



# WISE

## **Web Information Services Environment**

### WISE ADMINISTRATION GUIDE

Version 1.2 & MCCIS 5.1

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# 1 Welcome to WISE!

*Note: This Guide covers WISE for the PC version 1.2 and UNIX version 5.1 unless noted.*

## 1.1 Introduction

The Web Information Services Environment (WISE) application is a user-friendly system, which has been designed for easy use by all skill levels in web page design and management. This manual will guide you through the WISE program structure and administration responsibilities to ensure WISE runs smoothly at your site.

The Allied Command Transformation has developed the following documents to support the WISE product:

- **WISE 1.2 System Architecture Guide –**
  - *System hardware requirements and configuration discussion*
- **WISE 1.2 Installation Guide –**
  - *Complete instructions for installing WISE on a server*
- **WISE 1.2 Release Notes –**
  - *Details of the changes in this version of WISE*
- **WISE 1.2 & MCCIS 5.1 Administration Guide –**
  - *Outlining the WISE structure and administrative procedures*
- **WISE 1.2 & MCCIS 5.1 User Guide –**
  - *Full descriptions and examples of how to use WISE*
- **WISE 1.2 & MCCIS 5.1 Object Guide –**
  - *Full descriptions and examples of how to use WISE Objects*

## 1.2 Document Scope

The WISE 1.2 & MCCIS 5.1 Administration guide provides in-depth details and instructions to configure and maintain WISE. Details of site administrator tasks and explanations of task related functions are provided. Discussions on the configurations available to the site administrator will be given along with pros and cons of each method. Prior to installing WISE the System Architecture and Installation guide should be referenced. As WISE is a user operated application emphasis must be placed on the user providing the majority of the day-to-day work in maintaining the WISE site. The site administrator should monitor the site and server loads, providing help and ideas to the users as well as performing the standard back up functions. The WISE User Guide has full details of the operation of WISE including many content manager functions. This guide will not go into details of how to operate WISE as this is covered fully in the **WISE User Guide**. However, it will cover the areas that a WISE site administrator will need to manage.

### **1.2.1 PC and MCCIS versions of WISE**

WISE 1.2 and MCCIS 5.1 are the same version of WISE, one running on a PC platform the other on UNIX platform. The UNIX version, which is part of the MCCIS application, has some WISE objects related to command and control functions such as the COP. The PC version has the Brief Generator, which is not included on the UNIX version, as PowerPoint is not supported in UNIX. Section 9 of this guide looks at the differences in the UNIX version.

**Note:** *For the PC version of WISE, users assigned administrator privileges to their PC will be able to confirm the current installed version of WISE by selecting the Control Panel and then clicking on Add/Remove Programs. If you select WISE from the list of currently installed programs there will be a link for support information, which provides details about the current installed version of WISE. However, this information is not available if you are using WISE as a client.*

## **1.3 History**

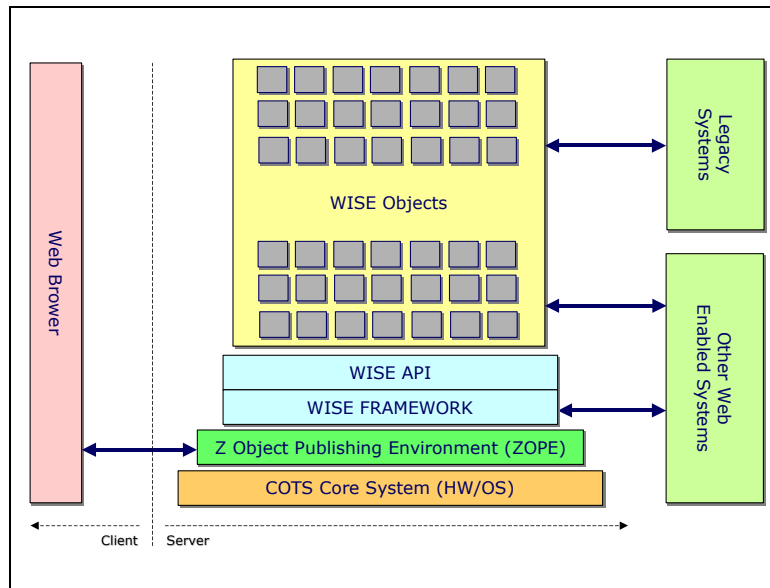
WISE was originally developed to be a web interface to the Martine Command and Control Information System (MCCIS) in 2001. Using the UNIX MCCIS server WISE provided a low cost easy solution to obtain limited access to the MCCIS services. Any workstation with a browser connected to a network could access command and control information provided by the WISE server running on the UNIX platform.

The MCCIS WISE application proved successful and popular with both users and administrators.

A stand-alone PC version of WISE was requested and was delivered by ACT UDB in 2002. WISE 1.2 will run on any current PC platform using all versions of Microsoft products from Windows NT to XP. Server capabilities and minimum requirements are discussed fully in the **WISE System Architecture Guide**.

WISE 1.2 is the latest version of WISE and has many new features and enhancements on the previous WISE products.

## 1.4 WISE Architecture



**Figure 1 - WISE Architecture**

WISE has been developed using modern open source applications, languages and a NATO developed user interface. The basic WISE application will run across many platforms. The diagram above displays the system architecture.

### 1.4.1 ZOPE

WISE is implemented in a modern, open-source web application server called Z Object Publishing Environment (Zope). Zope runs in UNIX and Windows and can be used with most popular web servers or its own internal server. This enables the WISE framework to provide support for a variety of users, including application developers, web site administrators, content managers and individual page developers. Zope runs in the background and is transparent to most users who use the WISE interface to build and maintain their web pages.

#### 1.4.1.1 The Zope product is developed by Zope Corporation and provides:

##### **A Web server**

Zope comes with a built in web server that serves content to you and your users. Of course, you may already have an existing web server, like *Apache* or *Microsoft IIS* and you may not want to use Zope's. Not to worry, Zope works with these web servers also, and any other web server that supports the Common Gateway Interface (CGI).

##### **A Web based interface**

When you build web applications with Zope, you use your web browser to interact with the Zope *management interface*. This interface is a development environment that lets you create web pages, add images and documents, connect to external relational databases and write scripts in different languages.

##### **An object database**



When you work with Zope, you are mostly working with objects that are stored in Zope's object database. Zope's management interface provides a simple, familiar way to manage objects that resembles the way many common file managers work.

### **Relational integration**

You don't have to store your information in Zope's object database if you don't want to, because Zope works with other relational databases like *Oracle*, *Postgres*, *Sybase*, *MySQL* and many others.

### **Scripting language support**

Zope allows you to write web applications in a number of different languages, like Python, Perl, and Zope's own Document Template Markup Language (DTML).

The WISE application runs on top of Zope and is written in the python language.

## **1.4.2 Python**

Python is an *interpreted, interactive, object-oriented* programming language. It is often compared to Tcl, Perl, Scheme or Java.

Python combines remarkable power with very clear syntax. It has modules, classes, exceptions, very high-level dynamic data types, and dynamic typing. There are interfaces to many system calls and libraries, as well as to various windowing systems (X11, Motif, Tk, Mac, MFC). New built-in modules are easily written in C or C++. Python is also usable as an extension language for applications that need a programmable interface. The Python implementation is portable: it runs on many brands of UNIX, on Windows, DOS, OS/2, Mac, Amiga. All Python files have a 2GB limit in size.

## **1.4.3 WISE Interface:**

The WISE interface sits on top of the ZOPE engine and provides a customised NATO interface to the features in ZOPE. This interface employs a set style but allows the user to have total control over the content. Security classification and user permissions and privileges are strictly controlled.

WISE is a web information portal that is:

- ACT developed
- User-centric
- Highly configurable
- Extremely user-friendly
- Fast and expandable
- Multi-platform

## **1.4.4 Apache**

WISE 1.2 has the addition of a front-end web server (Enterprise version). This was included to improve performance in the handling of file uploads and downloads. This is particularly important on large site configurations where large files are used.

## 1.5 Definitions

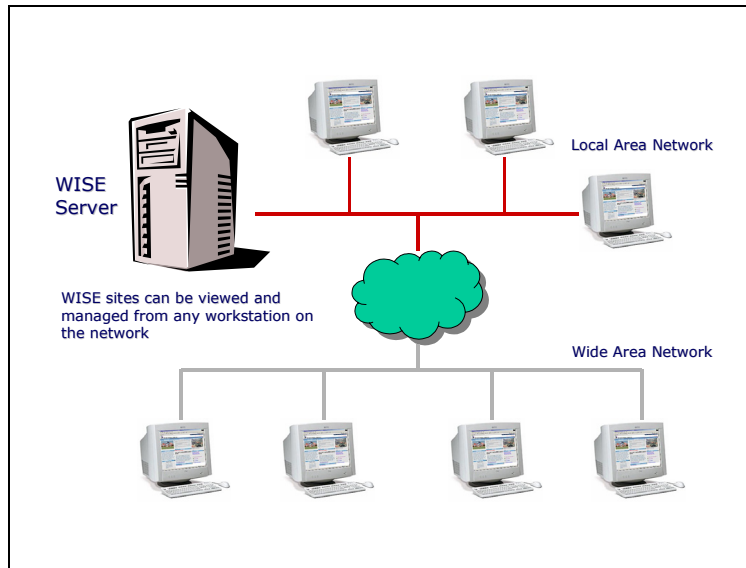
The following definitions are used to describe accounts and areas within WISE.

