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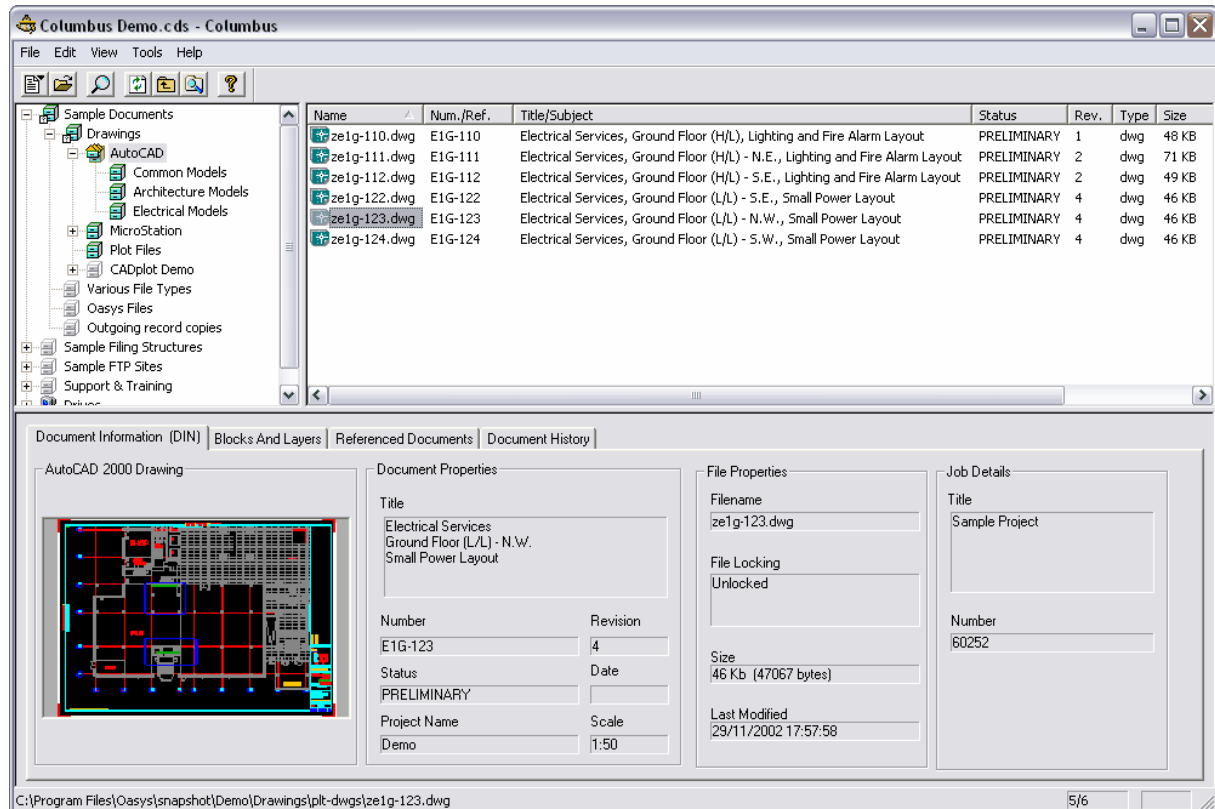
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1 Introduction

1.1 What is Columbus

Columbus is a combined navigator and viewer that allows you to organise data the way you perceive it, rather than by where it is physically located. So you can gather all the files and folders for a project under one heading even though they are spread across multiple directories, servers around the office or globe or accessible by different methods (e.g. remote file systems, FTP)*. This makes it easier to find, view, edit and print project data regardless of the document type or where it resides.



* Access to network locations or FTP sites is only available in Columbus Professional

1.2 Columbus Editions

Columbus is available in two editions: Professional and Personal.

Professional Edition

This is the fully featured version of Columbus and is a 'purchased' product. In addition to numerous enhancements such as full network support, FTP access, scanning, redlining and drawing comparison, it also includes one year's free support and maintenance.

This edition is intended for use in a office environment, where collaborative features, access to the latest updates and product support are essential. For information on how to buy Columbus Professional, please visit www.oasys-software.com/columbus/

Personal Edition

This is the free version of Columbus and includes most of the popular features found in Columbus Professional but is restricted, for example, to browsing local storage devices. Oasys provide an active user self help forum on at the Columbus web site which is available to all users free of charge.

This documentation describes all the features available in Columbus, however when a feature is only available in the professional edition or has been restricted in the personal edition, it will be noted.

1.3 Installation

To use Columbus, you will need:

- Microsoft Windows XP, 2000, ME or 98.
- 50 MB of free disk space
- We recommend that you use a screen resolution of 1024 by 768 pixels or greater.

Installation Requirements:

To install Columbus you will need:

- 100 MB of available disk space during the installation process
- To be logged in with an account that has administrative privileges

For performance reasons, Columbus should be installed on each PC's hard disk and not on a central server. To simplify this task, the [Enterprise Deployment tool](#) can be used to 'push out' Columbus remotely.

If the installer detects a compatible version of AutoCAD on the computer, it will ask if the Columbus ARX module should be installed.

1.4 Enterprise Deployment

Columbus includes an application called the Enterprise Deployment Tool which can be used by System Administrators to install Columbus on computers remotely.

The basic steps required to use the Enterprise Deployment Tool are:

- Start the Enterprise Deployment Tool from the tools | administration pull-down menu.
- Ensure that you are logged in with appropriate privileges
- Set the appropriate options on the various tabs
- Select the remote computers
- Press start to begin the deployment process

Computer Selection

Computers can be selected using the **browse** button. You should tick the box next to the required machines that you wish to deploy the application to. Only valid computers can be selected. Please note that domains, even though they may have a tick box next to them, can't be selected.

The **add** button can be used to type in computer names or paste them in from another source. Each name can be separated by spaces or on a different line.

Save List can be used to keep the current selection of computers in a text file.

Load List can be used to import a group of computer names from a text file. Each name can be separated by spaces or on a different line.

Deployment Buttons

The **check** button connects to all remote machines and checks if they are available and that you have the appropriate permissions to access the machine remotely. It is not essential to use this button, as a check is always carried out when deploying.

The **start** button initiates the deployment process. If deployment is successful, the status column will indicate success, otherwise it will say failed and a description of the problem will be listed in the message column.

The **retry** button works just the same as the start button, but skips machines that indicate a success status. This is used after a previous deployment attempt had a number of failures and you wish to retry the operation.

The **report** button produces a text file in notepad with the contents of the list. This can be saved to a permanent file to keep a log of the deployment process.

A **computer information** button is provided to show detailed data about the remote computers. This includes operating system service pack level, last known user, IP address, MAC address, etc.

General Options

This has two check boxes to indicate whether desktop and start menu shortcuts should be created for the application. If this is not relevant, they will be dimmed out.

There is also a check box which sends a win-popup notification to the users on the remote machines indicating that the software has been installed or updated. This feature is dependent on the windows messenger service running on those computers.

