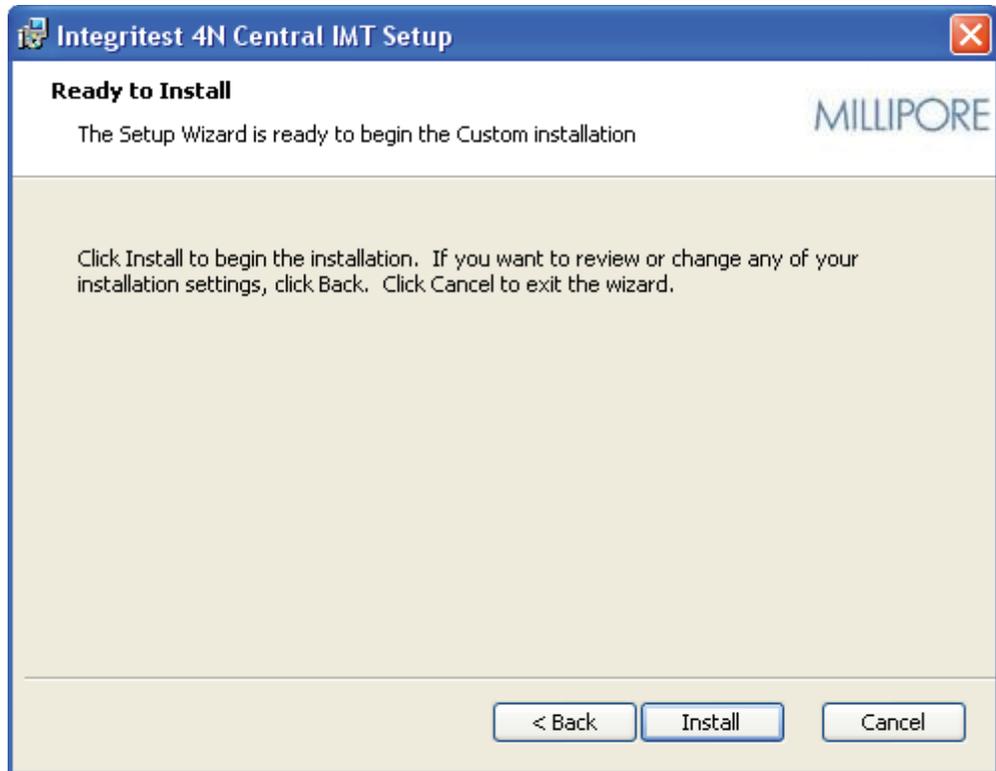
8. Click **Install**. The Role Server and Central IMT software is installed on the computer, and the Finish screen appears.

The following takes place during installation:

- The software is installed in the directory C:\Program files\Millipore\IT4N.

- The directory C:\Program Files\Millipore\IT4NMaster is shared as IT4NMaster.

- The directory C:\IT Temp is created. This directory is required by the software for the storage of log and configuration files.

- ITX ID Server service is installed and started.

- The icons described in the table below are placed on the desktop.

Icon	Label	Description
Integritest 4N Central IMT	Integritest 4N Central IMT	Used to launch the Central IMT (after domain mode setup is complete).
Integritest 4N ID Mapper	Integritest 4N ID Mapper	Used to launch the Integritest 4N ID Mapper Tool. This utility is used to map user names and passwords used by the software to the user organization's preferred passwords, if required.

9. Click **Finish** to exit the installation program.

10. Complete the following steps after the installation is complete:

   a. If a firewall (e.g., Windows Firewall) is running on the Role Server, check or add an exception for Integritest 4N ID Mapper on Port 23190.

   b. Locate the folder C:\Program Files\Millipore\IT4NMaster, ensure its share name is set as IT4NMaster and do the following:

      - Click the Permissions button to assign ITXRoleServer and ITXConnect users Full Control permissions to the ITNMaster share.

      Note: These are virtual user IDs used by the software; they are not assigned to any group or person.

      - At the Security tab, verify that the Administrators group has Full Control permissions.

   c. Add users ITXRoleServer, ITXConnect, and groups ITXConfigI, ITXConfigT, and ITXConfigU to the Administrators Group.

   d. Locate the C:\IT Temp directory and verify that the Administrators group has Full Control sharing permissions for this directory.

   e. Use ID Mapper Tool to map groups, user names, and passwords, if needed. (See "Using the ID Mapper Tool" for instructions.)

f. Go to Computer Management and perform the following actions:

  o Create three local groups: ITXConfigI, ITXConfigT, and ITXConfigU.

  o Add Instrument Administrators or each of the global groups to the related local group (e.g., add ITConfigI to ITXConfigI).

g. Run the Set Alternate Domain Tool from C:\Program Files\Millipore\ IT4N. The tool will display the default settings for the Domain, Alternate Domain, and the Role Server as the Domain Controller PC name. Update the Role Server and other settings as needed. See "Using the Set Alternate Domain Tool" for more information.

11. Log off as Administrator.

12. Log on as Instrument Administrator user.

13. Double click on **Integritest 4N Central IMT** icon to the launch the Central IMT. Verify that you can create an instrument and assign one or more users to the instrument. If you encounter problems, refer to the section "Confirming Settings after Installation."

Configuration C: Setting Up the Central IMT on Three Computers where the First is a Domain Controller, the Second will function as Role Server, and the Third will function as Service PC

Domain Controller

> **Important:** The Domain Controller must use a Windows Server 2003 operating system.

1. At the Domain Controller computer, log on as Domain Administrator.

   > **Note:** Contact your MIS department for assistance with performing steps as Domain Administrator, if needed.

2. Create the following permission groups:

   - ITConfigI - to manage instrument configuration

   - ITConfigT - to manage test definitions

   - ITConfigu - to manage users and roles

3. Create the following users with Password never expires option set:

   - User: ITXConnect, Password ITXConnect00

   - User: ITXRoleServer, Password: ITXRoleServer00

   > **Note:** These are virtual user IDs used by the software; they are not assigned to any group or person.

   > **Important:** These virtual group names and user IDs above are used by the software in default mode. Depending on your organization's security policy and password complexity requirements, the above IDs/passwords may not be allowed. If this is the case, assign the IDs/passwords in accordance with your organization's policy and make a note of the IDs/passwords used. If IDs/passwords cannot be set as above, you must use the ID Mapper Tool at the Role Server computer to map the IDs/passwords. See "Using the ID Mapper Tool" for more information.

4. To each group, add the User IDs (Domain Users) of the Instrument Administrators selected to perform the related functions (instrument configuration, test definition, and user management).

Role Server

1. At the computer that will function as the Role Server, insert the Central IMT installation CD. The Main Menu screen appears.
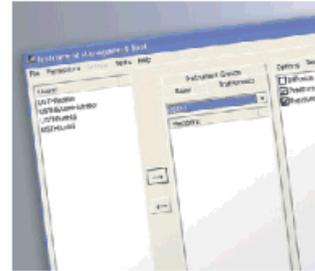
2. Click the **Install Software** button. The Welcome screen appears.

3. Click **Next**. The End-User License Agreement screen appears.
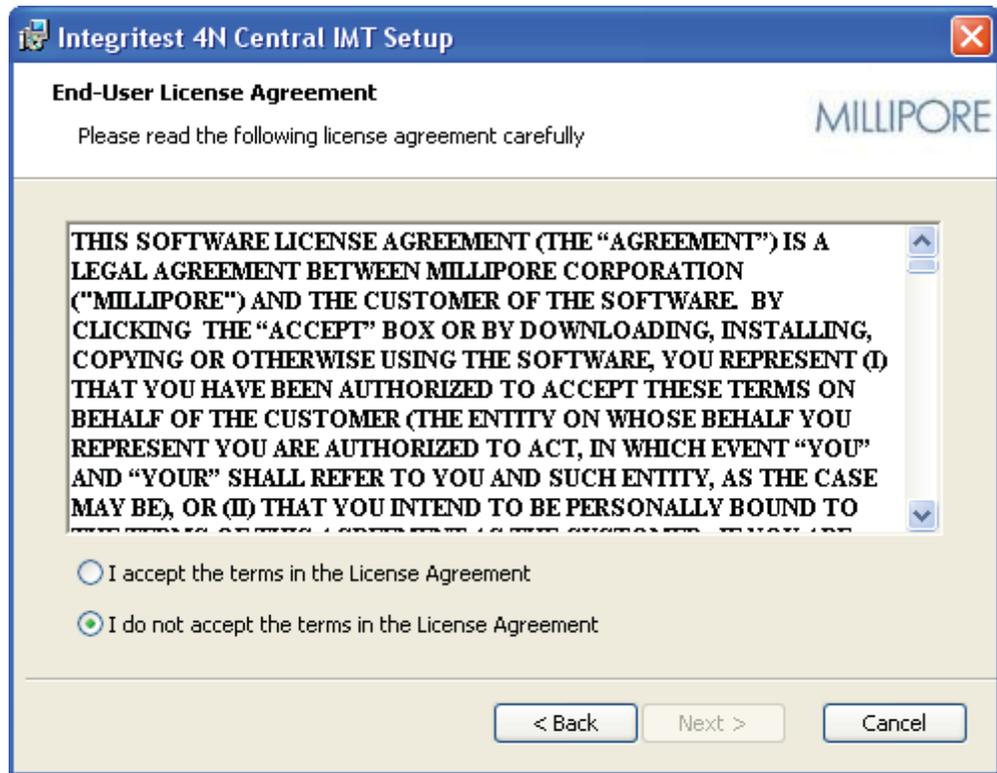
4. Review the license agreement terms then select the option **I accept the terms in the License Agreement**.