*Note: The default accounts can be renamed during the installation process. This manual will assume the default names have not been changed.*

- **Content Manager** – A user who has certain permissions allowing them to create and manage a web page or pages.
- **Emergency** – A default account, which allows the site administrator account and the wiseadmin account to be reset or password changed.
- **Guest** – Any default account used to “surf” a web site without logging in is given the guest role, any restricted objects or subwebs will not be available.
- **Metadata** – Defined as “data about data”, its basic elements are a structured format and a controlled vocabulary, which together, allows for a precise description of content, location and value.
- **Site** – A web based tree structure consisting of one or more levels of web pages. Each site on a WISE server is treated as a separate domain with no sharing of users or settings to other sites.
- **Site Administrator** – A default user who has full permission for a whole site tree and is responsible for that site.
- **User** - An operator who has registered on the site and may have additional privileges on the site.
- **wiseadmin** – The default site administrator account that controls all sites and creation of new sites.
- **Wiselet** – The name given to an object viewed on a home page or subweb.
- **UNC** - Short for Uniform Naming Convention or Universal Naming Convention, UNC is the [standard](#) for naming and accessing a [network resource](#). For example in [Microsoft](#) Windows a [user](#) would [access](#) a [shared resource](#) by typing or mapping to a [share](#) name similar to \\computer\drive

## 2 WISE Structure

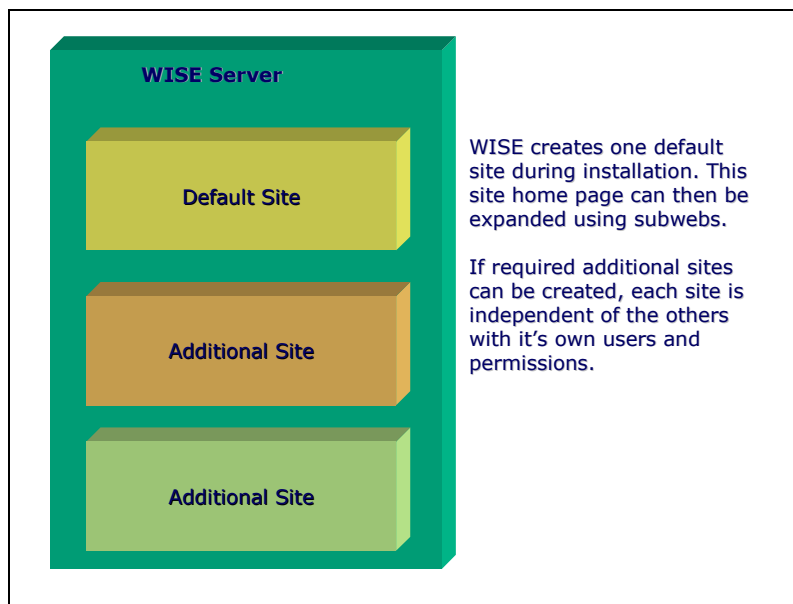
### 2.1 WISE Topology



**Figure 2 -WISE use in a network**

A WISE server connected to a LAN will provide services to any workstation connected on that LAN or WAN. A user can log in and perform all their normal tasks from any remote location. The only limiting factors would be the bandwidth capabilities of the network. As WISE uses the standard HTTP port it is unlikely that firewalls will inhibit the operation of WISE remotely.

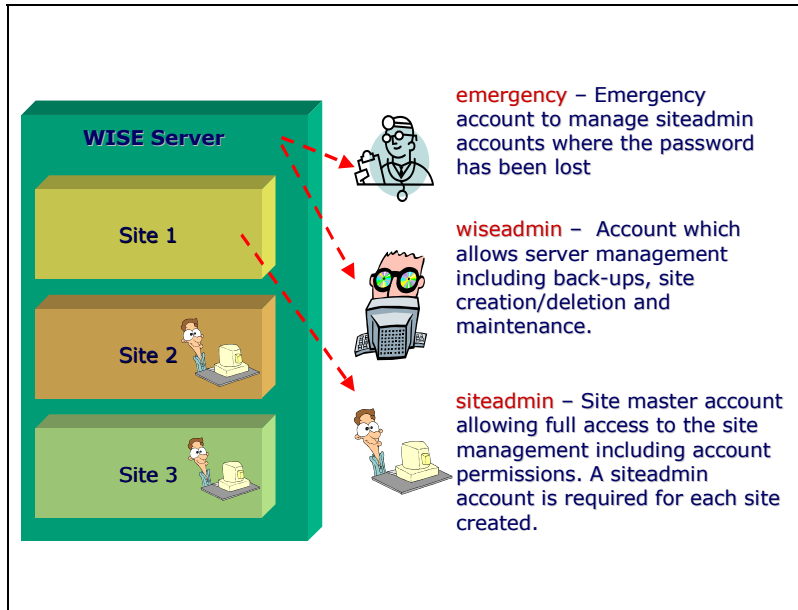
### 2.2 WISE Server Configuration



**Figure 3 - WISE Server Configuration**

After installation, the WISE server has one site structure called WISE (*this can be renamed during the installation process*). This can then be expanded using subwebs to create a very complex tree. If required additional sites can be created on the same server. These additional sites will not share registered users or site settings. One site can be designated as the default site; any user browsing to the URL of the server will see the default site. Additional sites can be viewed by typing in their URL.

## 2.3 WISE Default Accounts



**Figure 4 - Default User Accounts**

During the installation of WISE three default accounts were created. The installer has the ability to rename these accounts if desired. The account names may be different but their function (role) remains the same.

The accounts are:

- **Emergency** – An account used to replace a forgotten password. The Emergency account cannot own any WISE objects and is only used to “fix” accounts. There is one emergency account per server.
- **Wiseadmin** – This account is the default WISE server administrator. It provides all the system maintenance for the WISE server including: pack, import, export, establishment of new sites and the management of existing sites. There is one wiseadmin account per server.
- **Siteadmin** – This account is created for each site a WISE server has. It is the main account for each site and has all the privileges to restore deleted items, assign user permissions and control access. This account can be considered the administrator of the users for that site.

## 3 WISE Site Planning

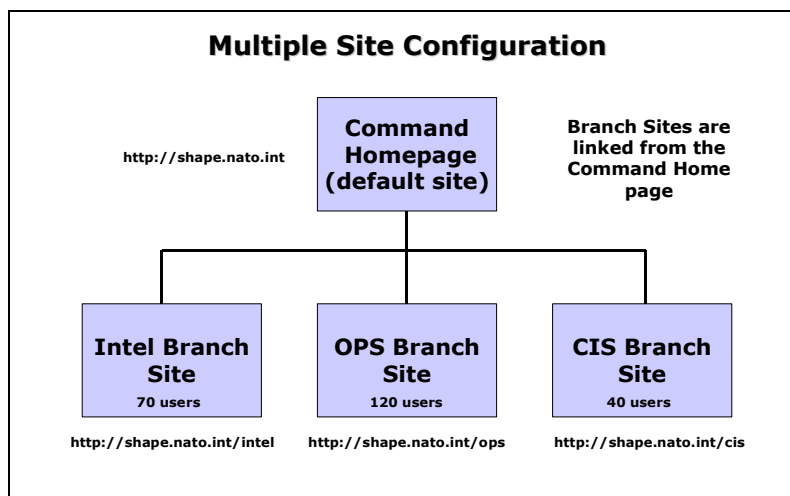
### 3.1 WISE Site Considerations

Depending on the size of your command or your anticipated number of users, you may consider splitting the command web structure into multiple sites on one server or using multiple servers with one site.

#### 3.1.1 Multiple Site Configuration

Consider the following when establishing multiple sites on one server:

- Each site has its own user accounts and permissions
- Each site has its own management tree and home page
- The menu bar of each site is easier to navigate
- All site data is contained in one file structure
- Users accounts are not shared across sites
- Search engines do not cross sites
- High user access will slow down server response times
- Single point of failure if equipment fails
- All sites combined cannot exceed 2GB for the data.fs (PC only)



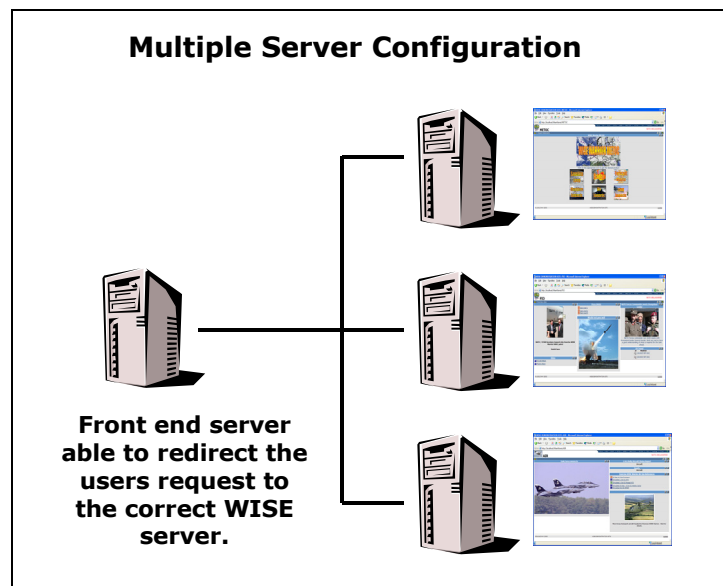
**Figure 5 -Multiple Site Configuration on one WISE server**

Here the command has set up a home page with three additional sites configured. Any user browsing to the command will go to the default site and from there be linked to the site required. Users who know the URL for the branch they require can type the URL directly.

### 3.1.2 Multiple Server Configuration

The multiple servers give you the following advantages and disadvantages:

- High user access does not have an impact on server performance unless all the access is being performed on one machine.
- Each site has its own file structure and user accounts
- Search engines will not cross servers
- Equipment failure will not terminate all the command's web sites.
- The 2GB file size limit of the data.fs would now affect each server and this allows for increased site size before reaching the 2GB limit.



**Figure 6 - Multiple Server Configuration**

Here the command has set up four WISE servers, with a command "home" and then three additional servers running the branch sites. The command home links to the other sites or the user can link directly to the branch site using the complete URL or virtual hosting if used.

## 3.2 WISE Enterprise and Classic Installation

During the PC installation of WISE, the installer is asked if they wish to load the WISE Classic or WISE Enterprise version. This new feature in WISE 1.2 loads Apache as an additional application in the Enterprise version.

Apache has been included to help WISE deal with multiple requests for files.

Guidelines for which version to select are discussed in the System Architecture guide and installation guide. The basic argument is listed below:

**Classic Version** – Normal version of WISE, providing all WISE services. Recommended for all sites that have small site where the WISE server is not constantly handling page requests and documentation/file transfers.

This version provides small commands with a powerful WISE server, which requires less administrative maintenance than the Enterprise version.

**Enterprise Version** – The enterprise version of WISE, provides all WISE services plus a front-end web server (Apache).

Recommended for large sites that have large amounts of files and user access.

This version increases the administrative workload, as the Apache service is another application to monitor log files and increases the complexity of the WISE installation and operation.

### 3.3 Site Default Options

The User Domain Branch (UDB) at Allied Command Transformation (ACT) supports adding new features in response to user requests. These settings are global and affect the whole site structure. The features are configured at the home page level on the site and logged in at the siteadmin permission level. Some features included:

- **Max Subweb Levels:** Sets the subweb level display on the navigation bar. If your site has 7 subweb layers and you wish the user to be able to navigate down all levels from the navigation bar, set this to 7.
- **Login Expiration:** Sets the time that a user account will be automatically logged out after inactivity.
- **Allow Registration:** If unchecked, the Register button will not be available on your site. Users will not be able to register on the site without the siteadmin role creating an account for them.