Columbus Specific Options

This includes an option to install the Columbus.arx module if AutoCAD 2000 or above is detected on the remote machines.

There is also an option to set the start CDS file of remote machines. This will always default back to un-ticked when the Enterprise Deployment Tools starts.

The file must be a fully qualified path with a drive letter or a UNC. You must ensure that the path that is entered is accessible by users on the remote machines. The next time that a user starts Columbus, their start CDS will change to the value set. However, they can go and change it to anything else subsequently.

Frequently Asked Questions

What operating systems are supported?

The Enterprise Deployment Tool can only be used to deploy applications to computers running Windows NT4, 2000 and XP. It can not deploy to Windows 95, 98 or ME computers.

Who do I have to log-in as?

For the Enterprise Deployment Tool to work successfully, the user needs to be logged in with an account that has administrative privileges on the **remote computer**. Typically this is accomplished in most organisations by being a member of the domain administrators group.

Do I need to keep a master installation on a server?

No, but you need to have a full installation of the product on the computer where the Enterprise Deployment Tool will be run. Typically, this is the System Administrator's computer.

What else can it do?

Though the Enterprise Deployment Tool is primarily used to remotely install applications, it can be used to update or patch existing installations. It can also be used at any time to reassure the System Administrator that the application files and registry entries haven't been modified inadvertently. If all files and registry entries are correct, nothing is copied and the whole operation only takes a few seconds per machine. The computer information button can also be used to obtain diagnostics information from remote computers without deploying anything.

Do users have to log out or exit the application?

No, the user can either be logged out, logged in or even running a previous or current version of the application being deployed.

If some shared files needed updating and are found to be in use, then the users are notified that they will need to reboot before using the new version of the application.

Can I deploy other applications?

No, it can only be used to deploy the application that it came bundled with. If you are interested in deploying other applications please contact us.

How does it work?

The Enterprise Deployment tools uses remote registry access and the administrative shares (e.g. \\remotemachine\c\$) to update application files, the registry and create shortcuts on remote machines.

1.5 Viewing document information

The list view contains a list of documents, with basic descriptive information. The description tab view shows general information about the document selected. This includes file properties, a preview image (if appropriate) and other information such as title, revision, status, etc. Dependencies and derived documents can be listed from other tab selections.

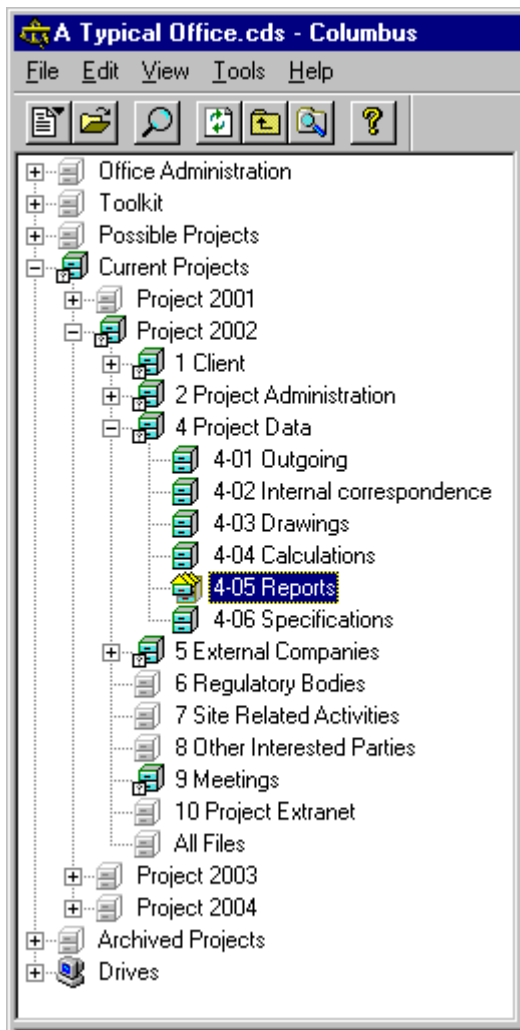
Columbus incorporates a viewing that uses technology from two third party vendors. These are Rasterex RxHighX™ and Stellant® Viewer Technology© (formerly know as INSO). Combining these two viewing engines, Columbus can view over 300 commercial file formats including PDF, AutoCAD, MicroStation, Microsoft Word, Microsoft Outlook and ZIP files.



1.6 Creating & browsing project areas

Project filing structures tend to be similar from project to project. The Project Setup Wizard allows you to get going quickly by creating your new project structure from standard templates*. You can then adjust the structure to suit your specific project requirements.

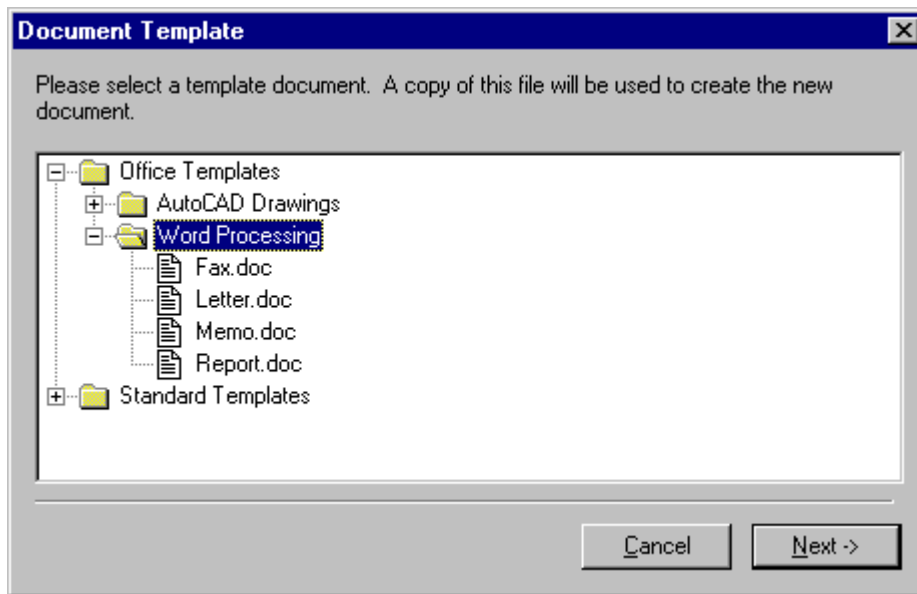
Browsing project areas is as simple as using Microsoft Windows Explorer and as Columbus uses a normal file system and does not rely on a database, access to documents is determined by the file system's own security. For maximum flexibility, it is recommended that network locations are mapped into Columbus as UNC paths (Universal Naming Convention - e.g. \\server\share\folder\filename), though drives that have been mounted can be used also*.



* Access to network locations and setting up projects on network drives is only available in Columbus Professional.