5. Click **Next**. The Choose Setup Type screen appears.
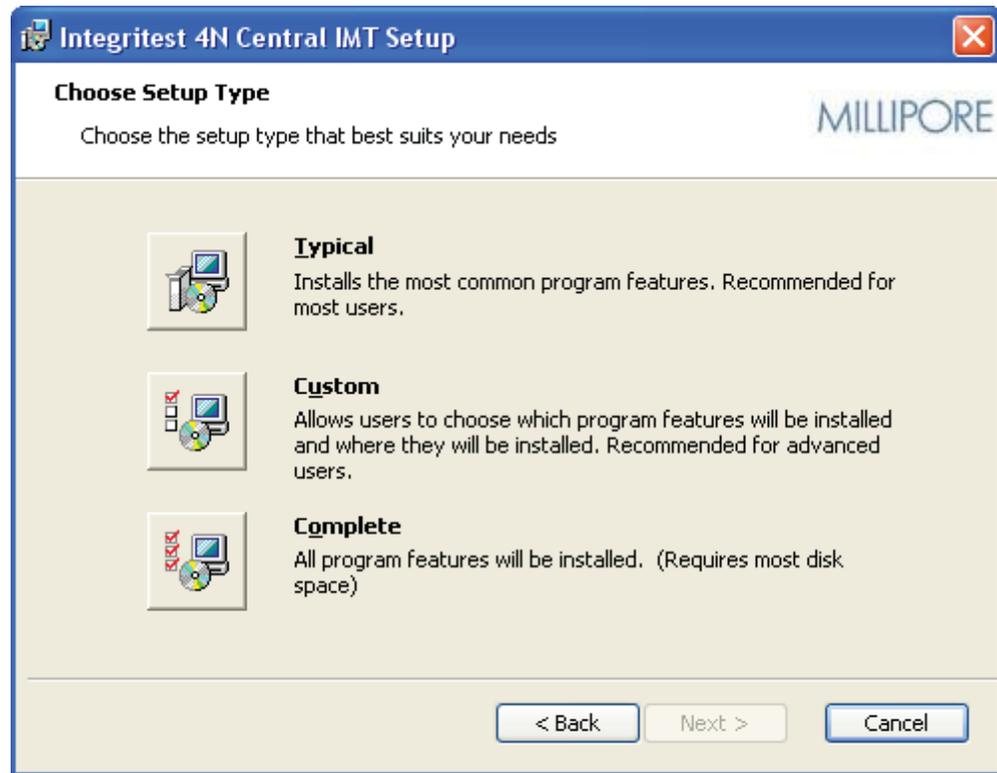
6. Click the **Custom** button. The Custom Setup screen appears.

> **Important:** Do not change the default installation location. The software requires that the files are installed in the C:\Program Files\ directory.
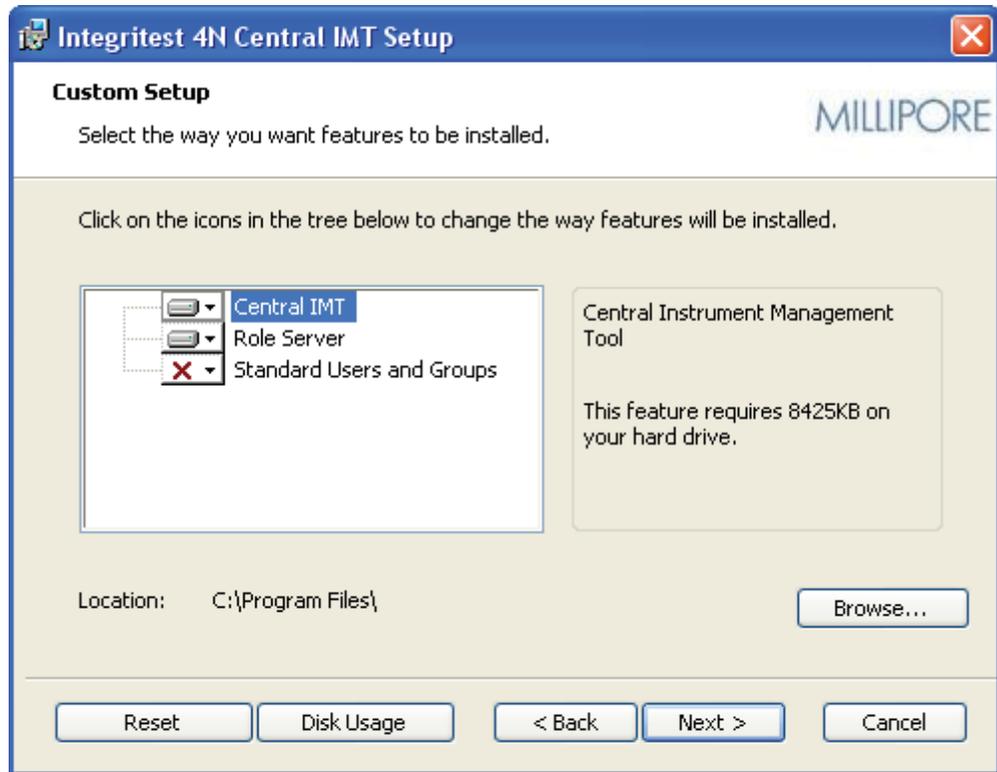
7. Click the icon next to Central IMT and select **Entire Feature will be unavailable** from the drop-down list.
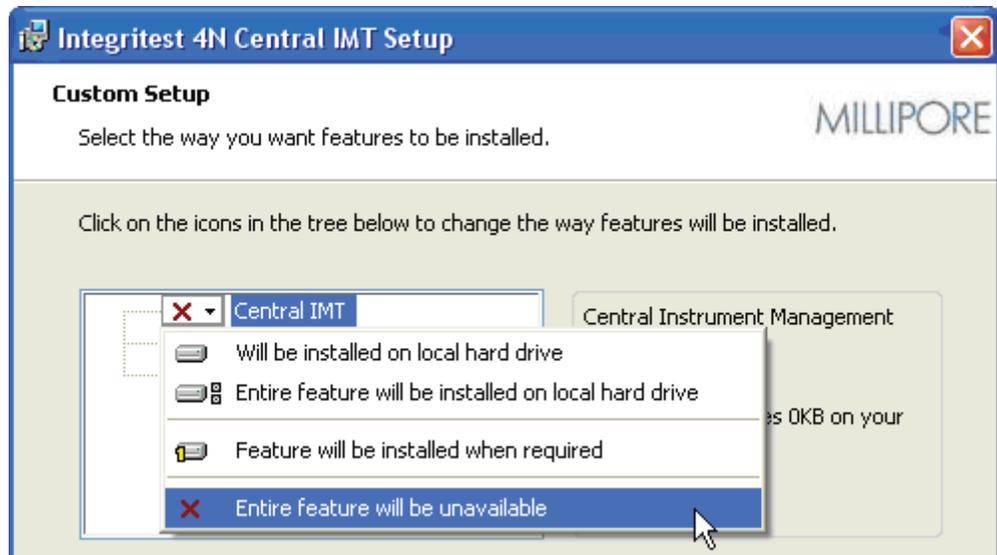
8. For the Role-Server-only installation, ensure that the custom setup window appears as follows.
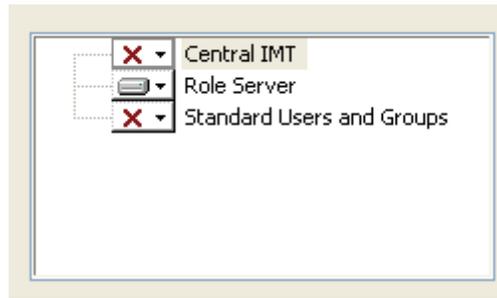
Note: The Standard Users and Groups option will create the local ITXConfig set of groups and add the current user to them and create the local ITXConnect and ITXRoleServer users with the standard non-complex passwords. This should not be used if this is not the desired configuration or if your organization requires the use of more complex passwords than the defaults supplied by the software. For more information, see "Using the ID Mapper Tool."

9. Click **Next**. The Ready to Install screen appears.
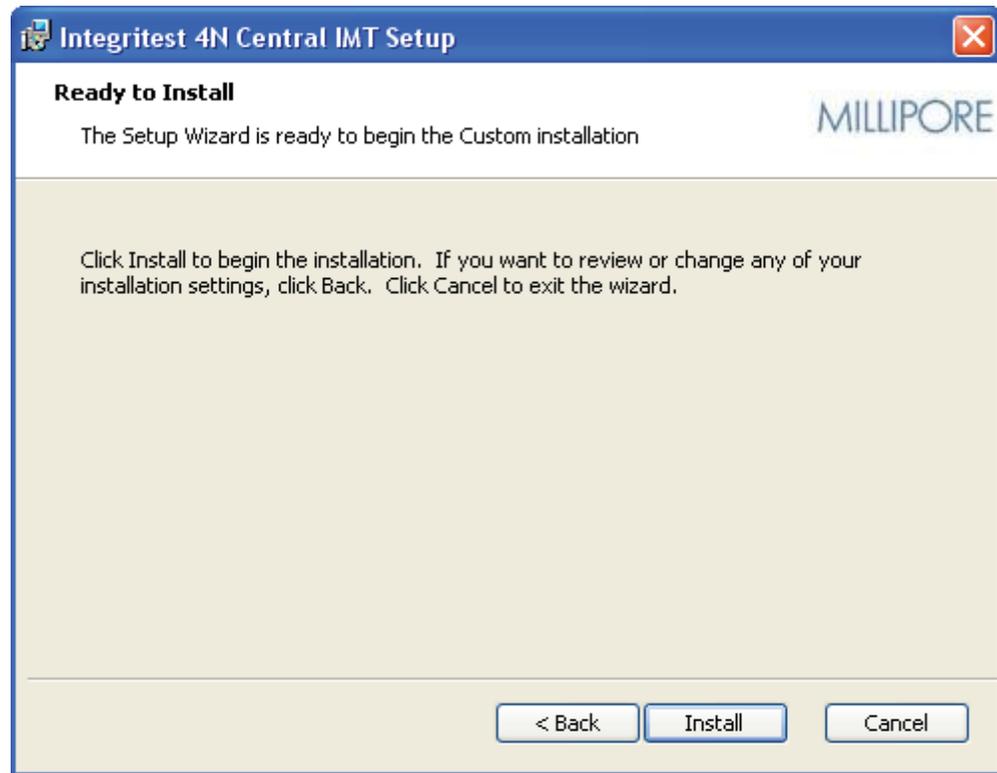
10. Click **Install**. The Role Server software is installed on the computer and the Finish screen appears.

The following takes place during installation of the Role Server:

- The software is installed in the directory C:\Program files\Millipore\ IT4NMaster.

- The directory C:\Program Files\Millipore\IT4NMaster is shared as IT4NMaster.

- The directory C:\IT Temp is created. This directory is required by the software for the storage of log and configuration files.