**Site Default Settings**

**Max Subweb Levels** – Sets the amount of subwebs levels to be shown on the site navigation bar

**Login Expiration** – Sets the default auto logout for user accounts

**Allow Registration** – Sets whether the site will allow user registration. The User Registration button is removed. (if set accounts can be created by the siteadmin role only)

Figure 7- Site Default Global Settings

## 4 WISE Administration Role “wiseadmin”

As stated earlier most of the administration of the WISE application involves tasks and responsibilities that are performed by the WISE user with Siteadmin permissions. The WISE site administrator role is to see that the application executes efficiently, is responsive to user requirements, and that sites are managed through packing frequently.

The role of the WISE site administrator is to:

- Monitor the system resources, ensuring the server operates correctly
- Create additional sites as required
- Setting the default site
- Perform database management including Pack, Undo, and restore operations.
- Import / Export WISE Sites
- Assist users with their requirements.

This chapter will discuss the roles of the wiseadmin account.

**Note:** *The wiseadmin account can be accessed from any workstation browsing to the WISE server. However for ease of moving files most of the work should be done on the WISE server itself. In the examples given in this chapter we will perform the functions on the WISE server using the <http://localhost> URL.*

### 4.1 wiseadmin Account

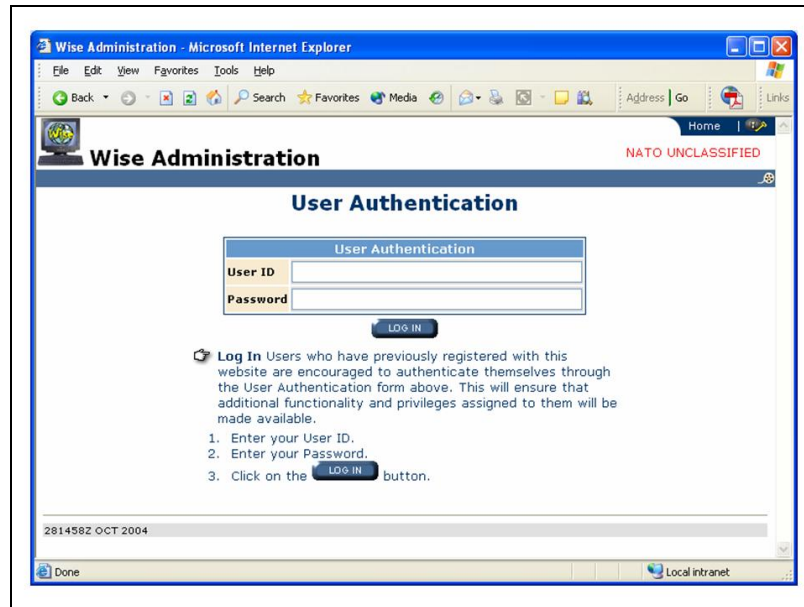
The wiseadmin account is the default user account and role for the system wide management of WISE. This account controls all the sites that may be on a server. It provides functions to pack the database, add community files, set indexing intervals, create new sites and export and import sites. The wiseadmin account cannot add objects to a site or have any manage control of the sites on that server.

The wiseadmin account can be accessed by adding **/wiseadmin** to the URL of the WISE server, for example

<http://www.wiseserver.shape.nato.int/WISE/wiseadmin> or if you are on the WISE server itself <http://localhost/wiseadmin>

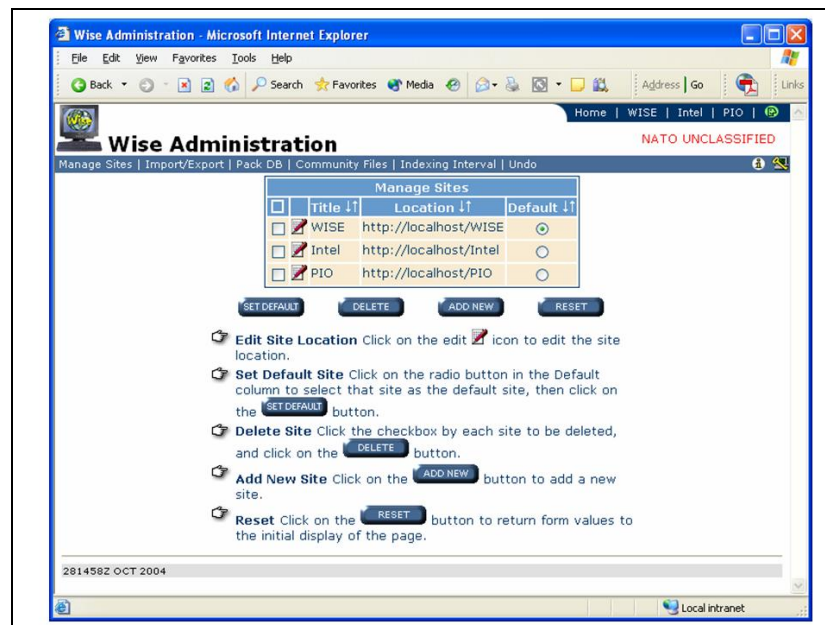
The WISE Administration log in window will appear as shown in Fig 8. The password for the wiseadmin account was set during the installation of WISE.





**Figure 8 - wiseadmin log in**

After logging in as wiseadmin, the wiseadmin screen will appear as shown below. The screen defaults to the "Manage Sites" view.



**Figure 9- wiseadmin screen**

All the sites on the WISE server will be listed. The following section explains the functions of the options from the main menu, which are as follows:

- Add a new site
- Delete a site
- Set the default site

- Set virtual Hosting
- Import/Export Sites
- Pack Database
- Community Files
- Indexing Interval
- Use Undo Feature
- Reset wiseadmin passwords

## 4.2 Manage Sites

The Manage Sites window in the wiseadmin role is the main window for controlling the sites on the WISE server. From here the user can:

- Add a new site
- Delete a site
- Set the default site

### 4.2.1 Adding a new Site

After installation WISE has one site, which is called WISE. All current pages, subwebs and users on the server will be associated with this default site. Creating a new site on the server will enable a new "tree" to be created. This home page and subsequent sub webs will be independent of other sites with no sharing of users, settings or data. If a new site is required simply select the "add new" button and the screen below will be displayed. When creating a new site only the first 10 characters will be used in the new URL. For example, the URL for a new web site entitled Intel Site would be http://servername/cissupport.

The screenshot shows a web browser window titled "Wise Administration - Microsoft Internet Explorer". The address bar shows "Home | WISE | Intel | PIO |". The main content area is titled "Wise Administration" and "NATO UNCLASSIFIED". Below the title bar, there is a navigation menu with links: "Manage Sites | Import/Export | Pack Db | Community Files | Indexing Interval | Undo". The main form is titled "Add Site" and contains the following fields:

- Title: CIS Support
- SMTP Host: mail.act.nato.int
- SMTP Port: 25
- Login Expiration: 30
- Allow Registration: ☒
- Site Administrator: siteadmin
- Password: (masked with dots)
- Verify Password: (masked with dots)

Below the form are two buttons: "ADD NEW" and "RESET".

Below the buttons is a section titled "Add New Rootweb" with a list of instructions:

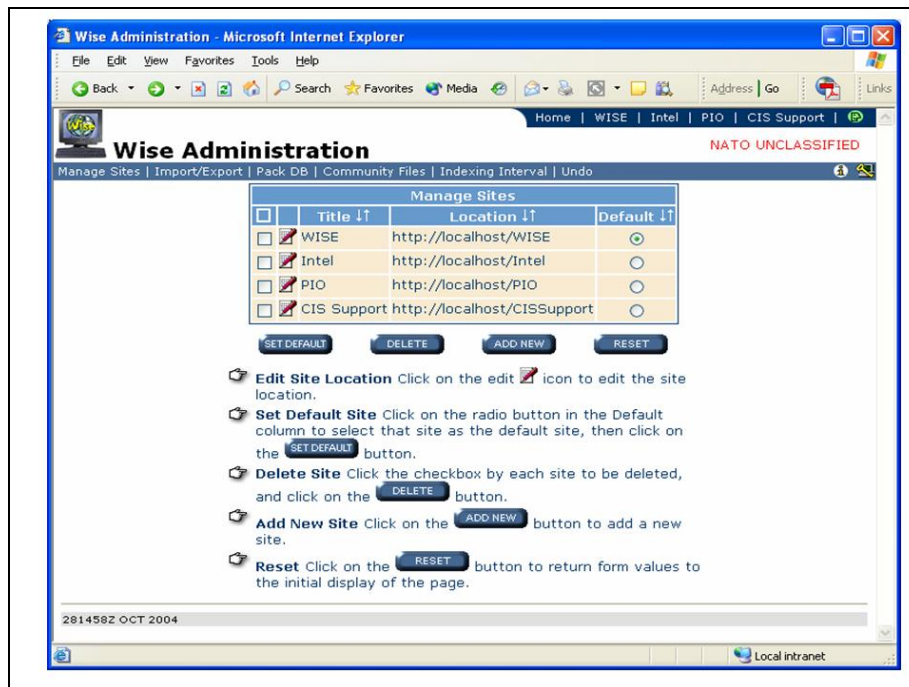
1. Enter a Title for the Site in the Title textbox.
2. Enter the mail server host name in the SMTP Host textbox.
3. Enter the mail server port number in the SMTP Port textbox.
4. Enter the number of minutes of inactivity before a user account will automatically be logged out.
5. Indicate whether users can register themselves.
6. Enter the login name for the Site Administrator in the Site Admin textbox.
7. Enter the Site Administrator password in the Password textbox.
8. Enter the Site Administrator password in the Verify Password textbox.
9. Click on the "ADD NEW" button to add the new site.

Figure 10- Adding a new Site

The Add Site window requires the following information to be entered:

- **Title** – The name of the New Site
- **SMTP Host** – The name or IP of the server which will handle Email
- **SMTP Port** – The port number that the mail server requires
- **Login Expiration** – The default time an account will remain logged in with no activity
- **Allow Registration** – Indicate whether or not users can register themselves on the website.
- **Site Administrator** – The user name of the person who will act as the administrator of this one site
- **Password** – Security password for the account
- **Verify Password** – Repeat the of above password to ensure it is correct

Once the data has been entered select "Add New" and the new site will be created. Once the new site is created the system will return to the Manage Sites window and the new site will be listed as shown below.