1.7 Creating a new document

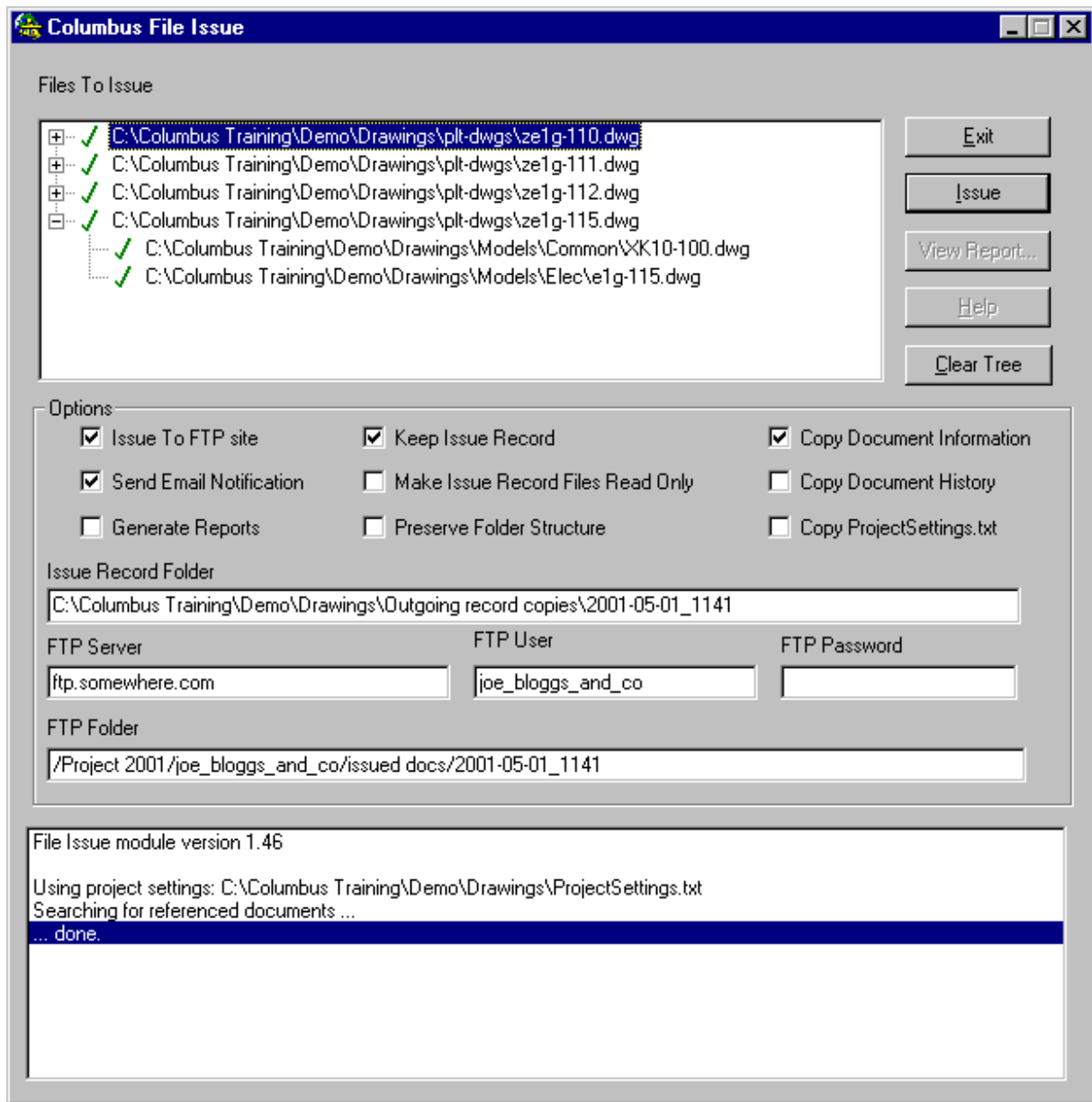
The Create New Document option presents a selection of templates that can be used as the starting point for the new document. Columbus will create the new file and optionally open it in your default editor for that document type. There is also an option for automatic file naming.



1.8 Issuing documents

The Columbus File Issue module will copy a collection of documents and their reference files to an issue record folder on your file system, and if requested to an FTP site*. This is particularly useful when using an extranet FTP server as part of a project hosting solution. The module can also send notification emails to other project participants if required.

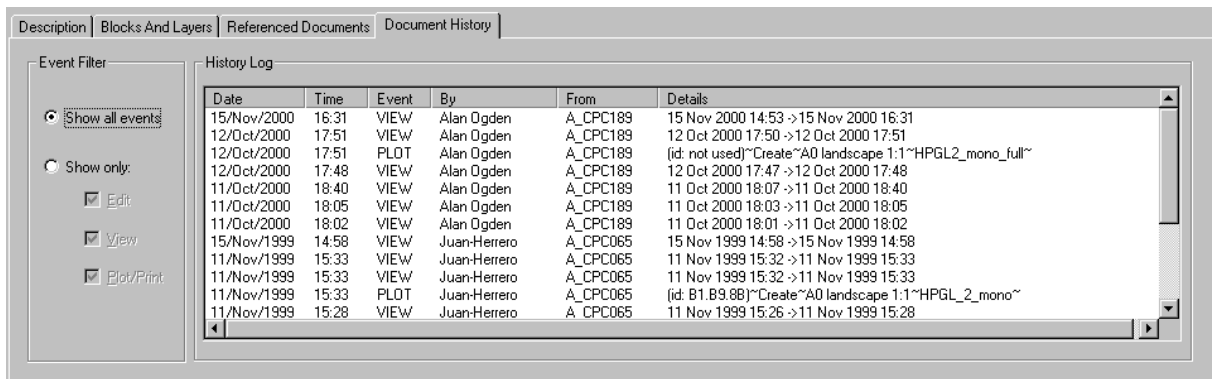
Issuing to FTP sites or network locations is only available in the Professional Edition of Columbus.



* Issuing to network locations or FTP sites is only available in Columbus Professional

1.9 Document history

The document history tab shows the edits, views and plots of a document throughout its lifetime*. Check boxes allow the log file to be filtered. The history log can be used for auditing and quality assurance.



* The existence of document history data is dependent on the metadata provider. The Columbus 'out of the box solution' only creates history data in AutoCAD using the Columbus ARX module.

1.10 Columbus Quick Tour

This Quick Tour uses the installed sample data to take you through some of Columbus's features*. If you didn't install the sample files re-run the setup and install them now.

Open Columbus

- Use the desktop shortcut to start-up Columbus
- From the menu bar select **File | Load CDS file...** and locate the Columbus Demo.cds file. The default location is:

\Program Files\Oasys\Columbus\Demo. Select the Columbus Demo.cds file and choose **Open**

Preview a document

- Observe the list of documents in the right-hand frame and notice the additional descriptive information adjacent to the file name.
- Select a file in the right-hand frame and notice the change in the bottom frame. A preview of each AutoCAD drawing can be seen together with additional information in the other tab views. Try picking the other tabs in the bottom frame.
- Return to the 'Description' tab, select a file and use your arrow keys on your keyboard to scroll through the files. Note how fast you can scroll whilst seeing the preview of each drawing.