- ITX ID Server service is installed and started.

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- The ID Mapper icon is placed on the desktop. This icon is used to launch the Integritest 4N ID Mapper Tool. This utility is used to map user names and passwords used by the software to the user organization's preferred passwords, if required.

11. Click **Finish** to exit the installation program.

12. Go to Computer Management and add ITXConnect, ITXRoleServer and Instrument Administrators or the global security groups (ITConfigI, ITConfigT, ITConfigU) to the Administrators group.

Service PC

1. Complete steps 1-6 from Role Server setup procedure above.

2. Click the [icon] icon next to the Role Server and select **Entire Feature will be unavailable** from the drop-down list.
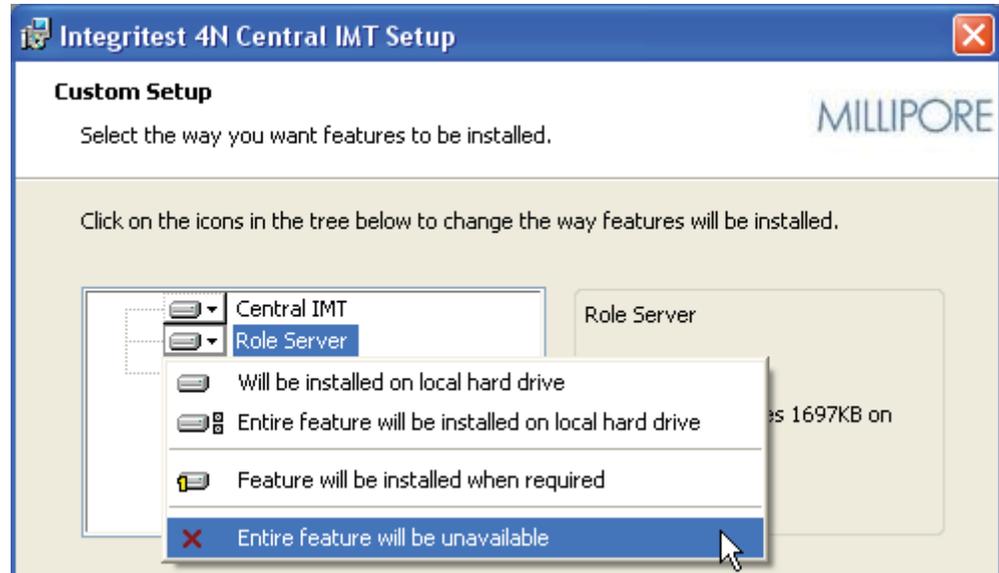
3. For the Central-IMT-only installation, ensure that the setup options now appear as follows.

4. Click **Next**. The Ready to Install screen appears.
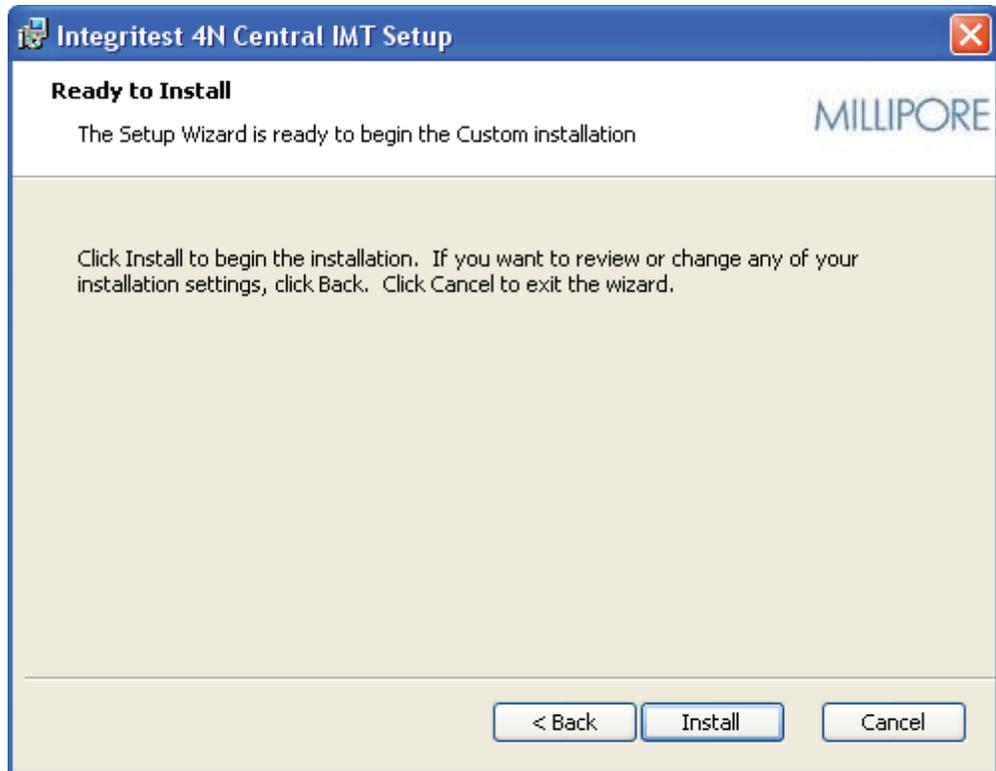
5. Click **Install**. The Role Server software is installed on the computer and the Finish screen appears.

The following takes place during installation of the Central IMT software onto the Service PC:

- The software is installed in the directory C:\Program files\Millipore\.

- The directory C:\IT Temp is created. This directory is required by the software for the storage of log and configuration files.

- ITX ID Server service is installed and started.

- The **Integritest 4N Central IMT** icon is placed on the desktop.

6. Click **Finish** to exit the installation program, and complete the following steps after the installation is complete.

7. Go to Computer Management and perform the following actions:

   a. Add Instrument Administrators or the global security groups ITConfigI, ITConfigT, and ITConfigU to the Administrators group.

   b. Create three local groups: ITXConfigI, ITXConfigT, and ITXConfigU.

   c. Add Instrument Administrators or each of the global groups to the related local group (ex: add ITConfigI to ITXConfigI).

8. Run the Set Alternate Domain Tool from C:\Program Files\Millipore\IT4N. The tool will display the default settings for the Domain, Alternate Domain, and Role Server as the current Domain Controller and Domain Controller PC name. Update the Role Server and other settings as needed. See "Using the Set Alternate Domain Tool" for more information.

9. Log out as Administrator.

10. Log in as an Instrument Administrator user.

11. Double click on the **Integritest 4N Central IMT** icon to launch the Central IMT. Verify that you can create an instrument and assign one or more users to the instrument. If you encounter problems, refer to the section "Confirming Settings after Installation."

Configuring Instrument(s) for the Domain

The procedures for configuring an instrument on a domain are described in the *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual.* Please refer to this document for procedures on configuring Millipore instruments for a domain.

Configuring a Central Repository and Backup Location

The computer(s) upon which the Central Repository and Backup Location will reside must be configured and connected to the network.

A Network Administrator should provide sharing to the required directories on the computer(s) hosting the Central Repository and Backup Location. This information will be required in the Central IMT for Backup Location and Central Repository configuration. These locations must be the same as the paths entered in the Central IMT (see "Central Repository and Backup Location Paths").

> **Note:** If the files appear to go to the wrong location, consult with the System Administrator to verify that the Central IMT and the instrument(s) have been properly connected to the network.

Confirming Settings After Installation

The Central IMT software includes utilities that can be used to verify and update Domain, Role Server, and other settings after installation.

Using the Set Alternate Domain Tool

The Set Alternate Domain tool is used to verify and update Domain, Alternate Domain, and Role Server PC settings as needed:
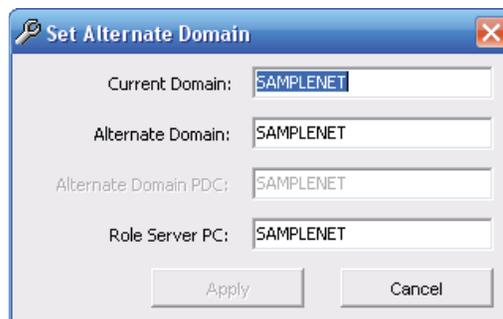
Set Alternate Domain Utility

To run the Set Alternate Domain utility:

1. Double click to open the SetAltDomain utility in the C:\Program Files\ Millipore\IT4N\ directory.

2. Review the settings to confirm they are correct. If any settings are incorrect, update them as needed then and click Apply. Otherwise, click Cancel.

   Important: The Role Server PC field should contain the name of the computer that has been configured for use as the Role Server.

   Note: If you set an Alternate Domain, the users available to the Central IMT will come from the Alternate Domain's controller.

Confirming Path Settings

Use the following steps to confirm path settings for Default Domain, Users, Role Server, Role Server data, and Tests:

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1. Double click the Central IMT desktop icon to start the Central IMT.

2. From the Central IMT's Help menu, choose **Paths**.

Instrument Management Tool [SAMPLENET\InstAdmin]: Paths

Default domain is SAMPLENET
Users come from \\SAMPLENET
Role Server is SAMPLENET
Role Server data path is \\SAMPLENET\IT4NMaster
Tests from C:\Program Files\Millipore\IT4NMaster\IT4ClientMaster.mdb

OK

Path Settings

3. Review the settings in the Paths Window to confirm they are correct.

   Note: If any settings are incorrect, you can adjust them using the Set Alternate Domain tool.

4 When finished, click **OK**.

Using the ID Mapper Tool

In order for the Integritest 4N Central IMT software to operate properly in domain mode, the software requires—in its default configuration—specific group names, user names, and passwords to be present on the domain. However, some of the default names and passwords used by the software may not be consistent with network security policies, password complexity requirements, or naming standards of the user organization.

The ID Mapper Tool was created so that organizations can map their required or preferred group names, user names, and passwords to the default group names, user names, and passwords used by the software.

> **Important:** The ID Mapper Tool should be used only if the required or preferred naming conventions of the user organization are different from the defaults used by the software.

> **Note:** If no mappings are set, the default names will be used.