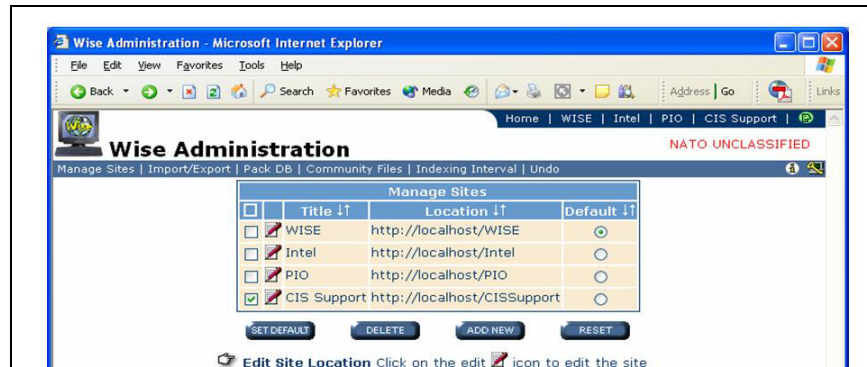


**Figure 11 - New Site creation listing**

#### 4.2.2 Deleting a Site

Any Site can be selected for deletion including the default WISE site. Once a site is deleted all users and objects will be removed from the WISE server. If a Site is deleted by accident it may be restored using the UNDO feature, which will be discussed later.

To delete a Site, select the site(s) checkbox on the left hand side and use the Delete button.



**Figure 12 - Selecting a Site for deletion**

A confirm deletion window will appear; select delete again to remove the Site

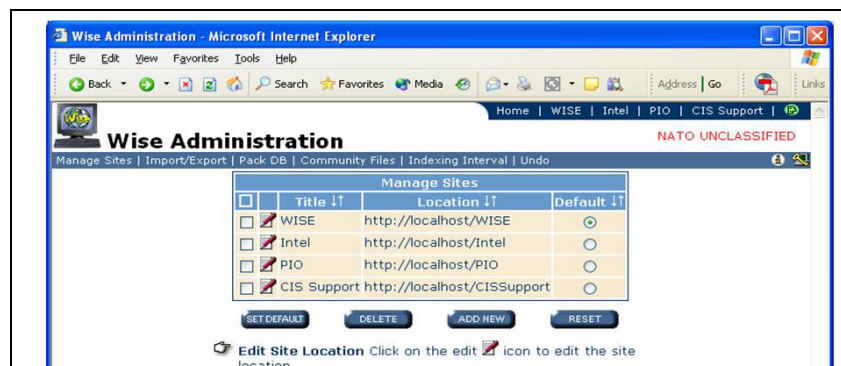
#### 4.2.3 Setting the Default Site

After installation the WISE server has one site and this site is automatically selected as the default site. Any user who enters the URL of the WISE server will see the default site. For example, to see the WISE page on a server the user could enter:

<http://www.shape.nato.int> or <http://www.shape.nato.int/WISE>

If a WISE server has multiple sites only one can be selected as the default site. Entering the full URL or linking from the default site can access the other sites. In the example below the default site is <http://localhost/WISE> to access the PIO Site a user would have to type in the URL <http://localhost/PIO>

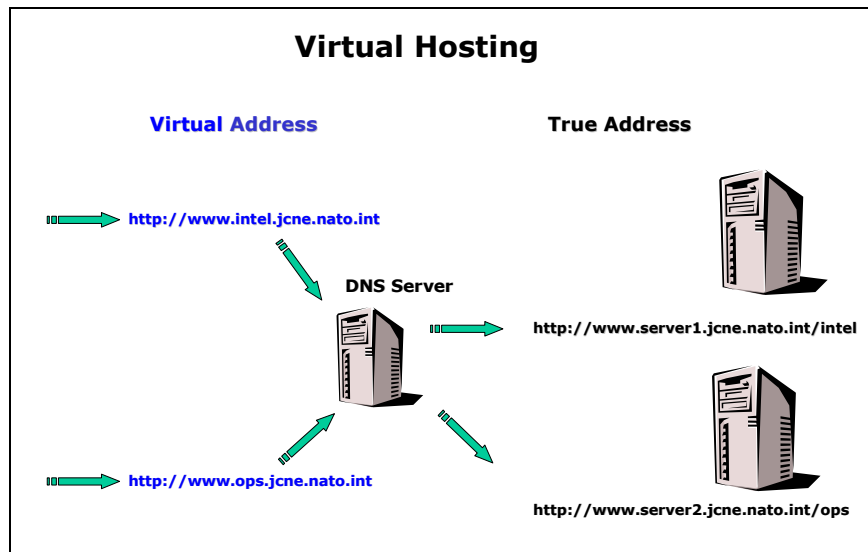
To change the default site select the site to be the default and click SET DEFAULT



**Figure 13 - Default Site Setting**

#### 4.2.4 Virtual Hosting

WISE has the ability to use virtual hosting both to aid the site administrator in load sharing or hardware distribution and for the user in creating “user friendly” URL’s.



**Figure 14 -Virtual Hosting**

By configuring the DNS server with aliases for the WISE server to recognise the user friendly URL, the web request will be routed to the correct WISE server. On the WISE server the virtual URL is entered to enable WISE to accept and respond to user requests using the virtual URL. To an outsider the virtual address appears as a true server. This gives the site administrator the advantage of being able to change the server, IP address or name without having to inform the user community of the change. Only the DNS server needs to be updated.

For example:

Rather than tell users your web site is <http://www.server1.jcne.nato.int/intel> you can make a virtual address <http://www.intel.jcne.nato.int>

There are two steps to setting up virtual hosting:

1. Configure the DNS server at your site to recognise the alias and route the request to the correct WISE server.
2. In the wiseadmin account configure the site with its virtual host address.

The diagram below shows the stages to set up the WISE server for virtual hosting.

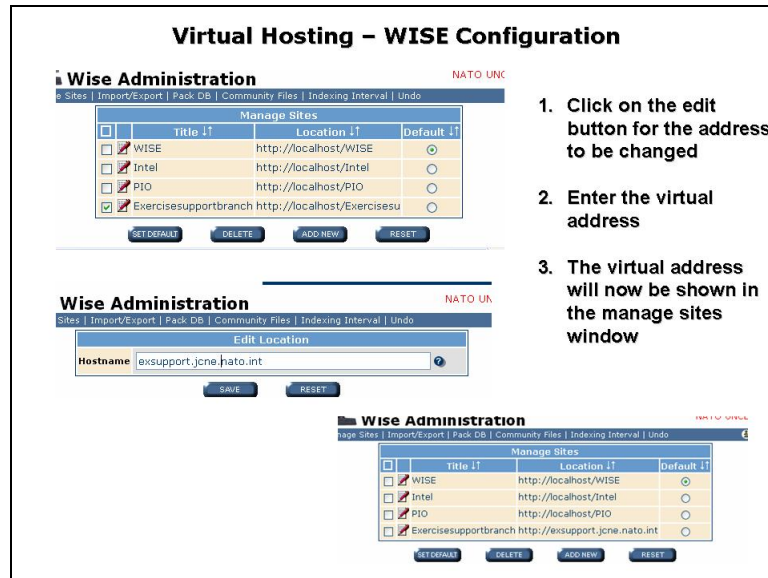


Figure 15 - Virtual Hosting - WISE Configuration

### 4.3 Import and Export Sites

The import and export menu allows the site(s) to be exported and imported from and to the WISE server. Within the functions of a site administrator, individual web pages or objects can be exported and imported between subwebs or WISE servers. The wisadmin account exports and imports the **total** site(s) only. The exported file contains:

- The home page and all sub webs from each site selected
- All the object data including file objects such as pictures, word documents or PowerPoint files
- All the user accounts, passwords and permissions from each site

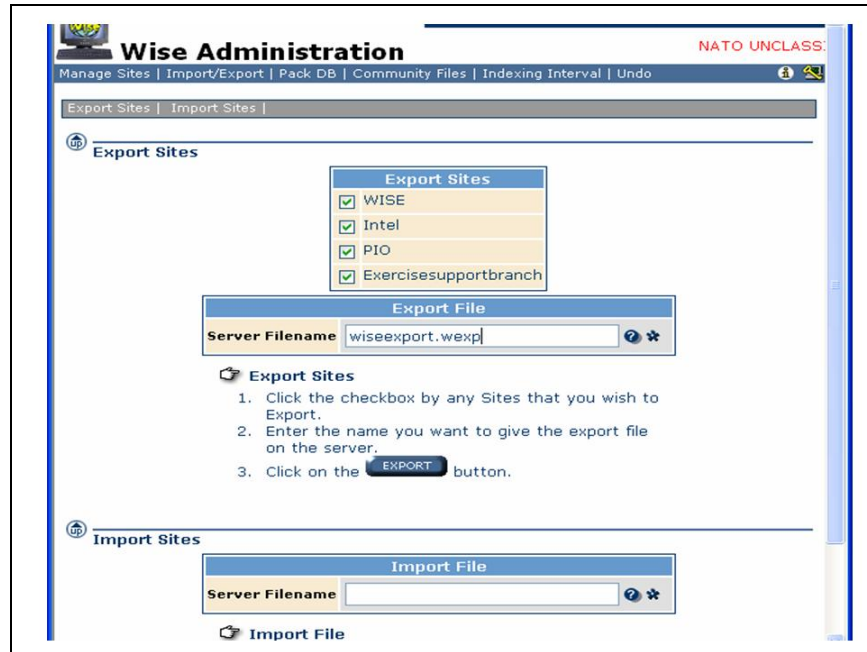
There is a 2 GB file size limit when exporting a WISE site. There are multiple steps to take when troubleshooting the export of large sites on a server.

1. If exporting multiple sites and the export fails.
  - a. Export the Individual site
  - b. Stop the WISE service and copy the complete WISE/var directory.
2. If exporting individual sites and the export fails.
  - a. Export individual objects from the website as siteadmin.
  - b. Stop the WISE Service and copy the complete WISE/var directory.

*(Note: Exporting the var folder is only possible when the same version of WISE is being used to receive the exported file as the var directory structure may have changed with subsequent versions)*

### 4.3.1 Exporting

From the Import/Export menu check the sites you wish to export and enter a name in the export file field. Care should be taken that there are no users attempting to manage the site being exported as it may result in corrupt data or loss of data. The next figure displays an export of all the sites with the export file called wiseexport.wexp.