Navigate the folder structure

- Navigate the folder structure in the left-hand frame as you would using Windows Explorer.
- Select the 'Various File Types' folder.
- Pick the file named Macintosh PICT.pct in the Various File Types folder, then from the menu bar choose **View | View Document**. This will open the image in a separate window.
- Drag the corners of the image to re-size it, and click the push-pin button to keep the preview displayed.
- Right-click over the image, notice the options available such as print, show full size and zoom.
- Dismiss the window by selecting **File | Exit** from menu bar in the preview window
- Select the 'Drives' folder, double-click a drive letter then navigate to a folder to find one of your own documents. Depending on its format, a preview of your selected document will appear in the document tab or right click the document and choose **Columbus Viewer...**

Edit an existing document

- Select your document to edit, right-click and choose open. Columbus will automatically open the document with your PC's registered editor for that type of file.
- Make a small change to the document and save the document in the normal way for that application.
- To see the changes to your file in the Columbus preview, you will need to refresh the preview. Select another file and then select the file you just saved. The preview will be updated to show your

changes.

Create new document

- Select a writable folder in which you want to create a new document.
- Select **File | Create New Document | From a Columbus Template** from the toolbar or right-click in a blank area of the file list and choose the same path. Then choose the **Standard Templates** folder in the dialog box.
- Open the Word Processing folder and **Select** the document called **WordPad 4.rtf** and select **Next**. Columbus will make a copy of this document in the selected folder when you have named the document.
- Name the new document, remembering including the document extension, using the Document File dialog box, then select **Next**. You can check the path to be saved by reading the Document Folder location in the dialog box.
- The Document Properties dialog box can be used to add additional descriptive information, which is displayed by Columbus in the document list frame. Enter some information and then select **OK**.
- Select **Yes** to edit now. Columbus will automatically open the document with your PC's registered editor for that type of file.
- Add some text to the document and **Save**. Select another file and then select the file you just saved. The preview will be updated to show your changes.

Create a new project folder structure

- Select **Tools | Administration | Project Wizard...** in the dialog box enter a location for the new folder structure to be created i.e. C:\Test Project and select **Next**.
- In the Select Template CDS dialog box click **Select**. Then choose the **Project Template.cds** file, then **Next**.
- Type a name for the project in the Project Label field
- e.g. Project X (2005).
- Skip Step 5 and select **Browse**.
- Select the **Columbus Demo.cds** file from the installation folder (write access is required to updated this file):

\Program Files\Oasys\Columbus\Demo and Open.

- Select **Finish** and **OK** to the Columbus Project Wizard dialog box.
- To see your changes you will need to refresh the current CDS file by selecting **Tools | Administration | Reload Current CDS** from the menu bar.
- You should now see your newly created project structure in the folder list. Explore its structure.
- Select one of the new folders i.e. '1-01 Commission', use Windows Explorer to view the folders on the file system by selecting **Tools | Explore Folder...** from the menu bar. Notice how the folders have been created at the same level even though Columbus displays them with a cascading effect. For a list of advantages see: [Flat or expanded CDS files?](#) .

What to do now?

- To get the most out of Columbus you should learn how to create your own [CDS files](#).
- If you are an AutoCAD user you will need to read about [ProjectSettings.txt file](#) especially with regard to automatically [Working with AutoCAD drawings](#) and [Working with AutoCAD drawings](#).
- Training manuals are available via the Columbus web site. These provide greater detail and additional worked examples.

* Access to network locations or FTP sites is only available in Columbus Professional

2 Configuring the Columbus Data Structure (CDS)

2.1 Getting started

Company / Project filing structure

To make the best use of Columbus, now would be a good time to review your company's filing systems. Columbus can be used to bring together a well-established paper filing system with the way you electronically create and save files. It can also bring together in one application all your company's documents from any part of your network or FTP sites. It does not impose its own structure on your office practices.

2.2 CDS files

Documents are categorised in a tree structure displayed in the left-hand pane. This structure is defined by a CDS file. Though this tree may mirror the file system structure, this is not mandatory*.

What is a CDS File?

CDS files are 'Columbus Data Structure' description files. They provide links to folders through a tree structure containing pathed filters (e.g. \\server\path*.doc). There is usually just one parent CDS file per office, which links to a number of nested CDS files in each project folder. The IT manager would normally maintain these CDS files. Typically, one parent CDS is created in an area where users can easily find it but not change it

e.g. \\Server\Program Files\Oasys\Columbus\DomainSettings.

Separate project CDS files are then created in the root of each project folder and the office/parent CDS is edited to provide links to each of the project CDS files. You can do this one of two ways:

- Copy an existing CDS (a sample is provided with Columbus) and edit both it and the master manually.
- Use the Project Setup Wizard, which will create a whole new project structure for you from a template, create a Project.cds file, and modify the master to create the link.

* Access to network locations or FTP sites is only available in Columbus Professional

2.3 Editing CDS files

CDS files should be created and edited using an ASCII text editor such as Notepad. To edit the current CDS file in use choose

Tools | Administration | Edit Current CDS... from the menu bar. You can also edit CDS files from Windows Explorer by selecting a CDS file and choosing the **Edit** option from the right-click menu.

The description of the Columbus folder structure should proceed the link to the project folders on the file system (see the following example). Using tabs prior to the Columbus folder description will force the folder to be indented as if it were a sub folder. The number of tabs determines the number of indentations. Columbus ignores tabs after the Columbus folder description.

2.4 Example CDS file

CDS File Syntax*

// Two forward slashes together used at the start of a new line, indicate a comment. Columbus will ignore any further text on this line.

= The text that follows the equals sign '=' is a description of what Columbus should do when the Columbus folder is selected

e.g. = Folder*.doc will only display files ending with .doc in a folder specified with a relative path

= `\\Server\folder*` will display all files and sub-folders in a folder specified with a UNC path.

= `ftp ://userID@hostname/rootfolder/*` will display all files and sub-folders in a specified folder using