The figure below shows the ID Mapper Tool in default mode.
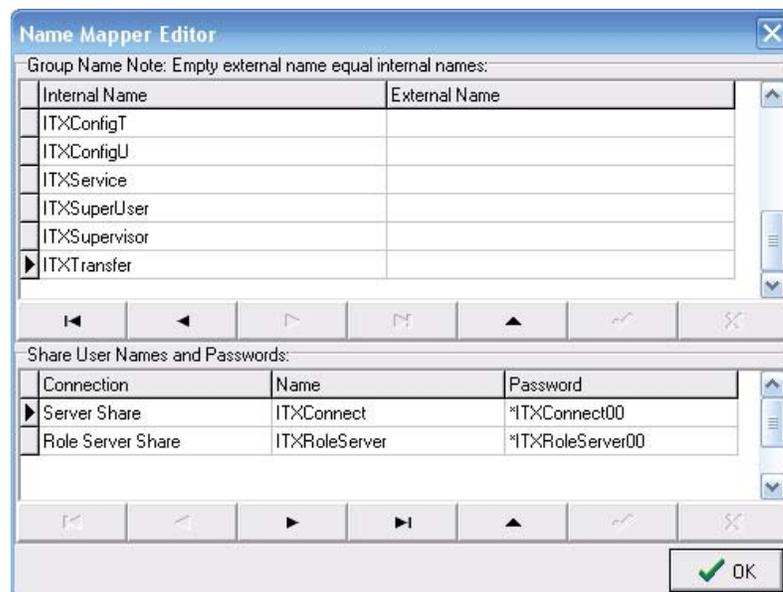
ID Mapper Tool

Mapping Group Names, Share User Names, and Passwords

1. Log on to the Role Server computer as Domain Administrator.

2. Install the Central IMT software on to the Role Server computer, if it was not installed there previously.

3. Double click on the **Integritest 4N ID Mapper** icon on the Windows desktop.

> **Note:** The tool can also be run from the C:\Program Files\Millipore\ IT4Nmaster directory.

4. Click the **Edit Map** button.

5. In the External Name fields, map the group names required or preferred by your organization to the Internal Names (used by the software).

> **Note:** Any External Name added here must exist and be properly configured on the domain in order for the mapping to be properly set.

For example:

Internal Name	External Name
ITXAll	MilliporeAll
ITXConfigI	MilliporeConfigI
ITXConfigT	MilliporeConfigT
ITXConfigU	MilliporeConfigU
ITXService	MilliporeService
ITXSupervisor	MilliporeSupervisor

6. Overwrite the predefined user names ITXConnect and ITXRoleServer with the user names required or preferred by your organization.

7. Overwrite the default passwords ITXConnect00 and ITXRoleServer00 with the new passwords required by your organization.

> **Note:** Passwords are visible in the ID Mapper Tool and must be preceded by an asterisk (*).

For example:

Predefined Name	New Name	Default Password	New Password
ITXConnect	MilliporeConnect	ITXConnect00	*MilliConnect00
ITXRoleServer	MilliporeRoleServer	ITXRoleServer00	*MilliRoleServer00

8. When finished, click **OK**.

9. In the Test Mapper window, type the Internal Name as per the table in step 5 and click **Map Group**.
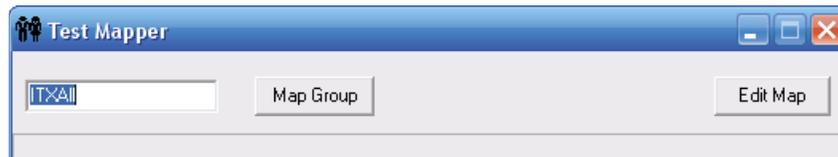
Test Mapper

10. Verify the mapped name is as defined in the External Name field.

11. Close the Test Mapper.

Chapter 2
Introduction

Introducing the Central Instrument Management Tool

The Integritest 4N Central Instrument Management Tool (IMT) is designed to provide centralized administration of filter testing instruments on a network. The Central IMT is used by administrators to manage instruments users, tests, reports, and other system options.

Tests administered via the Integritest 4N Central IMT can be conducted on a wide range of membrane filter systems. These include on-site bubble point, diffusion, HydroCorr™ and additional tests. Both hydrophobic and hydrophilic membrane filters can be tested, and testing is not limited to Millipore products.

It is recommended that organizations install both the software and instrument(s) on a 21 CFR Part 11 compliant network and verify compliance after installation with the requirements of 21 CFR Part 11. It is the responsibility of the end user to maintain compliance with this and any other data security rules and regulations.

Features

Centralized User and Instrument Management

Centralized user and instrument management allows a user in one location to access and configure instruments in multiple locations. A test can be created at a single location and added to a group of instruments without having to access each instrument individually. Centralized user management provides the Instrument Administrator with information for all of the accounts on the domain. This allows the Instrument Administrator to assign users to various functions on the instrument(s) without having to create IDs or assign passwords. Users assigned to the instrument(s) will log in with the same name and password they use elsewhere on the network. Any changes made to a user account are applied to all instruments. For example, if a user's domain account is disabled by the MIS department because of unauthorized access, that user will not be able to log in to any of the Integritest 4N instruments until the account is re-enabled. Centralized instrument management allows the Instrument Administrator to configure instruments from a Service PC. Instruments may be consolidated into logical groups that have the same configurations. For example, adding a test to an instrument group will add that test to all instruments within that group.

Centralized Test Management

Test specifications are managed through the Test Definition Editor (TDE). The TDE is accessed via the Central IMT's Test menu.

New test specifications can be created on the Central IMT computer and added to multiple instruments over the network. If this option is not used, a new test must be programmed on each instrument, which is more time-consuming and increases the chance of input error. Central management of the specifications, when used properly, ensures that all instruments are using the same revision of the filter test.

For more information, see "Managing Tests."

Report Transfer

Using the Central IMT, instruments can be configured to send completed test reports to a network location, hereafter called the Central Repository. The instruments send a checksum file with the report file that can be used to verify that the report has not been altered.

Once the test report has been successfully transferred, the test data can be removed from the instrument(s) to reduce the size of the test database.

For more information about configuring report transfer options using the Central IMT, see "Selecting Report Transfer Options." For information about report transfer options, see the *Integritest 4N Integrity Test Instrument Network and Administrator Manual.*

Electronic Signatures

Electronic signatures can be configured when reports are to be transferred to the Central Repository. A user name, time, and reason for signature are added to the report when a user enters the information and provides a valid password. The instruments can be set to require no signature, one signature, two signatures, or two signatures that include one provided by a Supervisor. Reports are not transferred to the Central Repository until the required signatures have been provided. The transferred report files contain the signature information.

See "Selecting Electronic Signature Options" for more information.

Remote Backup

Using the Central IMT, the instruments can be configured to back up the database information to a designated Backup Location on the network. Once a network location is set using the Central IMT, the information is automatically backed up to this location once a week.

For information about configuring remote backups using the Central IMT, see "Selecting Remote Backup Options." For information about remote backup options on the instruments, see the *Integritest 4N Integrity Test Instrument Network and Administrator Manual.*

Networking Safeguards

The Central IMT and instrument software have built-in safeguards to ensure that database information is not modified by malicious or unintentional actions. For example, most operating system functions are limited to those users with a high access level.

The Central IMT can also be configured to comply with the technical controls of 21 CFR Part 11 for electronic records and electronic signatures. Test reports can be signed electronically by the operator and a supervisor. All changes to user, test, and instrument configuration are logged with the date, time, and name of the individual making the change. It is the responsibility of the end user to maintain compliance with applicable data security policies and regulations, including 21 CFR Part 11.

Chapter 3
Getting Started

Overview

When the Integritest 4N Central IMT is first installed, all settings are in default mode.

Depending on the requirements of your organization, some of the settings in the Central IMT will need to be adjusted. In addition, settings may need to be adjusted if requirements within your organization change.

Accessing the Central IMT

In most instances, you will access the Central IMT from the Service PC because you will be working in domain mode.

> **Note:** There may be instances when you need to access the local IMT on the instrument. Access to the local IMT on the instrument is available only to users who are Instrument Administrators.

To access the Central IMT from the Service PC:

1. Using your domain user name and password, log in to the Service PC.

2. Double-click the Integritest 4N Central IMT desktop icon. The Central IMT (Figure 1) will appear.
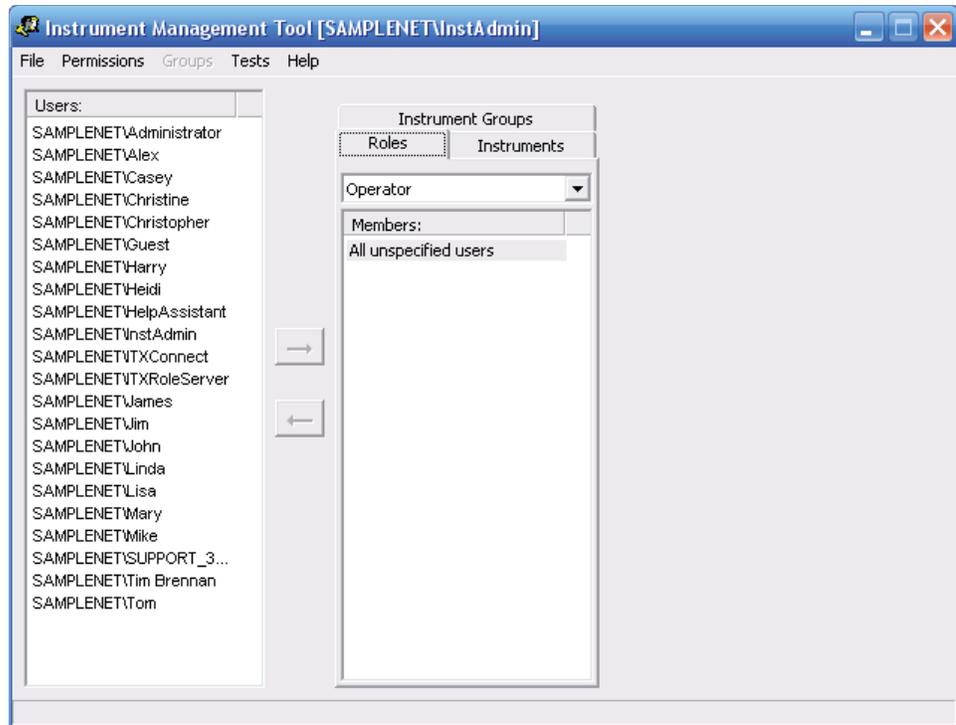
Figure 1: The Central Instrument Management Tool

Setting the Central IMT Language

The default language setting for the Central IMT software is English. Do the following to change the language on the Central IMT:

1. Log on to the Service PC and double-click the ![Integritest 4N Central IMT icon] icon to launch the Central IMT.

2. Select **Language** from the File menu and choose the desired language.

3. When you close the Central IMT and restart it, all of the Central IMT strings will appear in the language you selected.