**Figure 16 - The wiseadmin Export screen**

The file will be saved on the WISE server with the name given and the extension .wexp (WISE export file). Regardless of how many sites are selected and exported only one file will be created.

On a PC version of WISE the file is saved in (assuming your program file drive is C:)

C:/Program Files/WISE/var/ImportExport

On a UNIX version of WISE the file is saved in

/home/data/local/ZOPE/var/ImportExport

Once the system has saved the file a message will be displayed informing the administrator what sites were exported and if it was successful. Large sites will take considerable time to be exported. It is advisable to **Pack** a site before exporting, as this will reduce the size of the export considerably.





**Figure 17- Successful Export Message**

### 4.3.2 Importing

WISE sites can be imported to a new WISE server or to a back up server. **If the administrator is restoring an exported site, care must be taken that there is no site with the same name on the server**

To Import a site(s) onto the WISE server, the file to be imported must be placed in the correct directory on the WISE server.

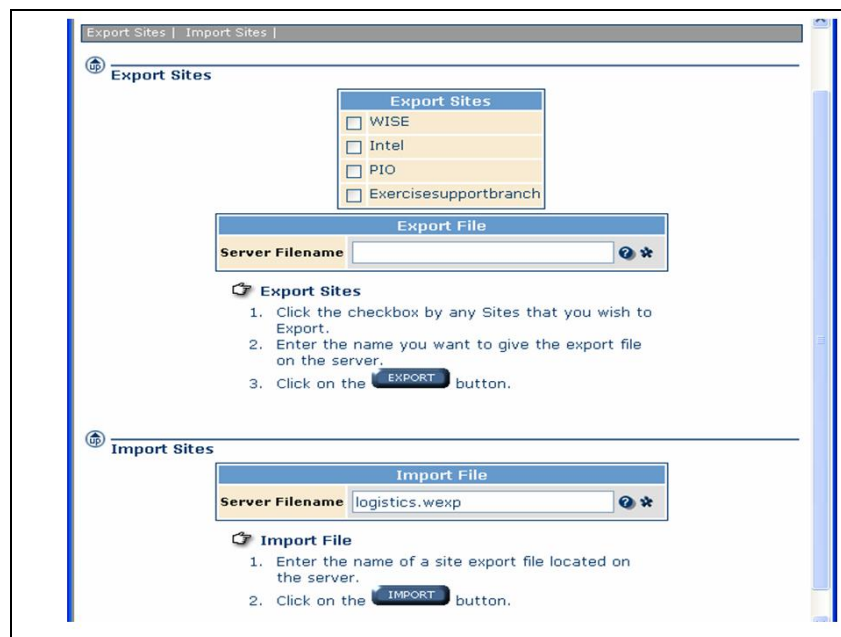
On a PC version of WISE the file is saved in (assuming your program file drive is C:)

C:/Program Files/WISE/var/ImportExport

On a UNIX version of WISE the file is saved in

/home/data/local/ZOPE/var/ImportExport

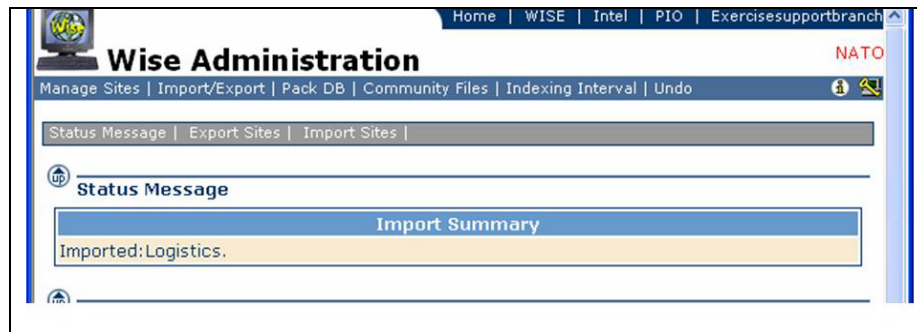
Once the file is in place, type in the name of the file to be imported in the Server Filename window as shown below.



**Figure 18 - Importing a Site(s)**



The system will import the site and report when completed. Large sites may take some time to complete the import operation. Once complete a message will inform you which sites were imported and if the operation was successful as shown below.



**Figure 19- File Import report message**

#### **4.4 Pack Database**

All entries and changes to the site(s) made are recorded. These records called "**transactions**" are created and stored in the database. If a user has made a mistake, the change can be "undone" by the site administrator. This is done using the *undo* feature under the Site Administration menu. As the transaction log grows, the WISE file **data.fs** grows increasing dramatically when a site has a lot of users updating WISE. The *pack* operation removes all the discarded transactions and objects that are time stamped over the specified number of days. Once the pack is completed any event that was removed cannot be recovered through the *undo* feature.

Packing the database can result in significant reductions in the size of the data.fs file. The data.fs file cannot exceed 2GB. It will hinder the website if it goes beyond the 2GB limit. Some sites have reported going from 1.9GB to 200MB after a pack operation.

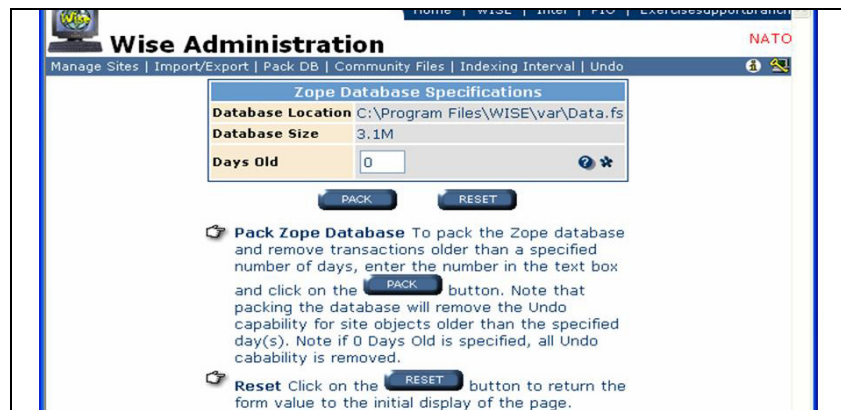
The only parameter required for a pack operation is the number of days to pack. Selecting 2 would delete all records over 48 hours; selecting 5 would remove all entries over 120 hours old. However, selecting 0 days would delete all records within a 24 hour period. Removing the transaction log of events does not affect the actual current objects in any way, only the ability to *undo previous changes made to them*.

As the data.fs file contains all the sites on a WISE server, the *pack* operation effects all the sites so great care must be taken to ensure that the users of all the sites will not require any *undo* operations over the time period specified.

Once the pack operation is completed the deleted transactions will be stored in a folder located in C:\Program Files\WISE\var\FileObjectBackup. The folder FileObjectBackup contains a file that is named with the date of the packs that have occurred. You should monitor the size of this folder in order to ensure that it does not grow excessively. Regular maintenance of this folder will make certain that the size limit of the drive stays within its specifications.

**NOTE: If there is a virus protection or background software running, be advised to stop the service and reboot the system before packing the database.**

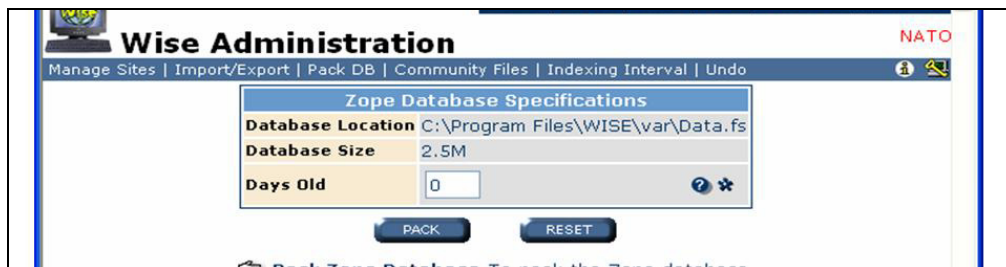
To pack the database select the PACK button, specify the age of the transactions the system should delete and select PACK.



**Figure 20 - Packing the database**

The PACK process can take some time to complete, the WISE server is available to users during the process.

Once completed the PACK window will return and the new size of the database will be reported. In the simple example above a pack operation reduced the demonstration site from 3.1MB to 2.5MB. Real sites will see significant changes.



**Figure 21 - The completed PACK operation**

## 4.5 Community Files

This new feature in WISE 1.2 increases the capability of the community files object. In previous versions only one directory structured within WISE could be used as a "shared directory". Now multiple directories can be specified. The following explains the configuration of the community object.

### 4.5.1 Preparing shared drives/directories for use in WISE Community Files

Although the WISE Community Files object has a default path of C:\Program Files\WISE\var\Community(PC Version) and /home/data/global/Community(HP-UX Version) it is capable of using any shared drive or directory. Where access permissions have been setup, the username and password for that shared item must be specified in order for WISE to be able to access the area. The pathname must be in the Universal Naming Convention (UNC)

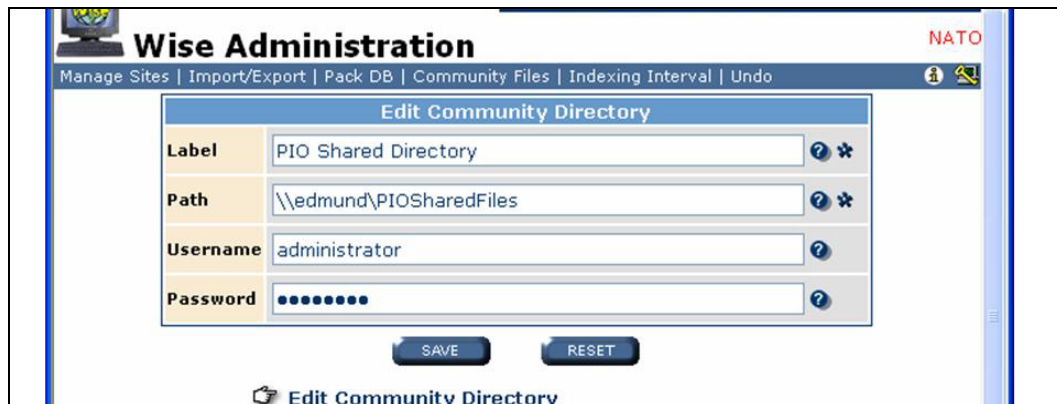
### 4.5.2 Setting up Community Files

From the Wise Administration menu, select Community Files



**Figure 22 - The Community Files Window**

Select ADD NEW and enter the information required as shown below.