FTP

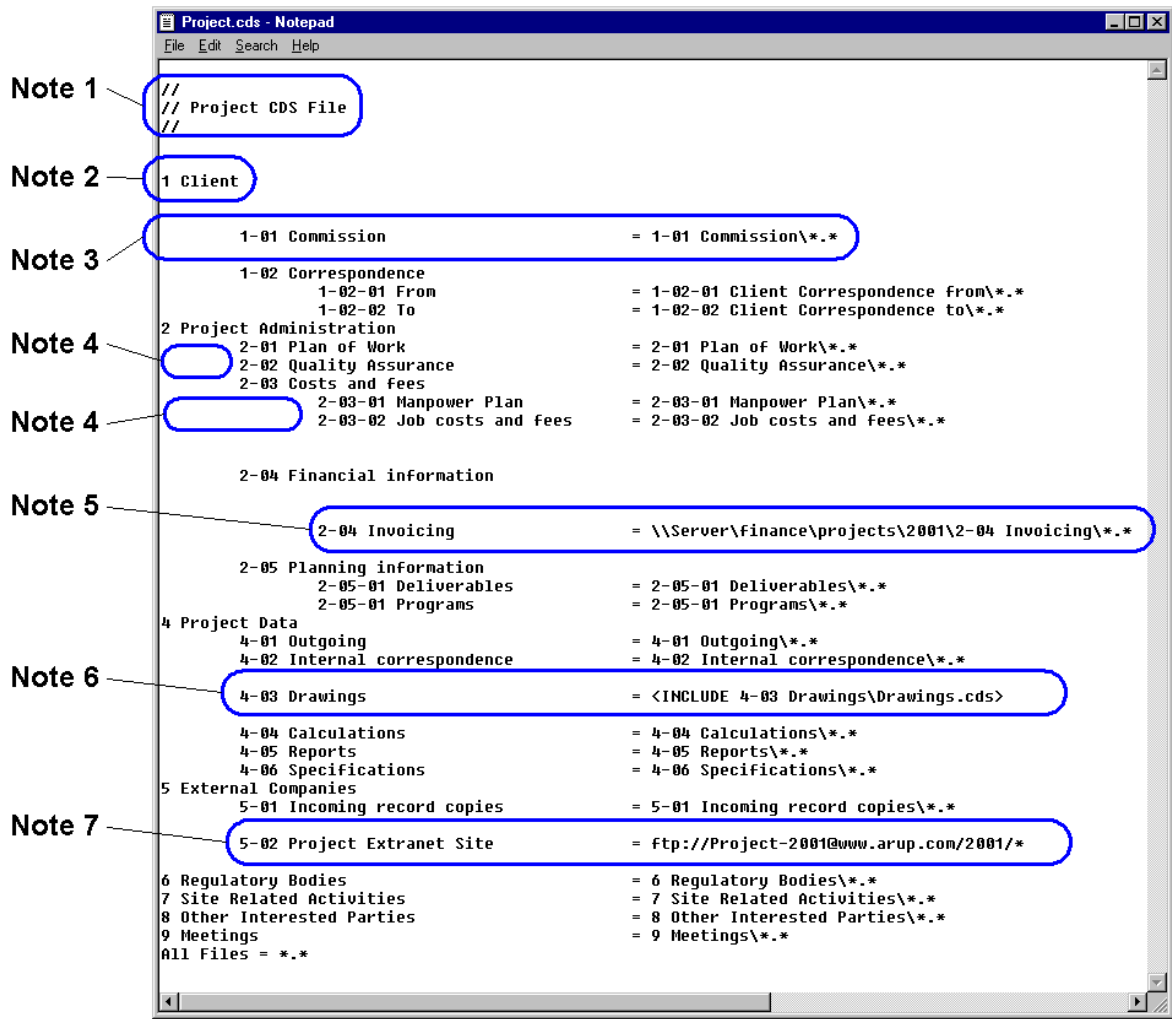
= `<INCLUDE folder\Another.cds>` will combine Columbus folders and links in another cds file within the current cds file

= `%variable%*` will display all files and sub-folders in a folder specified using an environment variable.

(For example, on Windows 2000 or XP, `%Homeshare%%Homepath%*` will show the contents of the home directory).

TAB The number of TAB characters indicates the level of indentation of each node.

< > Special commands are enclosed by angled brackets.



Note 1 Forward slashes used at the start of a new line indicate a comment. Columbus will ignore any further text on this line.

Note 2 If the line does not include an '=' sign, the line is just used as a heading label for the Columbus folder structure (no folder will be created on the file system when using the Project Setup Wizard). Each line in a CDS file describes one node on the Columbus folder structure.

Note 3 The text that follows the equals sign '=' is a description of what Columbus should do when the Columbus folder is selected. This example has a relative path. These are relative to the CDS file's location.

Note 4 The number of TAB characters in the Columbus folder structure dictates the level of indentation of each node.

Note 5 This is similar to Note 3 except this example has a full UNC path.

Note 6 Angle brackets i.e. < > enclose a special command. At present, only the INCLUDE command has been implemented. INCLUDE will nest another CDS file at that position. The path to the nested CDS may be either a

full or relative path. This example has a relative path.

Note 7 In this example Columbus will open a folder on an FTP Extranet site.

Benefits of using project CDS files with relative paths

Many projects have a similar structure. Project CDS files created with relative paths may be reused for other projects as no reference is made to the folder or server where the project resides. Columbus includes a template Project CDS file in the support folder.

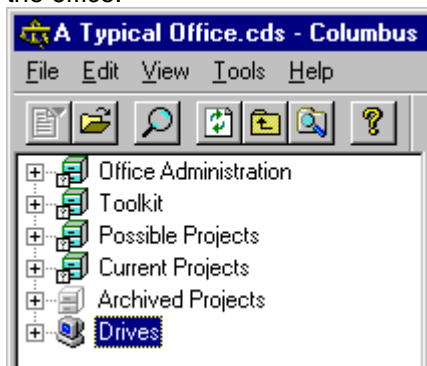
In use, project CDS files would normally be referenced from a parent CDS file. However, it is possible to load a project CDS file directly into Columbus, thereby making it the parent CDS file. This is useful for browsing archived projects, which may for example be on writable CDROMs, as the project CDS file would be archived too.

* Access to network locations or FTP sites is only available in Columbus Professional

2.5 Office CDS files

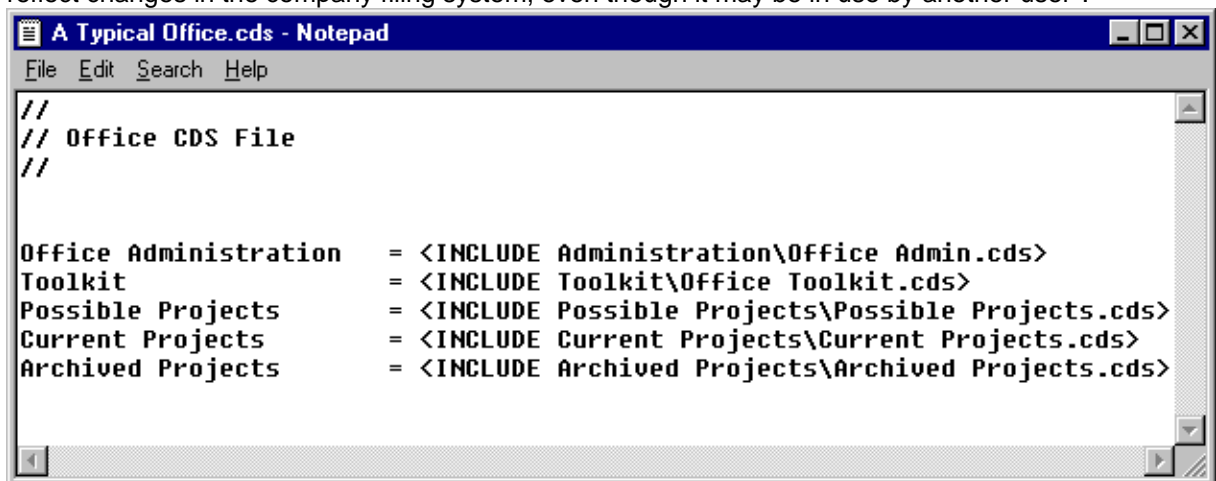
Creating an Office CDS file

CDS files can be setup to represent your office filing structure. The following example represents the top of the office's filing tree and would be the starting point to retrieve or create any document within the office.