   Important: Some of the language strings that appear in the Central IMT originate from the operating system. For all text to appear in the desired language on the Service PC, both the Central IMT and the operating system must be set to that language.

Graphical User Interface

The Central IMT uses menus, lists, and tabs to sort and display information. Depending on the access levels assigned to your User ID, some of the menus, lists, and tabs may, or may not, be available.

This section provides an overview of the Central IMT's graphical user interface.

Menus

There are five menu items in the Central IMT: File, Permissions, Groups, Tests, and Help. The items in each menu are briefly explained in the tables below.

File Menu

Print Instrument Options Report	Prints an Instrument Option Report. This report states the current options for each instrument.
Print Report by Permissions	Prints a Permission Membership Report. This report lists all instruments and roles and the users assigned to each.
Print Report By Users	Prints a User Permission Report. This report lists all users and the roles and permissions assigned to each one.
Print Test Definitions Report	Prints a Test Definitions Report. This report lists all of the defined tests with their parameters.
Language	Sets the Central IMT language. To operate entirely in the selected language, the operating system language must be set to the selected language as well.
Set Role Server	Lets you enter the Domain and Role Server names. This should only be accessed when setting up the Service PC or if a new Role Server will be used.
Set Alt Domain	Lets you specify an Alternate Domain from which to receive user information. If an alternate domain is set then all users listed in the Central IMT come from that domain, not the primary domain.
Exit	Saves changes and closes the Central IMT.

Permissions Menu

Add Instrument	Lets you add an instrument name to the Central IMT. Each instrument name must be unique.
Delete Instrument	Removes an instrument.
Refresh	Refreshes the user and test lists. While the lists are set to update automatically, this setting may be used if users and tests you expect to see in the list are not present.

Groups Menu

The Groups menu list becomes available when you select the Instrument Groups tab (Figure 2).

| Add Group	Lets you create a new instrument group. Once a new group has been added, Rename Group and Delete Group menu items become active.
Rename Group	Lets you rename an existing instrument group.
Delete Group	Removes a group
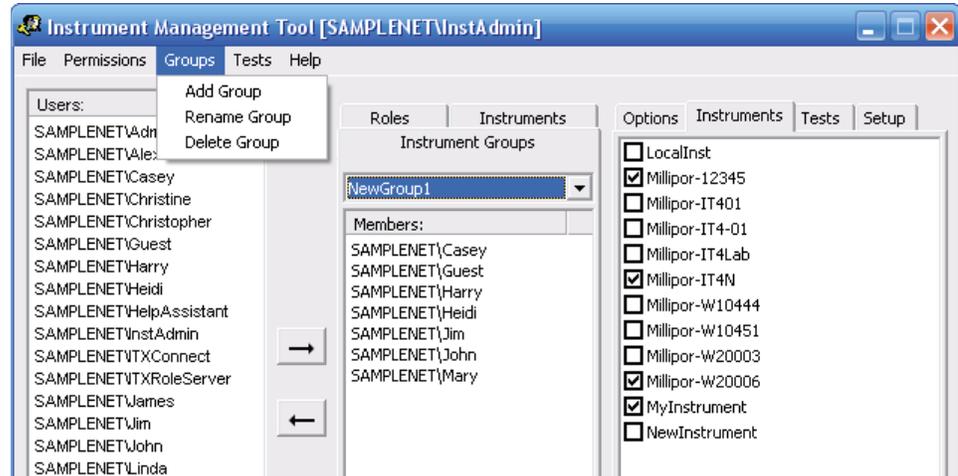
Figure 2: Central IMT Groups Menu and Instrument Groups Tab

Tests Menu

Edit/View Test	Displays the Test Definition Editor (TDE).
PSI, mbar, kPa	Lets you set the TDE pressure units.

Help Menu

About	Displays the Central IMT version number.
Paths	Displays path information for the Default Domain, Users, Role Server, Role Server data, and Tests

Lists and Tabs

The following tables describe the functions and information available in the lists and tabs of the Central IMT.

Users List

The Users list (Figure 3) is displayed on the left side of the Central IMT, and includes all of the domain users, which are provided by the Domain Controller. The Users list has a search function that allows users to be found by name. Click on the Users list and press Control-F on your keyboard to open the search box (Figure 10). You can search on part or all of a user's name.	Users: SAMPLENET\Administrator SAMPLENET\Alex SAMPLENET\Casey SAMPLENET\Christine SAMPLENET\Christopher SAMPLENET\Guest SAMPLENET\Harry SAMPLENET\Heidi SAMPLENET\HelpAssistant SAMPLENET\InstAdmin SAMPLENET\TXConnect SAMPLENET\TXRoleServer SAMPLENET\James SAMPLENET\Jim SAMPLENET\John SAMPLENET\Linda *Figure 3: Users List*
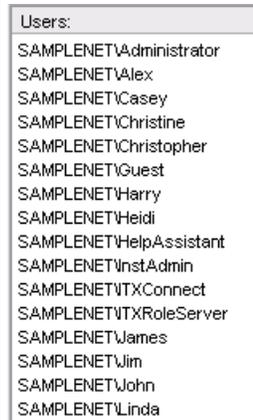
Roles Tab

The Roles tab (Figure 4) is used to assign users to roles. Selecting one of the roles from the drop-down list shows the users who are assigned to that role. Permissions for each role are pre-configured. For more information, see "Roles."	Instrument Groups Roles Instruments Operator Operator Service Supervisor *Figure 4: Roles Tab*

Instruments Tab

The Instruments tab (Figure 5) is used to assign users and tests to instruments, and to configure report transfer, remote backup, and electronic signature options.

Selecting one of the instruments from the drop-down list shows the users that are assigned to the instrument and allows access to the Options, Tests, and Setup tabs.
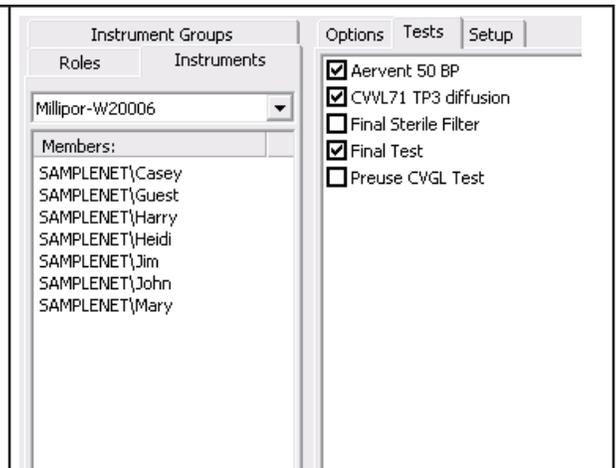
Figure 5: Instruments Tab

Instrument Groups Tab

The Instrument Groups tab (Figure 6) is used to assign instruments to logical groups, and to configure report transfer, remote backup, and electronic signature options for those groups. Selecting one of the groups from the drop-down list shows the users that are assigned to that group and allows access to the Options, Instruments, Tests, and Setup tabs.

The Instruments tab associated with the Instrument Groups tab displays a list of all of the instruments that have been added to the Central IMT. Instruments with check marks are part of the selected instrument group.
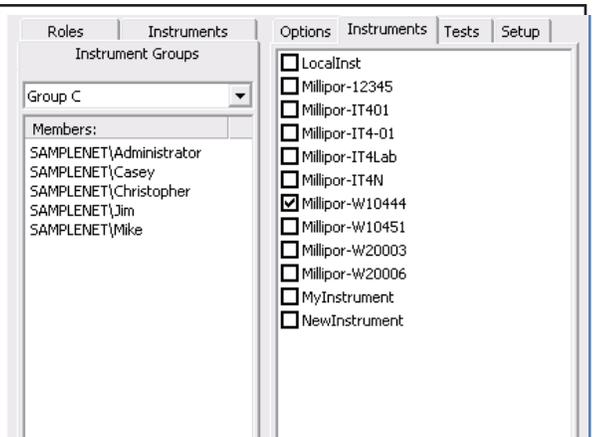
Figure 6: Instrument Groups Tab

Options Tab

The Options tab becomes available when you select an instrument or instrument group. It contains the report transfer, backup, and electronic signature options. The table below describes the functionality of each option.

Reports: Path	Displays the file location selected for transferring reports.
Reports: Style	Allows selection of PDF, XML or both formats for transferred reports.
Reports: Delete On Successful Transfer	Sets the instrument to delete tests after a successful transfer. (See "Selecting Report Transfer Options.")
Backup: Path	Displays the file location selected for backups
Backup: Style	Lets you choose a backup style. The options are Current, Full, and Audit. (See "Selecting Remote Backup Options.")
Signature Lines	Use the scroll box to set the number of required electronic signatures. Use the check box to require a supervisor signature. (See "Selecting Electronic Signature Options.")

Tests Tab

|	
The Tests tab (Figure 7) displays a list of all of the tests that have been created using the Test Definition Editor. Tests with check marks are available on the selected instrument or instrument group.	 *Figure 7: Tests Tab*
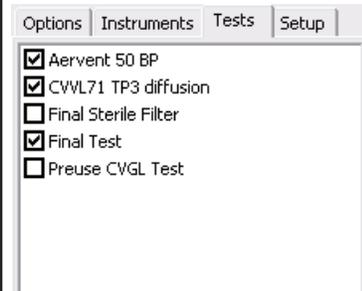
Setup Tab

The Setup tab (Figure 8) displays a list of all of the fields available for the Instrument Options Report for a selected instrument or instrument group.

The Comment Required checkbox sets the Comment field on an instrument's Test Parameters screen as required or optional. A check mark in the box indicates a comment is required before a test can be run.