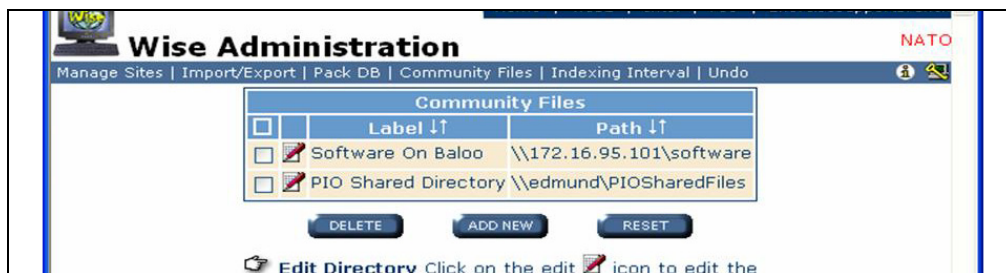


**Figure 23 - Entering a new Community File**

- Label – Name of the community File
- Path – Location of drive or directory (UNC)
- Username – Account that has access to the information
- Password – Password for that account

**Note: The Username and Password are only needed if the drive or directory is password protected.**

Once completed select SAVE. Continue to enter all the required community files. When completed the window will display the entries and the paths.



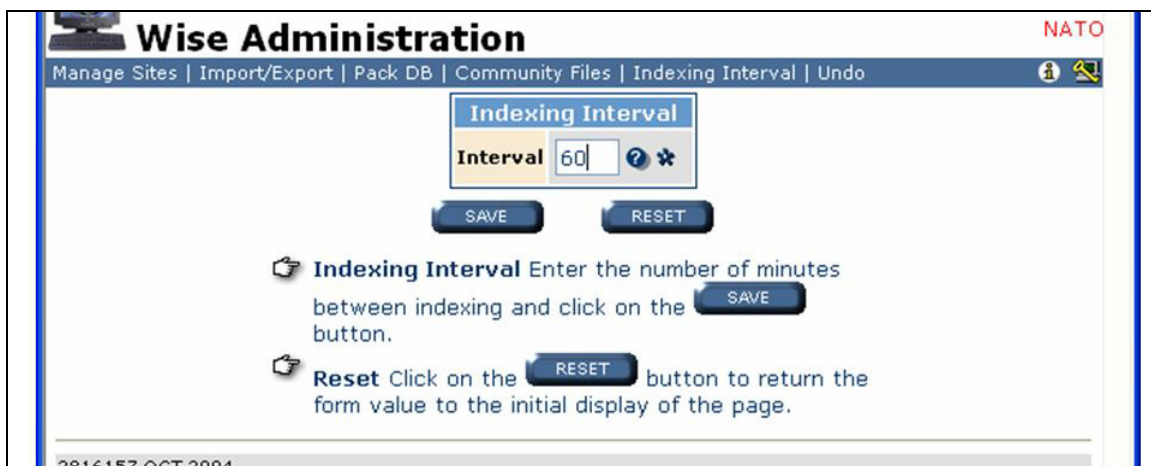
**Figure 24 - Community File Window**

## 4.6 Indexing Interval

WISE 1.2 allows the administrator to set the time interval between site(s) indexing. The WISE search engine will provide keyword search throughout the WISE site including, all known file types. WISE indexes all new transactions and records keywords from files and objects at a specified cycle time. This indexing process can take a lot of server CPU time where the WISE sites are constantly being updated. The default setting is 10 minutes, but this can be changed from 1 to 1440 minutes. The WISE administrator must decide on a practical balance between giving the users a site search that is current and not creating a slow server due to constant indexing.

### 4.6.1 Changing the Index Interval

To change the Indexing Interval select Indexing Interval from the WISE Administration window and type in the new time required. Select SAVE. The system will start the indexing process when the time specified is reached.



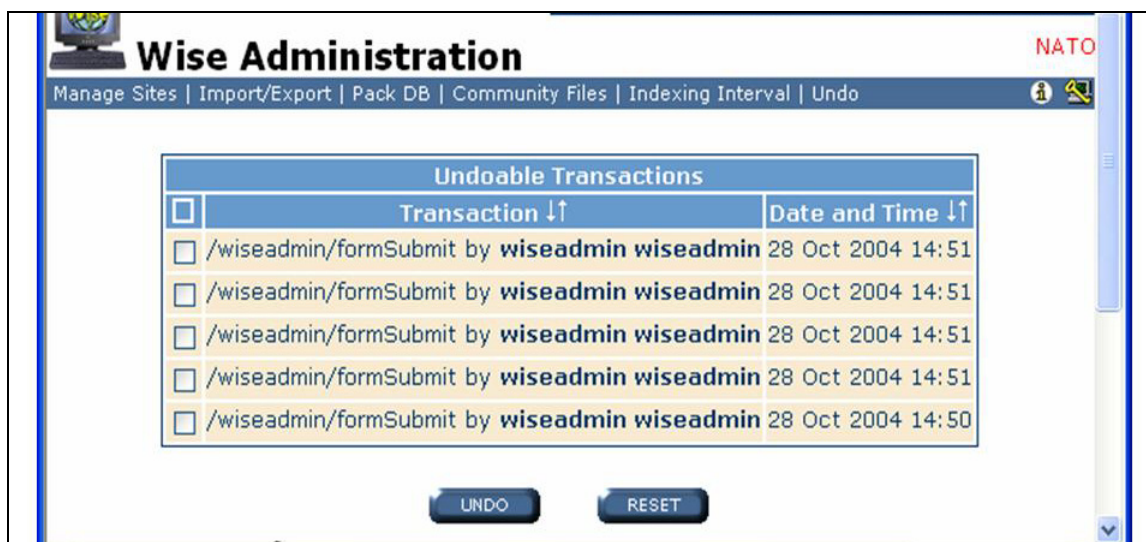
**Figure 25 - Indexing Interval window**

## 4.7 Undo Feature

The Undo feature in the WISE Administration role allows events that have been performed to be recovered or "undone". This UNDO list is only for the events, which the wiseadmin account has performed. The UNDO window lists all the events that have taken place with the username of who performed the operation and a date stamp. Simply click on the event to be "undone" and select UNDO.

Once completed the UNDO transaction log will reappear with the latest event recorded.

The UNDO transaction will only undo the events in the database. It will not affect the file system. For example exporting a site will create an entry on the undo log, but undoing it does not delete the .wexp file that exporting creates. You would have to delete the .wexp file manually.



**Figure 26 -The WISE Administration UNDO window**

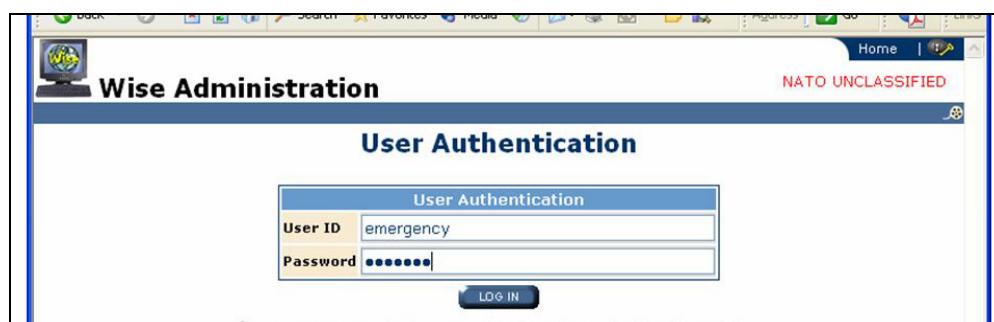
## 4.8 Wiseadmin Accounts

The default wiseadmin is set-up during WISE installation. Registering a new user at the WISE Administration log in screen will create additional accounts. Once created the default wiseadmin account can grant privileges to the user giving them full access to the wiseadmin menus.

In the event the wiseadmin password is lost, the emergency account can be used to reset the wiseadmin account password.

### To reset a wiseadmin password:

- Go the wiseadmin log in screen
- Enter the emergency account and password
- From the WISE Administration window go into manage mode
- Select Access
- Click on the lock icon to reset the account or the edit symbol to modify the account.



**Figure 27 - Logging in as the emergency user**



**Figure 28 - Changing User settings**

## 5 Managing Sites

The WISE site administrator is responsible for installing the WISE server and maintaining the system. Daily administration tasks will be discussed in this chapter as well as the siteadmin role.

### 5.1 Daily Administration

WISE requires very little daily administration tasks, the WISE administrator should be aware of the following:

- Size of the data.fs file and pack if required
- Monitor Users use and ensure images have been reduced to as small a file size as possible. A 30KB picture can look the same a 2MB picture!
- Any complaints of system response time from users should be investigated.

### 5.2 Siteadmin Role

As stated before, the web content managers are responsible for the site home page and sub webs. The WISE administrator should understand the basic functions of WISE such as security and page settings. The WISE user guides give full details of these features as well as details and examples of the WISE objects.

#### 5.2.1 Security

WISE has built in security features and allows users to be allocated permissions for web pages as well as individual objects on a page. Each WISE object has a permissions tab in the siteadmin role. Some objects have additional permissions depending on how complex the object is.

If the wiseadmin created the website allowing registration, which allows anybody to register to the site, and the siteadmin wishes to not allow registration to the site, select properties in manage mode and uncheck **Allow Registration**. (This will enable only people with the siteadmin role to register users to the website)

Any person who visits a site and does not log in has "guest" permissions. The default permission of a WISE page is "allow guest" which allows viewing of all objects. It is a simple procedure to remove the "guest" access and require users to log in to see the page or an object on the page. The siteadmin should select **Access** in manage mode and uncheck the Guest as a user. Individual users can also be given permissions to see certain objects on a page as well.

The security classification of the site is set by the classification defined on the home page. Any sub webs or objects added to the site will inherit the classification of the next higher web page. Users with siteadmin permissions have the capability to change the classification level of the object or page. (See User Guide for details)

#### 5.2.2 Page Format

After installation WISE has an empty home page created. The web content manager can build the home page, add subwebs and change the basic settings of the page. Each subweb layer can have it's own page format.



## 6 WISE Log and File Structure

### 6.1 WISE Installed Directories

When WISE is installed on a server it creates a directory and file structure under the Program Files tree (On a PC platform).