Example Office CDS file

The folder view above was created using the following CDS file. This file can be modified at anytime to reflect changes in the company filing system, even though it may be in use by another user*.



Nested CDS files

In the example CDS file above, the Columbus folder structure has been linked to other CDS files. CDS files used in this way are referred to as nested CDS files.

Using nested CDS files can be a very efficient way to manage a filing system.

* Access to network locations or FTP sites is only available in Columbus Professional

2.6 Template & Project CDS files

Creating a template CDS file

To assist in the creation of project folders and CDS files, Columbus includes a project Setup wizard, which can create new project hierarchies from template CDS files.

You can have as many templates as you like to suit different types of projects.

Supplied with Columbus are some sample template files which can be copied and modified with a text editor (Notepad) to suit your filing structure.

```
//
// Template Project CDS File
//
1 Client
    1-01 Commission                = 1-01 Commission\*.
    1-02 Correspondence
        1-02-01 From                = 1-02-01 Client Correspondence from\*.
        1-02-02 To                  = 1-02-02 Client Correspondence to\*.
2 Project Administration
    2-01 Plan of Work                = 2-01 Plan of Work\*.
    2-02 Quality Assurance            = 2-02 Quality Assurance\*.
    2-03 Costs and fees
        2-03-01 Manpower Plan        = 2-03-01 Manpower Plan\*.
        2-03-02 Job costs and fees    = 2-03-02 Job costs and fees\*.
    2-04 Financial information
        2-04 Invoicing                = 2-04 Invoicing\*.
    2-05 Planning information
        2-05-01 Deliverables          = 2-05-01 Deliverables\*.
        2-05-01 Programs              = 2-05-01 Programs\*.
4 Project Data
    4-01 Outgoing                    = 4-01 Outgoing\*.
    4-02 Internal correspondence      = 4-02 Internal correspondence\*.
    4-03 Drawings                    = 4-03 Drawings\*.
    4-04 Calculations                 = 4-04 Calculations\*.
    4-05 Reports                     = 4-05 Reports\*.
    4-06 Specifications               = 4-06 Specifications\*.
5 External Companies
    5-01 Incoming record copies        = 5-01 Incoming record copies\*.
6 Regulatory Bodies                  = 6 Regulatory Bodies\*.
7 Site Related Activities             = 7 Site Related Activities\*.
8 Other Interested Parties            = 8 Other Interested Parties\*.
9 Meetings                           = 9 Meetings\*.
All Files = *.

```

2.7 Flat or expanded CDS files?

The project setup wizard will create in your file system all the folders and sub-folders listed in the template CDS file*.

Because the Columbus folder structure does not need to match the file system folder structure, you have a great deal of flexibility in arranging your documents.

Expanded folder structure

Traditionally, electronic documents are saved in folders and sub-folders, but this has a few drawbacks.

- Displaying a file path in the footer of a document is common practice. But if the path is too long it becomes un-printable (this is now more common with usage of long file and folder names).
- Redundant 'grouping' folders are required to create the hierarchy. Users can then mistakenly place

documents in the grouping folders when they ought to be using the sub-folders (see the following example).

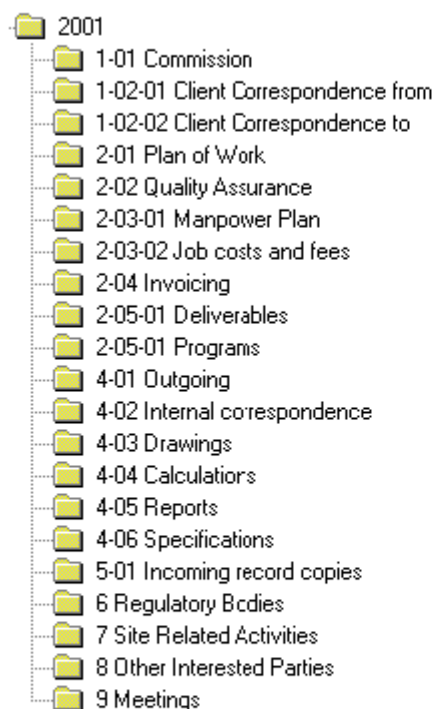
- Applying different security access to folders in the middle of the folder structure can be difficult.
- Preventing the unauthorised creation of new folders in the middle of the folder structure can be difficult.

Flat folder structure

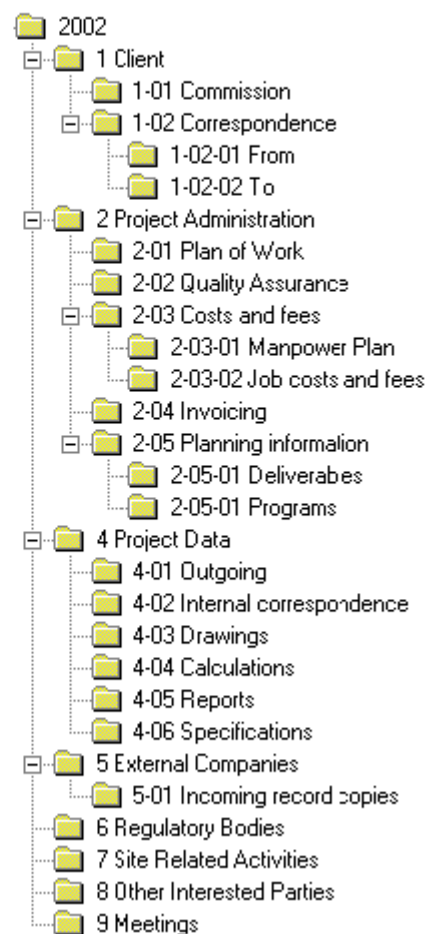
When using Columbus you have the advantage of being able to display the folders expanded, but have the actual folders arranged on the file system in a flat structure, without any sub-folders. This avoids all of the problems above.