Click the Select All button to select all Report Fields in the list.
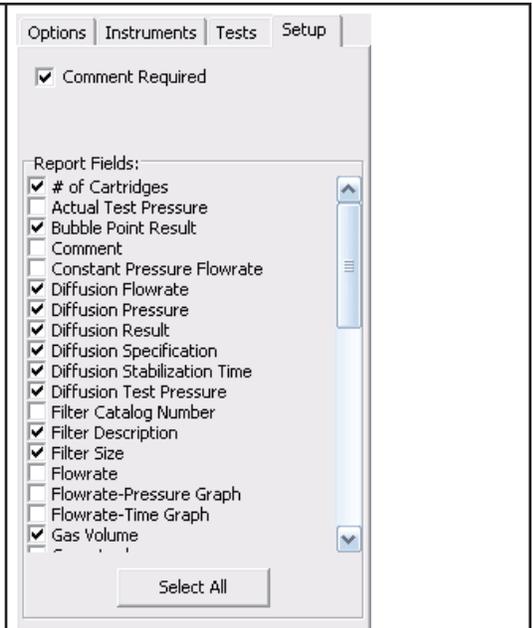
Figure 8: Setup Tab

Saving Changes

Some changes made in the Central IMT are effective immediately upon their execution (such as assigning a user to a role). Other changes, such as updating a filter test definition or selecting a report style, are applied after closing the Central IMT. To ensure that all new configurations are applied, close the Central IMT after making changes. If you make a mistake when configuring an option within the Central IMT, it is best to correct it during the same session. If you already closed the Central IMT, then restart the Central IMT, change the incorrect setting, and close it again.

When you use the Central IMT to make changes to the instrument settings, this updates the Role Server. The instrument will download those updates the next time a domain user logs on, provided that the instrument is connected to the network.

Note: The Service PC must be connected to the Role Server for the Central IMT to operate properly. Also, the Role Server must be available on the domain when the instrument attempts to download the changes. Otherwise, the instrument will continue to operate with the previous settings.

Introduction

Using the Central IMT, the Instrument Administrator can update many of the settings on the instruments from a central location.

> **Important:** While settings listed in this section can be adjusted via the Central IMT, some settings will need to be set on the instrument(s). See the *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual* for instructions.

Managing Users

The Central IMT can be used to manage user access to instruments across the network. Users should be assigned roles and instruments. Figure 9 shows the Central IMT when limited to user management.
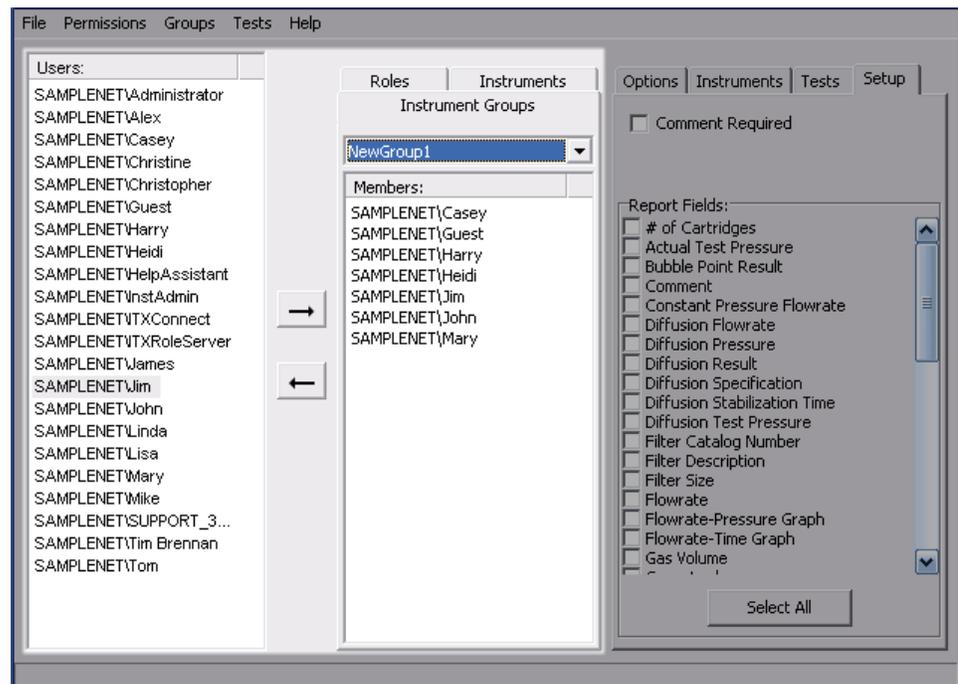
Figure 9: Central IMT User Management

Roles

Roles are used in the Central IMT to organize users into groups that have the same permissions. This eliminates the need to maintain individual permission levels for each user. The Central IMT provides three roles: Service, Supervisor, and Operator. A user can be assigned to multiple roles.

> **Note:** There are additional roles available on the instruments that are not available on the Central IMT. For a detailed description of all roles, refer to the *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual.*

Central IMT roles appear in the drop-down menu in the Roles tab (Figure 4).

> **Note:** The Operator role is the default; until you assign a user a role, he or she is an Operator.

Assigning Users to Roles

Follow these steps to assign a user to a role:

1. Launch the Central IMT and select the role from the drop-down list on the Roles tab (Figure 4).

2. Select the user in the Users list and click ➝ .

   > **Note:** This is not necessary for the Operator role because all users default to the Operator role.

Removing Users from Roles

1. Launch the Central IMT and select the role from the drop-down list on the Roles tab (Figure 4).

2. Select the user from the list of users assigned to that role and click ⬅ .

Assigning Users to Instruments

Use the Central IMT to assign users to instruments. Once assigned to instrument(s), a user will be able to perform all of the functions on the instrument(s) allowed by the role(s) set for the user.

Follow these steps to assign a user to an instrument:

1. Select the instrument from the drop-down list in the **Instruments** tab (Figure 5).

2. Select the user in the Users list and click . To assign a user to all of the listed instruments, select All from the drop-down list and follow the same procedure.

Users can also be assigned to instrument groups, as follows:

1. Select the group from the drop-down list on the **Instrument Groups** tab.

2. Select the user in the **Users** list and click ⟶ . A user assigned to an instrument group is able to use all of the instruments in that group

Removing Users from Instruments

To remove a user from an instrument or instrument group:

1. Select the instrument or group from the drop-down list.

2. Select the user to be removed from the list of users assigned to that instrument or group and click ⟵ to remove the user from the instrument.

Searching for Users

The Users list within the Central IMT has a search function that lets you search for users by name.

1. In the Central IMT, click on any name in the **Users** list and press Control-F to open the Find box (Figure 10).
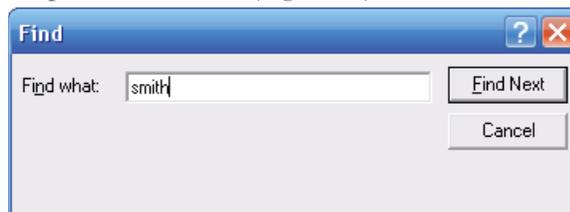

Figure 10: Find User

2. Enter all or part of a user's name in the **Find what** field and press **Enter** or click the **Find Next** button.

Managing Instruments

Use the Central IMT to manage instrument settings. Figure 11 shows the Central IMT when limited to instrument management.
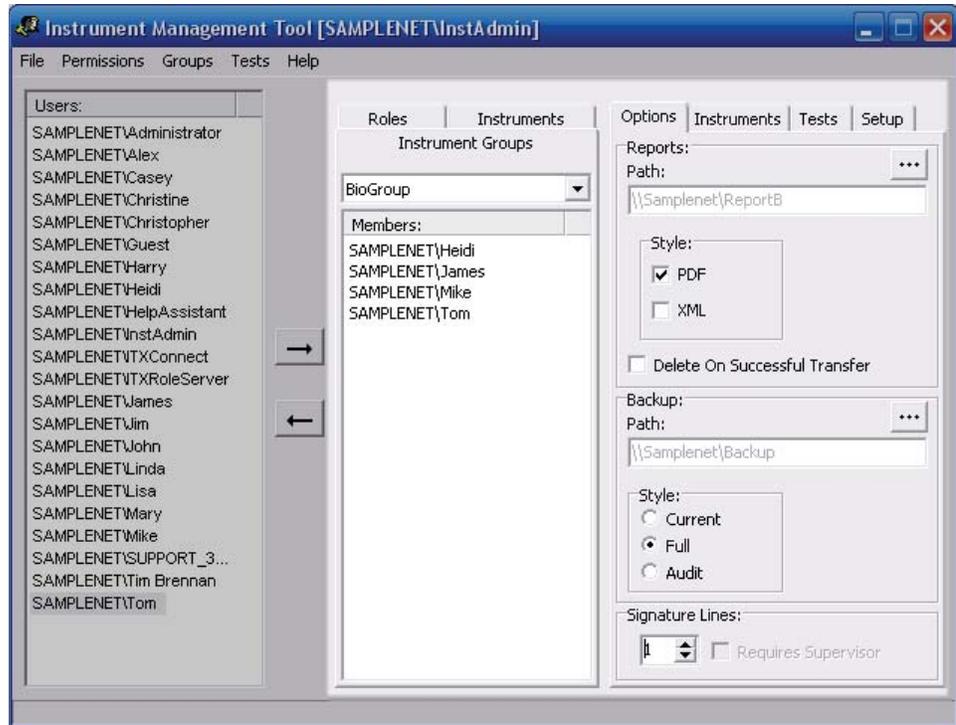

Figure 11: Instrument Management Options

> **Note:** The Options tab shown in Figure 11 is used to configure the instrument(s) report transfer, remote backup, and electronic signature options. For more information, see "Setting the Central Repository and Backup Location Paths" and "Selecting Electronic Signature Options."

Adding and Deleting Instruments

To add an instrument to the Central IMT, do the following:

1. Access the Central IMT and select **Add Instrument** from the Permissions menu. This opens the Add Instrument box (Figure 12).
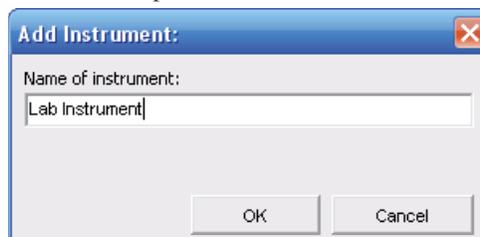
Figure 12: Add Instrument Box

2. Enter the network name of the instrument and click **OK** to add the instrument to the Central IMT.

To delete an instrument from the Central IMT, do the following:

1. Access the Central IMT and select the instrument from the **Instruments** tab.

2. Select **Delete Instrument** from the Permissions menu.

3. Click **Yes** to confirm that you want to delete the instrument from the Central IMT.

   Note: The "All" entry cannot be deleted from the list of instruments.