The following structure is created

- Program Files
  - **WISE - Classic Configuration**
    - bin – Holds the executable programs
    - doc – Holds Zope documents
    - Extensions – Zope structure directory
    - import – Used for Zope operations
    - inst – Instruction set .pyc files
    - install – Installation for Apache and Python 2.3.4
    - lib – Library of Zope scripts
    - pcgi - Persistent CGI header file for pcgi-wrapper
    - utilities - This directory contains utility scripts and modules that augment Zope
    - Zserver – The Zserver utilities and instructions
    - var – Holds the WISE variables (This is the folder which will be used the most by the WISE administrator)
      - Community Files – A file sharing area which can be accessed through WISE
      - FileObjectBackup – Holds the backup files that have been packed
      - FileObjectStore – Holds the sites uploaded information and files
      - ImportExport – Directory where .wexp (exported / imported files are created/placed
  - **WISE - Enterprise Configuration**
    - Apache Group – Holds apache related files
    - bin – Holds the executable programs
    - doc – Holds Zope documents
    - etc – Apache and Wise configuration files
    - Extensions – Zope structure directory
    - import – Used for Zope operations
    - inst – Instruction set .pyc files
    - install – Installation for Apache and Python 2.3.4



- lib – Library of ZOPE scripts
- pcgi - Persistent CGI header file for pcgi-wrapper
- utilities - This directory contains utility scripts and modules that augment Zope
- Zserver – The Zserver utilities and instructions
- var – Holds the WISE variables (This is the folder which will be used the most by the WISE administrator)
  - Community Files – A file sharing area which can be accessed through WISE
  - FileObjectBackup – Holds the backup files that have been packed
  - FileObjectStore – Holds the sites uploaded information and files
  - FileObjectUploads – Holds the sites uploaded information and files temporarily
  - ImportExport – Directory where .wexp (exported / imported files are created/placed
- System Files
  - The data.fs file in the var directory holds all the transactions for all the sites configured on the server. This file has a size limit of 2GB (limitation of this version of ZOPE) and if this size is exceeded it will cause the WISE server to stop. The packing procedure described in section 4.4 of this manual outlines the methods for keeping this file less than 2GB.

## **6.2 Log Files**

WISE creates a number of log files from installation to recording every event performed. If problems occur during the normal operations of WISE, these files can provide further information concerning the issues.

### **6.2.1 Audit Files**

As a security mechanism, WISE implements auditing of all information access that occurs during the life of the WISE application. There are two files that provide this audit history:

#### **Z2.log**

The Z2.log file is created during installation and is updated throughout the life of the website. An entry is written in the Z2.log text file for each browser request made in WISE. As one can imagine this file can grow very large, a 14MB increase a month is not unusual on a site getting light to moderate use. The log will enable an administrator to view the areas that are being requested including the requesting IP address. The location of the file is C:\Program Files\WISE\var. Below is an example of the Z2.log file. If the enterprise version of WISE is installed the Z2.log file may remain at 0 because apache log files record transactions.

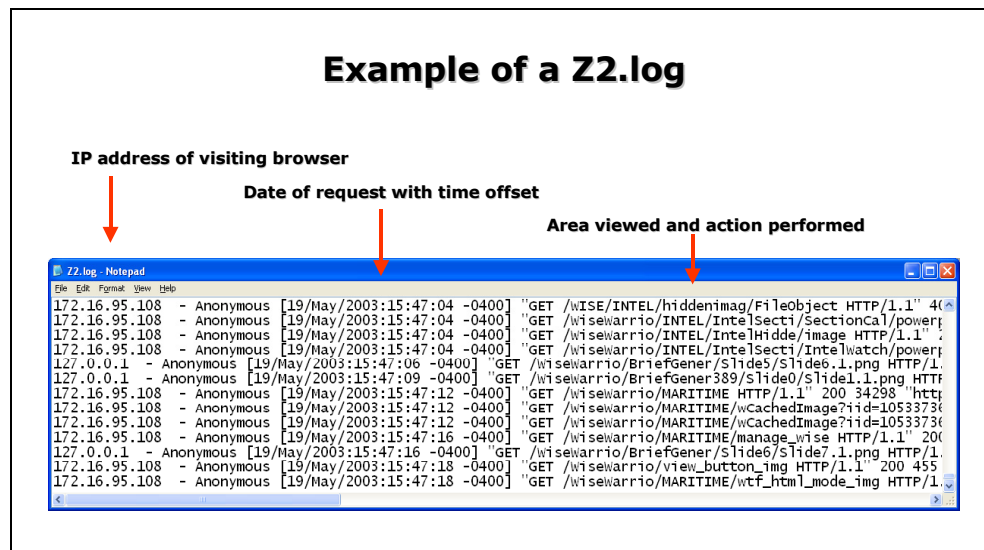


Figure 29- Example of a Z2.log

**access.log**

The access.log file is only found in the Enterprise Configuration of WISE. This file shows everyone who has accessed the apache server. Like the Z2.log file, it will enable an administrator to view the areas that are being requested including the requesting IP address. The file is located in C:\Program Files\WISE\Apache Group\Apache2\logs. Below is an example of the access.log file.

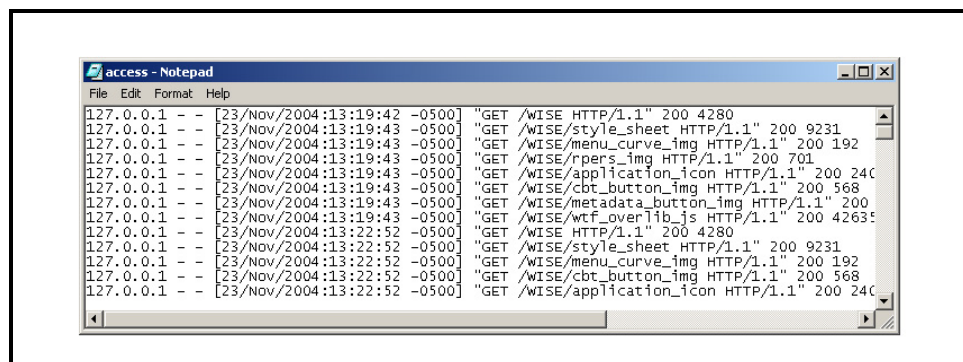


Figure 30- Example of an access.log

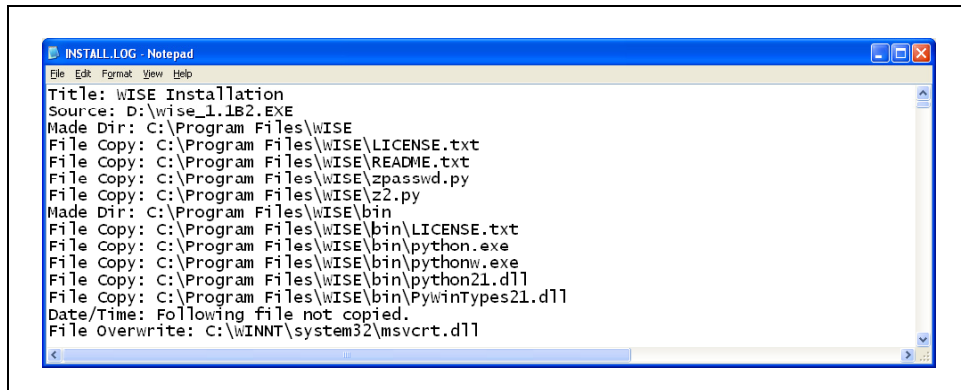
These files should be archived if required periodically and cleaned, otherwise they will become very large in size.

The files can be copied and renamed, and the old file's contents erased.

These files are compatible with commercial statistical software, which will provide detailed information on your sites usage.

### 6.2.2 Install.Log

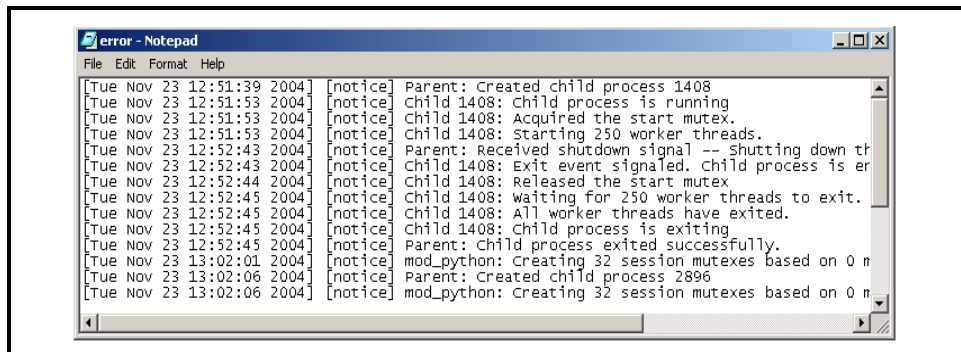
WISE creates a log during the installation process. The log can be found at the following location C:/Program Files/WISE/INSTALL.LOG



**Figure 31- Example of the INSTALL.LOG**

### 6.2.3 Error.Log

The error.log file is only found in the Enterprise Configuration of WISE. The log shows all the apache errors that occur. It is located in C:\Program Files\WISE\Apache Group\Apache2\logs. Below is an example of error.log file.



**Figure 32- Example of the Error Log**

This file can also grow large in size and needs to be regularly maintained by the Administrator.

## 7 Getting Help

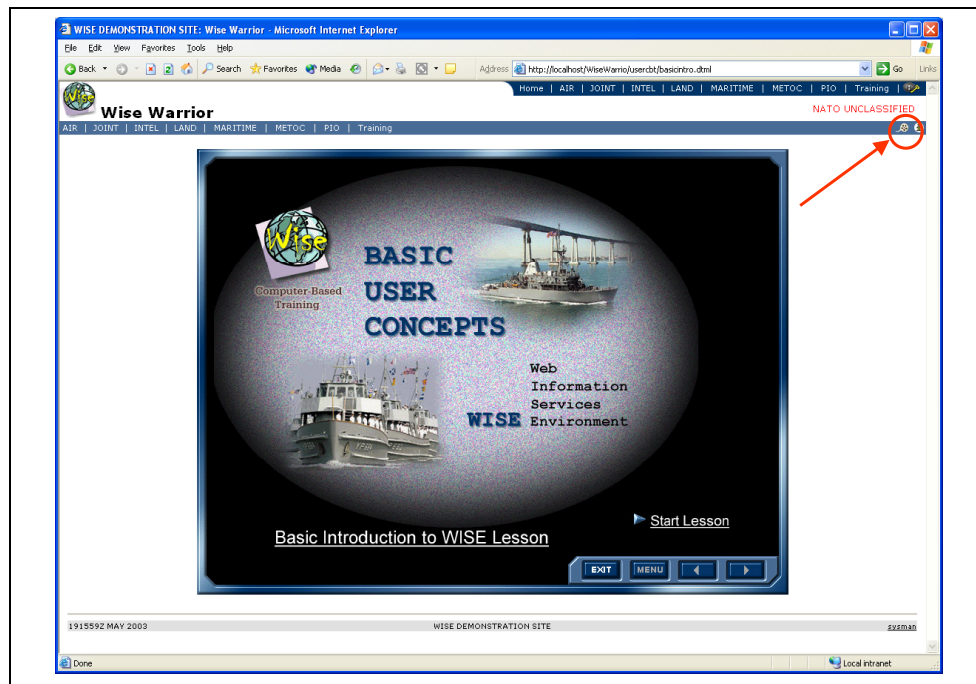
### 7.1 Built in Guides

The WISE product is made to be as intuitive as possible. Each area or object has a guide screen assisting the user as to what should go in each field. The Administration Guide and Users Guide are also included within the WISE application. These guides can be added to a web page using the same method as all other objects.