Viewing the file system using Windows Explorer

Flat Folder Structure

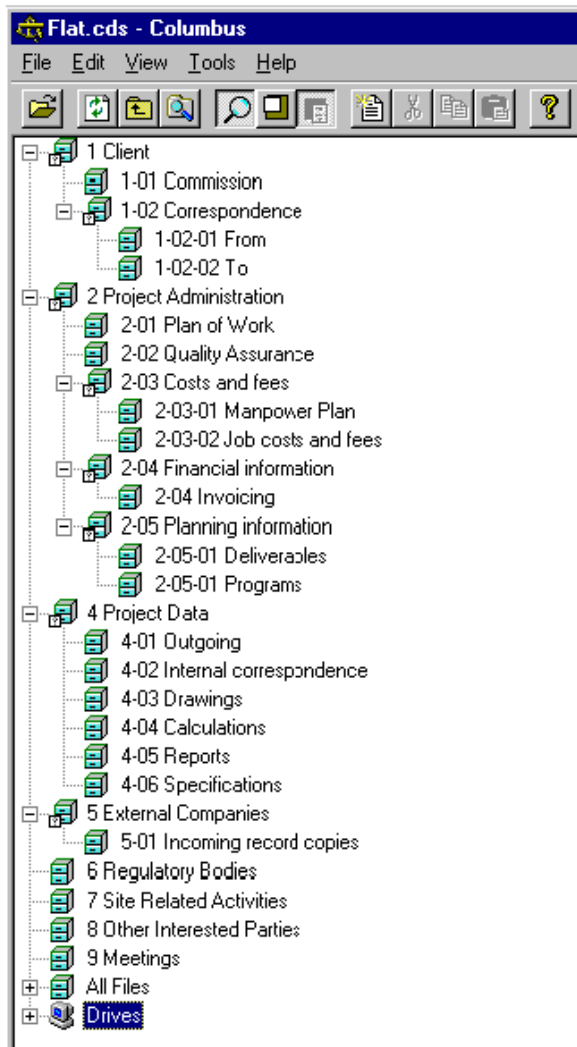


Expanded Folder Structure

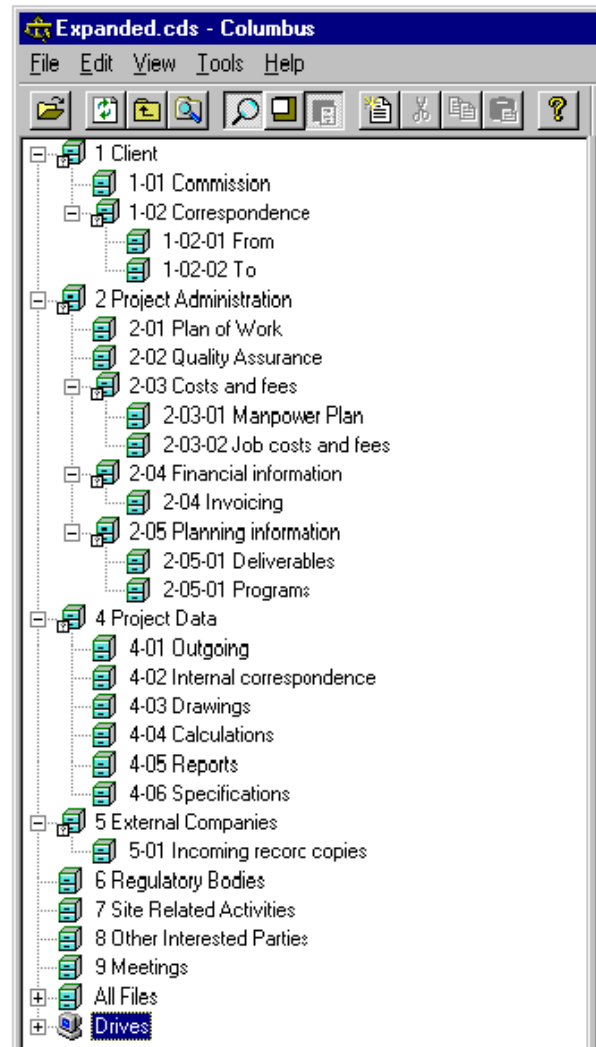


Viewing the file system using Columbus

Flat Folder Structure using Columbus



Expanded Folder Structure using Columbus



* Access to network locations or FTP sites is only available in Columbus Professional

2.8 Project Setup Wizard

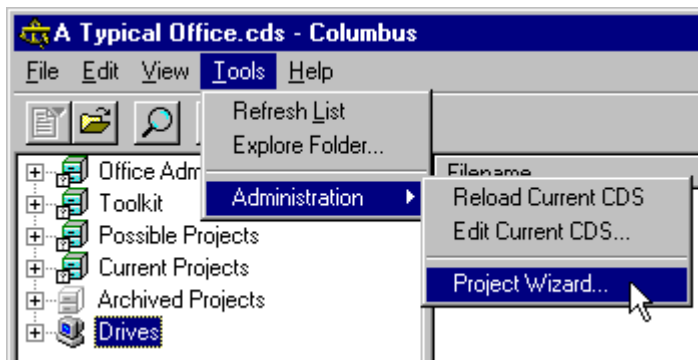
Using the Project Setup Wizard*

The Project Setup Wizard guides you through the process of creating a new project folder structure and complimentary CDS file, and linking it to an Office CDS.

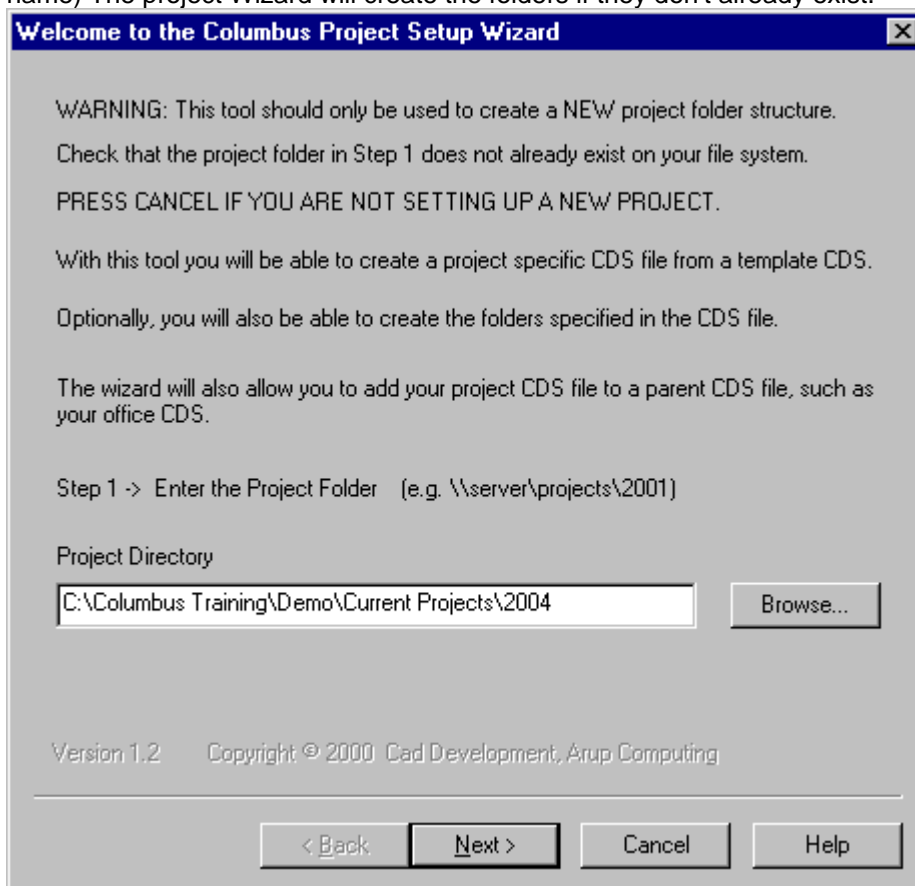
Most projects have a similar structure to previous projects, so the quickest way to start a new one is to use a template. The Columbus 'Project Setup Wizard' will create a project CDS file and all the required folders from a template structure. A number of standard templates are provided with Columbus but you can create your own.