Working with Instrument Groups

Instruments that will have the same configuration settings can be assigned into groups. This eliminates the need to configure each instrument independently. When an instrument is part of a group, its options cannot be changed individually.

Creating Instrument Groups

To create a new instrument group in the Central IMT, do the following:

1. Select the **Instrument Group** tab and select **Add Group** from the Groups menu. This opens the Group Management box (Figure 13).

2. Enter the desired group name and click **OK** to save the new group.
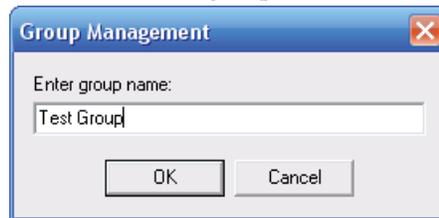

Figure 13: Group Management Box

   Note: When a group is first created, it does not contain any instruments. Follow the steps in "Adding Instruments to Groups" to add instruments to the group.

Adding Instruments to Groups

To add instruments to a group in the Central IMT, do the following:

1. Select the group from the drop-down list on the **Instrument Groups** tab (Figure 14).
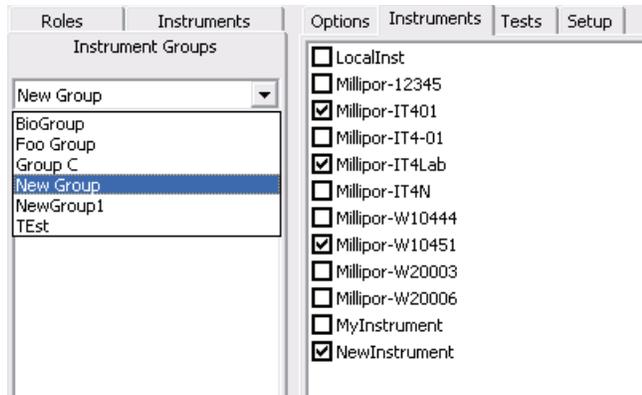
Figure 14: Instruments in Instrument Group

2. In the **Instruments** tab, select the checkbox beside each instrument you want to assign to the group.

>   **Note:**   An instrument can only belong to one instrument group.

When the next domain login occurs, the group settings will be downloaded from the Role Server.

>   **Note:**   If you want to configure the group's report transfer, remote backup, and electronic signature options, refer to "Setting the Central Repository and Backup Location Paths" and "Selecting Electronic Signature Options" for instructions.

Renaming Instrument Groups

To rename an instrument group in the Central IMT, do the following:

1. Select the group that you want to edit from the **Instrument Groups** tab.

2. Select **Rename Group** from the Groups menu. This opens the Group Management box (Figure 13).

3. Enter the new group name and click **OK** to save the new name.

Deleting Instrument Groups

To delete an instrument group, do the following:

1. Select the group from the **Instrument Groups** tab.

2. Select **Delete Group** from the **Groups** menu.

3. Click **Yes** to confirm that you want to delete the instrument group.

Setting the Central Repository and Backup Location Paths

The Central Repository and Backup Location must first be mapped to a network drive on the Service PC before they can be selected as the repository or backup path.

Contact your Network Administrator for assistance with mapping network drives.

To set the location of the Central Repository or Backup Location, do the following:

1. Click ⋯ located above the **Path** field (Figure 15).
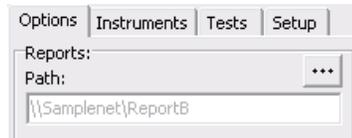
Figure 15: Reports Path

This opens a window that lets you set the reports path (Figure 16).
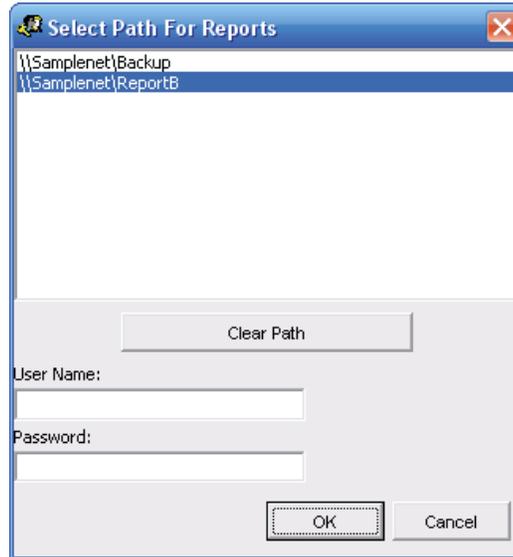
Figure 16: Select Path for Reports

2. Select the drive mapped to the Central Repository or Backup Location. If required, fill in the **User Name** and **Password** fields to allow access to the remote drive.

   Note: Configuring the instrument(s) to transfer reports or send remote backups to a local directory or the floppy drive may result in errors and/or eventual data loss.

3. Click **OK** to confirm the new location. You may close the Central IMT to save the changes or proceed to "Selecting Report Transfer Options" for instructions on setting the other report options.

Canceling Report Transfer and Remote Backup

If you want to cancel report transfer and/or remote backup:

1. Click the [···] located above the **Path** field.

2. In the Select Path for Reports window (Figure 16), click the **Clear Path** button. This will clear all text from the Path field(s).

3. Close the Central IMT. At the next connected login, the instrument(s) will not send test reports and/or will perform backups to the floppy drive.

Selecting Report Transfer Options

You can use the Central IMT to centrally configure report transfer options for instruments.

If report transfer options are configured using the central IMT, the data for the instruments is sent to the Central Repository in a secure report for later retrieval and review once tests are completed.

> **Note:** This section provides an overview of configuring remote report transfer using the Central IMT. Descriptions of the report transfer options are provided in the *Integritest 4N Integrity Test Instrument Network and Administrator Manual.*

The report transfer options are displayed in the Reports box on the Options tab. The steps below describe how to configure the report transfer options using the Central IMT:

1. Select the instrument from the **Instruments** tab or the group from the **Instrument Groups** tab.

2. Select the **Options** tab.

3. In the Reports box, the **Path** field contains the path to the Central Repository for reports (see "Setting the Central Repository and Backup Location Paths").

4. There are two report styles available for transferred reports: PDF and XML. In the Styles box, select **PDF** or **XML** or both by placing a check mark next to the desired style(s).

   > **Note:** For more information about the PDF and XML formats, see the *Integritest 4N Integrity Test Instrument Network and Administrator Manual.*

5. If you want test data removed automatically from the instrument after it has been transferred and processed, then place a check mark in the **Delete on Successful Transfer** field. If you select this option, the test data will be removed from the instrument when certain conditions apply.

Note: For information about these options, see the *Integritest 4N Integrity Test Instrument Network and Administrator Manual.*

Selecting Remote Backup Options

Using the Central IMT, you can configure any number of instruments to send backup data to a specified Backup Location on the network. Once a Backup Location is set, the information is automatically backed up there once a week.

This section describes the remote backup options available through the Central IMT. Instructions for performing a backup on an instrument are found in the *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual.* For information about the types of files saved and created during backups, see the *Integritest 4N Integrity Test Instrument Network and Administrator Manual.*

The remote backup options are displayed in the Backup box on the Options tab. Follow the steps below to configure the remote backup options.

1. Select the instrument from the **Instruments** tab or the group from the **Instrument Groups** tab.

2. Select the **Options** tab.

3. In the Backup box, the **Path** field contains the path to the Backup Location on the network (see "Setting the Central Repository and Backup Location Paths"). If you leave the Path field empty, this will cause the instrument to send backups to its floppy drive, and the user performing the backup must select a backup style.

4. The Style options are only available if you entered a path in the Path field. In the Styles box, select the **Current**, **Full**, or **Audit** backup style.

Selecting Electronic Signature Options

You can use the Central IMT to configure electronic signature options for instruments and instrument groups.

This section describes the electronic signature options available through the Central IMT. For more information about electronic signatures, see the *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual* and the *Integritest 4N Integrity Test Instrument Network and Administrator Manual.*

The electronic signature options are displayed in the Signature Lines box on the Options tab. Follow the steps below to configure the electronic signature options using the Central IMT.

1. Select the instrument from the **Instruments** tab or the group from the **Instrument Groups** tab.

2. Select the **Options** tab.

3. In the **Signature Lines** box, select zero, one, or two signatures.

  - If **0** is selected, the check box for Requires Supervisor will be grayed out on screen, and no signatures will be necessary for test report transfer.

  - If **1** is selected, the instrument will require one user to enter a User ID, password and reason for signing. Once this is done, the test report is considered complete, and the report will be transferred if a valid network connection is available.

  - If **2** is selected, one user must enter the required information. Once that is completed, a second signature box becomes available, and a second user must enter their information. A different user must provide the second signature, with a different User ID and password.

4. Check the **Requires Supervisor** box to require that a supervisor signs the report. This option is only enabled for two signatures and will be grayed out if less than two are selected.