A stand-alone documentation CD is also issued with the software release. This CD can be browsed on any PC and contains all the WISE documentation, PowerPoint presentations and instructor guides.

### 7.2 CBT

WISE has several built in computer based training modules (CBT), anywhere you see the movie spool on the right hand side of the web page a CBT is available to guide you through the process. The CBT provides an interactive session where the user is shown how to perform the task and then asked to perform the steps. The figure below displays the Basic User Concepts CBT, which informs users in the general aspects of WISE.



**Figure 33- The Basic User Concepts CBT**

Additional CBT's are available for:

- WISE Log In,
- WISE Subweb,
- WISE File Object/Metadata,
- WISE Table Generator,
- WISE Form Generator, and
- WISE World Atlas.

The first time a CBT is requested by the user, they will be prompted to load the Authorware software from the WISE server. Once installed all CBT's will run without additional downloads.

### 7.3 Helpdesk

The User Domain Branch (UDB) support WISE through documentation, training classes and a helpdesk based at the Allied Command Transformation Headquarters (ACT). The helpdesk is open during normal US working hours (EST) but questions can be sent at any time. The Helpdesk can be reached at:

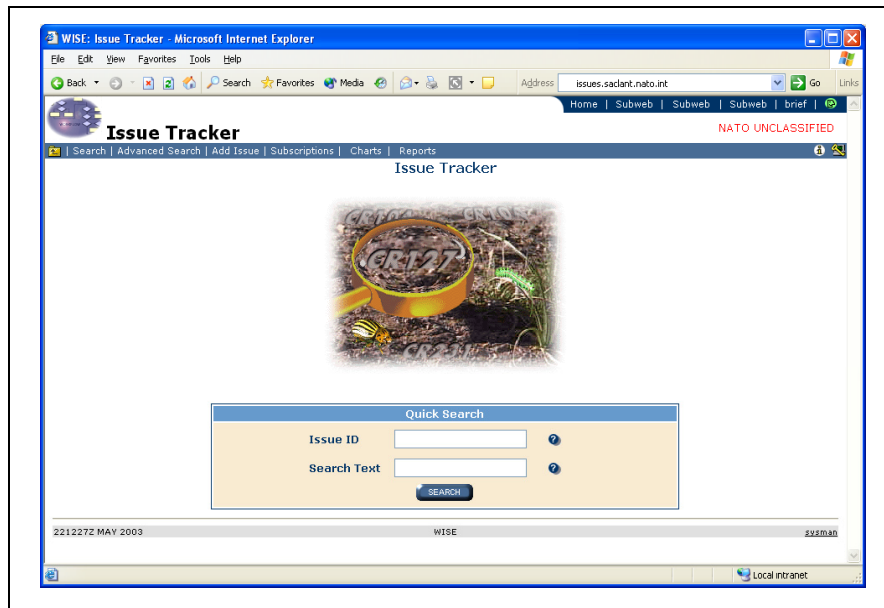
Email [wise@act.nato.int](mailto:wise@act.nato.int) (classified and internet)

Phone – IVSN 555-3868 Commercial 757 747 3868

Fax – IVSN 555-3785 Commercial 757 747 3785

#### 7.3.1 Issue Tracker

The UDB has used the workflow application in WISE to develop a tracking tool of all issues raised against WISE. These issues can be helpdesk questions, new feature requests, bugs found in the software, hardware questions, and any additional dialogue between users and developers. The Issue Tracker can be found on the classified WAN only at **http://Issues.act.nato.int**



**Figure 34 - UDS Issue Tracker**

The issue tracker can be searched by text or issue number, the advanced search option allows detailed parameters to be entered. New issues can be raised and monitored. All aspects of the Issue Tracker are available to the user including developer comments and the status of the issue. An email will be sent to the author anytime a change is made in the issue.

## 8 Upgrading and Uninstalling WISE

### 8.1 Upgrading

New versions of WISE are designed to allow the administrator to upgrade without losing any data. The release notes and new documentation with the release will contain recommendations on backing up data and full installation directions. Any errors or problems encountered should be passed on to the UDB helpdesk.

The WISE web site at **wise.act.nato.int** (classified WAN) contains details of new release plans and system documentation as well as the management structure and information.

#### 8.1.1 To Upgrade a WISE Server

If you are about to upgrade your WISE server, ensure you have created a back up of the site(s) either through the wiseadmin export process or copying the /var directory.

We recommend you inform the users WISE will be down during the install process and remove the user's access during the upgrade service. Upgrades should normally take less than 1 hour depending on the capabilities of the server and the size of the site.

When the WISE CD is inserted onto the server the WISE installer will start and take you through the process as described in the installation manual.

### 8.2 Uninstalling WISE Classic Configuration

In the event you wish to remove WISE Classic Configuration from the server, use the Add or Remove program utility form the Windows Control Panel. After WISE is removed, delete the WISE directory from the Program Files directory on the server. Ensure any backups are performed before de-installation as once WISE is removed all data files are deleted.

The figure below shows an example of using the Add or Remove Program from the control panel on a Windows XP platform.

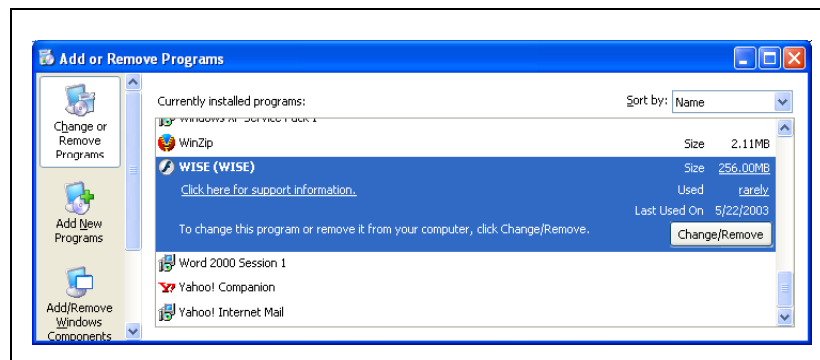


Figure 35 - Removing WISE on a Windows XP platform

### 8.3 Uninstalling WISE Enterprise Configuration

In addition to the procedures for "Uninstalling WISE" as shown in Para 8.2, additional steps are required for uninstalling the WISE Enterprise Configuration. Ensure any backups that are required, are performed before de-installation is attempted.

In the "Control Panel/Add or Remove Programs" window, the following program files need to be removed in the order below:

- Apache HTTP Server
- All Python Programs
- WISE

Once the Apache, Python, and WISE programs are removed, manually delete the following directories.

- C:\program files\WISE
- C:\python23

**NOTE: After de-installation of either WISE Classic Configuration or WISE Enterprise Configuration you will have to reboot your system.**

## 9 MCCIS WISE

### 9.1.1 Installation and De-installation

WISE is installed during the installation of the MCCIS software. The segments ZOPE and NAWISE contain the software and application set up. The WISE application is placed in the following directories:

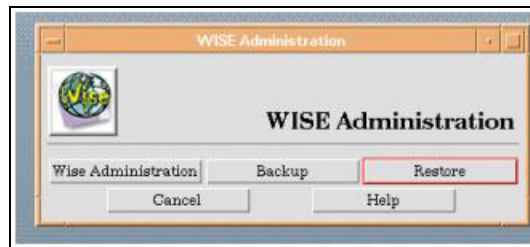
*/home/data/local/ZOPE – WISE Data including the /var directory*

*/s/ZOPE – Software Segment*

The WISE segment can be de-installed or disposed of using the MCCIS segment manager as described in the MCCIS system Administration Guide.

### 9.1.2 WISE Backup and Restore

The MCCIS WISE version has a backup and restore function as well as the import and export functionality under the wiseadmin account. This makes it possible to have a full WISE backup process at your site. It is accessed from the SA Default menu structure under the Configuration > WISE Administration menu.

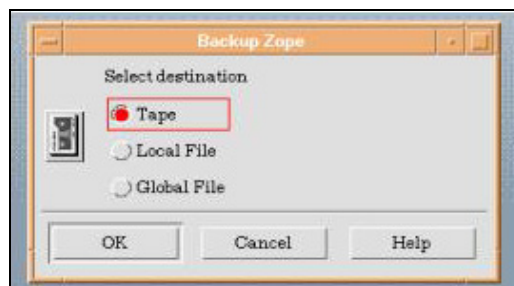


**Figure 306- WISE Administration Window**

From this menu the following options are available:

- WISE Administration – Opens the Netscape browser to the wiseadmin login
- Backup – Allows the WISE data files to be saved to a tape or hard drive location
- Restore – Allows the WISE data file to be restored from a tape or hard drive location

The backup and restore options allow the user to save the file to either a tape drive, to the local personal directory or the shared global directory as can be seen below. During the backup and restore process ZOPE is stopped to allow a complete backup, users will not be able to connect to WISE.



**Figure 317 - WISE backup and restore options**



## 10 Summary

WISE is a very low maintenance application for administrators. Monitoring the server response time, log files and packing the database are the most important roles of the administrator. Due to the nature of WISE, the user is responsible for maintaining and building the sites, the administrator in keeping the service available and in good running order. Over the lifespan of WISE, the biggest cause of WISE failure has been allowing the data.fs file to exceed 2GB. In subsequent versions of WISE this limitation will be removed.

WISE is a constantly evolving application and we welcome your feedback, problems encountered and your experiences. Please contact us with any questions or comments you may have.

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User Domain Branch

Allied Command Transformation