Managing Tests

Creating and Editing Tests

The Test Definition Editor

You use the Test Definition Editor (TDE) to create new test programs and specifications, and to view, edit, or delete existing test programs and specifications. Figure 17 shows the TDE.
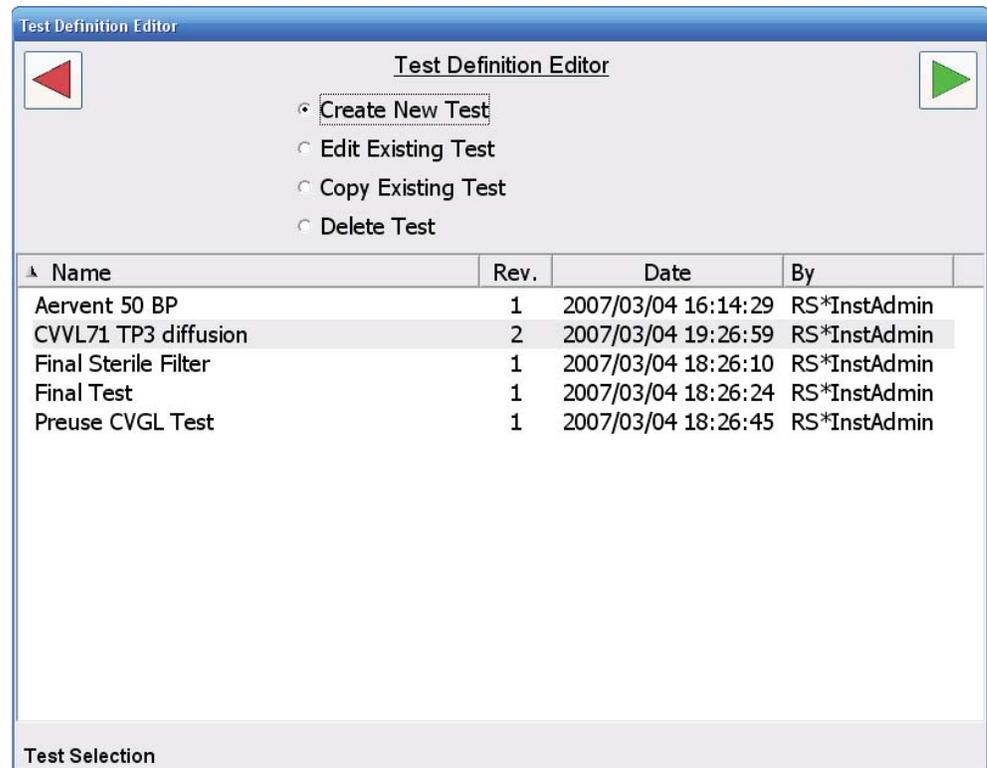
Figure 17: Test Definition Editor (TDE)

To access the TDE, select **Edit/View Tests** from the Central IMT's Tests menu.

> **Note:** An on-screen keyboard is part of the TDE. Data may be entered with the on-screen keyboard using a mouse if a normal keyboard is not present.

For step-by-step procedures on using the TDE, refer to *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual.*

Selecting Pressure Units

From the Central IMT, you can set the pressure units that will be used in the TDE. There are three selectable units: PSI, mbar, and kPa. The default pressure unit is PSI.

To change the default pressure unit used by the TDE, select the option from the Central IMT Tests menu.

Important:

- PSI or mbar are the recommended units because filter specifications are normally provided in either of those units.

- It is recommended that the TDE and the instruments use the same pressure units. If the TDE pressure units are different from the instruments' units, the test input data (upstream volume, minimum bubble point, etc.) will be converted at the instrument.

- For additional information, refer to the *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual.*

Assigning Tests to Instruments

Use the Central IMT to assign tests to instruments or instrument groups. Figure 18 shows the Central IMT when limited to test management.
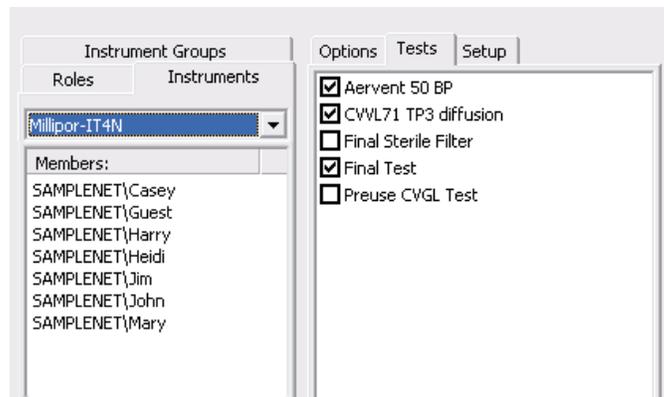
Figure 18: Test Management

You create tests using the Test Definition Editor (TDE). (See "The Test Definition Editor.") Once a test is created and saved, you can assign it to an instrument or instrument group by using the Tests tab (Figure 18). Follow the steps below:

1. Select the instrument or group from the **Instruments** or **Instrument Groups** tab and then click the Tests tab. The Tests tab lists all available tests in the Central IMT.

2. Place a check mark next to tests that should be available on that instrument or group, and remove any check marks next to tests that should be unavailable.

3. Close the Central IMT to save the changes. At the next connected login, the instrument will contain all of the selected tests.

    Important:

    - Although tests can be administered via the local IMT on the instrument, **this is NOT recommended while in domain mode.**

    - If the instrument(s) are set to merge tests, additional tests beyond those marked in the Central IMT may be available on the instrument.

    - Test specifications are created, modified, and deleted using the TDE.

    - See "Managing Tests" and the *Integritest 4 Automatic Filter Integrity Test Instrument XIT4S0001 and XIT4N0001 Operators Manual* for more information.

Reports

In addition to configuring report options for networked instruments using the Central IMT, you can also print the administrative reports described in the table below.

Report	Description
Instrument Option Report	This report states the current options for each instrument.
Permission Membership Report	This report lists all instruments and roles and the users assigned to each.
User Permissions Report	This report lists all users and roles.
Test Definitions Report	This report lists all of the defined tests with their parameters.

> **Note:** For information about configuring report options for the instruments using the Central IMT, see "Selecting Report Transfer Options."

Printing the Reports

Do the following to print a report:

1. Depending on the type of report you want to print, select Print Instrument Options Report, Print Report by Permissions, or Print Report by Users from the Central IMT's File menu.

2. In the Windows Print box, ensure that the printer you want is selected and/or adjust the options as needed.

3. Click **OK**. The report will be printed to the selected printer in accordance with the options you selected.

Appendix A
Glossary of Terms

Backup	Saves test specifications and archives. The type of instrument data saved is set by the Instrument Administrator.
Backup Location	The network location to which the instrument(s) send backups.
Central IMT	Central Instrument Management Tool. See the "Instrument Management Tool" glossary item below.
Central Repository	The network location to which the instrument(s) send test reports.
Domain Controller	The Domain Controller is used to create and manage users. This computer provides all the required User ID, security, and password verification information when the instrument(s) are in Domain mode.
Domain Mode	Operation mode of instruments that are part of a domain. User information and security comes from the Domain Controller, and all of the network features are available. The instrument(s) are updated with configuration changes by the Role Server.
ID Mapper	The ID Mapper Tool is a utility that lets organizations map their required or preferred group names, user names, and passwords to the default group names, user names, and passwords used by the software.
Instrument Administrator	The person responsible for configuration and management of the instrument(s); defines users, instrument groups, and where and how instruments are to be used. Configures access, roles, reporting defaults, signature requirements, and other details for each instrument or instrument group. Depending on the organization, multiple people can function as Instrument Administrators, and a single Instrument Administrator may control many instruments.

Instrument Group	A set of instruments that have the same configuration of users, roles, and test and filter definitions. When an instrument group is created in the Central IMT, any changes made to the group are applied to each instrument in that group.
Instrument Management Tool (IMT)	A tool used by the Instrument Administrator to configure user access, permissions, and usage of instruments, tests and filters. When instruments are in Domain mode, the Central IMT runs on a Service PC. When instruments are in Workstation mode, the local IMT on the instrument is used to manage that instrument only.
Integrity Test	An integrity test is a test used to determine whether or not a filter has a defect capable of passing particles that should be retained. Tests performed by the Integritest 4N instrument(s) are non-destructive and non-contaminating.
MIS (Management Information Systems)	A general term for the computer systems in an enterprise that provide information about its business operations. The term is often used to refer to the departments or people who manage these systems.
Network Administrator	Has administrator-level access to the network and is responsible for adding new computer, users, and maintaining network security. For instruments in Domain mode, the Network Administrator configures the Role Server and Service PC and administers user accounts and passwords.
Networked Workstation Mode	The instrument is connected to a network, but is not part of a domain. Instrument configuration is performed using the local IMT. The instrument can be set to transfer filter tests, perform remote backups, and require electronic signatures.
PDF	Portable Document Format, a multi-platform file format developed by Adobe® Systems. A PDF file captures document text, images, and the formatting of documents from a variety of applications. Viewing a PDF file requires Acrobat® Reader®.
Restore	Returns data saved during a backup to the instrument(s). This is not available for all types of backups.

Role Server

The Role Server stores information on users, instruments, instrument groups and instrument configurable parameters. The Role Server also stores test specifications and all configured parameters that are programmed using the Central IMT. In Domain mode, this function is provided by a computer on the network. In Workstation mode, all Role Server operations are performed by the instrument.

Service PC

This computer allows access to the Central IMT for instruments in Domain mode. Filter and test specifications, instruments, and roles are configured from the Service PC and stored in the Role Server.

Test Definition Editor (TDE)

Allows a user to create and edit test specifications. The TDE is accessed through the Central IMT's Tests menu.

XML

Extensible Markup Language, is a subset of SGML (Standard General Markup Language) for Web page use. XML is used to define documents with a standard format that can be read by any XML-compatible application.

Appendix B
Error Messages

This table lists some of the error messages that may appear while using the Central IMT.

Note: This is not an exhaustive list of all the possible error messages. The specific error messages generated while using the Central IMT depend on the configuration of the instrument and the network to which it is connected. This table lists the most common error messages.

Scope	Message	Cause
Service PC at IMT launch	Windows cannot access the specified device, path or file. You may not have the appropriate permissions to access the item.	Attempting to launch the Central IMT on the Service PC without the correct access level.
Service PC and instrument	Role Server Unavailable	Role Server is not accessible from Central IMT. Check network connections and Role Server settings.
Select Path windows	The user name or password has not been specified. This may make it unable to share this directory.	No user name or password specified to access the Central Repository or Backup Location.
Adding new group	Group name is too long. Maximum length is 15 characters.	Entered group name is too long.
Adding new group	Group name already exists.	Entered group name already exists.
Adding new instrument	Instrument name is too long. Maximum length is 15 characters.	Entered instrument name is too long.
Adding new instrument	Instrument name already exists.	Entered instrument name already exists.

Technical Assistance

For more information, contact the Millipore office nearest you. In the U.S., call **1-800-MILLIPORE** (1-800-645-5476). Outside the U.S., see your Millipore catalogue for the phone number of the office nearest you or go to our web site at www.millipore.com for up-to-date worldwide contact information. You can also visit the tech service page on our web site at www.millipore.com.

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