Step 1

- From the Tools pull down menu select **Administration | Project Wizard**

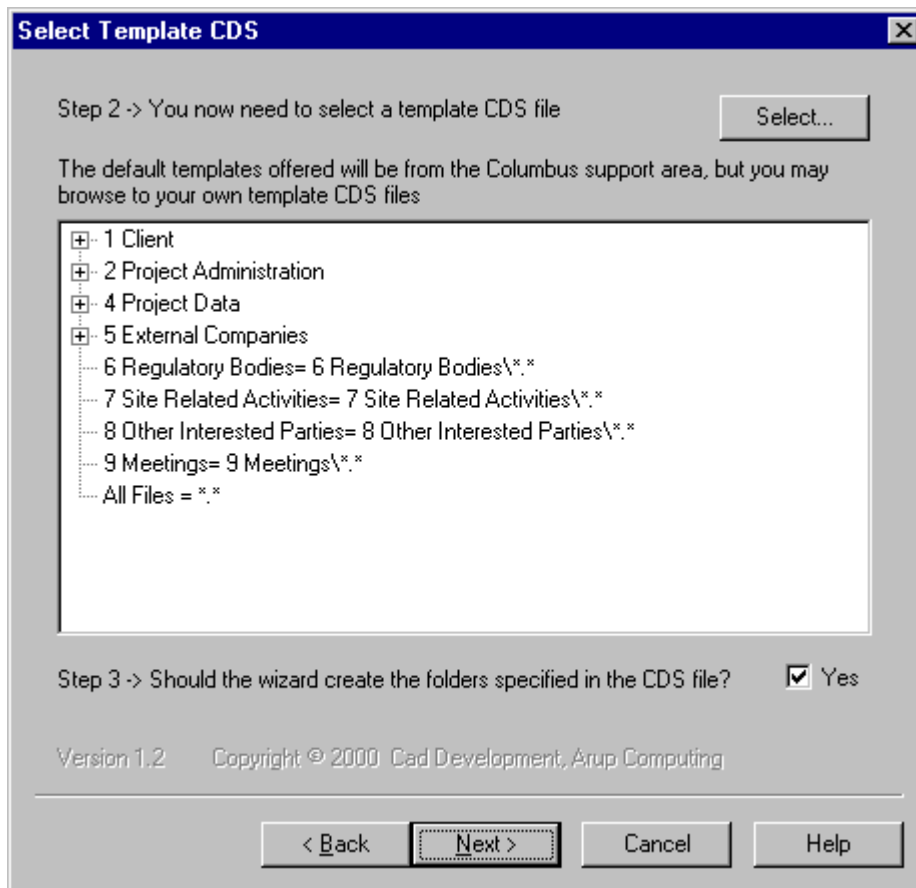


Type in the folder where the new project folder structure will reside or pick browse to locate one. (You may find it easiest to browse to the general project area and then key in the new project name) The project Wizard will create the folders if they don't already exist.



Step 2

Pick **Next**, then on the **Select Template CDS** page pick the **Select** button to select a template structure. Select a template then Pick **Open**. The structure is shown in the dialogue so that you can check whether it is the one you want.

**Step 3**

- Ensure that the **Should the wizard create folders specified in the CDS file?** tick box is ticked if you want the folders created (which you probably will).

Step 4

- Pick **Next** and type the project name into the **Project Label** field
e.g. Project 2001

Project Label

Step 4 -> What label do you wish to assign to the project CDS?
(This will be the name displayed in the Columbus tree)

Project Label
Project 2004

Step 5 -> Optionally, you can enter a "Root Filter" for your project CDS.

Project Root Filter (Optional)

Step 6 -> Now, you can add an entry in your "Office CDS" for this project

Do you wish to add this project to your "Office CDS file"?

☒ Yes, update: C:\Columbus Training\Demo\Current Project

☐ No

Version 1.2 Copyright © 2000 Cad Development, Arup Computing

< Back Finish Cancel Help

Step5

- Normally when Columbus first opens a CDS file, only the folder structure appears with no files listed in the document list frame. However by including a Project Root Filter

a listing of files can also be obtained at the same time.

In the **Project Root Filter** you can optionally add any valid filter (e.g. `\\Server\projects\2001*.*`). If this CDS is subsequently referenced by a higher CDS, the filter action will occur when the user picks the project folder, otherwise it will simply expand the tree. In most cases you will leave this blank

Step 6

- The wizard can insert an appropriate entry in your office CDS file. You would normally want to do this so select **Yes** and **Browse** to the location of your office CDS file. Make sure that you have write permissions on your office CDS file, otherwise the wizard will fail to update it.

Note: If you don't yet have an office CDS file in your DomainSettings folder you may like to create one now. You can do this by simply creating an empty text file and saving it with an appropriate name e.g. London Office.cds. Or copy and modify a sample one supplied with Columbus.

- Now pick **Finish**.

Testing the new structure

You will now have a new project folder structure, and in its main folder will be a Project.cds. If you browse to this via Explorer and double-click the CDS file, Columbus will load just that project's structure.

If you locate your office CDS and double-click that, Columbus will load that structure and you will see your newly added project at the bottom of the list (assuming you followed the instructions in

Step 6). If you do not want the project to appear at the end of the list, edit the CDS with an ASCII text editor e.g. Notepad and move it to an appropriate position.

* Access to network locations or FTP sites is only available in Columbus Professional

2.9 Document templates

Many companies have template documents for letters, faxes, drawings etc. These can be used with Columbus when using the 'Create New Document' option. Columbus by default will offer a folder called 'Standard Templates'.

Columbus creates a new document by placing a copy of the selected template document into the current folder being viewed. This has the advantage of filing the document into the required folder as it is created.

Standard Templates*

Standard template documents, such as Word, Excel, Notepad, Visio etc. are provided with Columbus and can be found in a series of sub-folders in the DomainSettings location:

\\Server\Program Files\Oasys\Columbus\Support\Templates\Word Processing.etc.

Office Templates*

Your existing company or office template documents can be used with Columbus by copying and renaming them (to the default document extension i.e. *.dot should be renamed to *.doc) into a series of sub-folders in the DomainSettings location:

\\Server\Program Files\Oasys\DomainSettings\Templates\ Word Processing etc

See: [Creating new documents from templates](#) and [DomainSettings Folder](#).

* Access to network locations or FTP sites is only available in Columbus Professional

2.10 Security

Folder Security*

To avoid complications and conflicts, Columbus does not attempt to provide its own folder or file security system. Instead it utilises the operating system's own security features.

Refer to your operating system's manuals or systems manager for restricting user access to particular folders

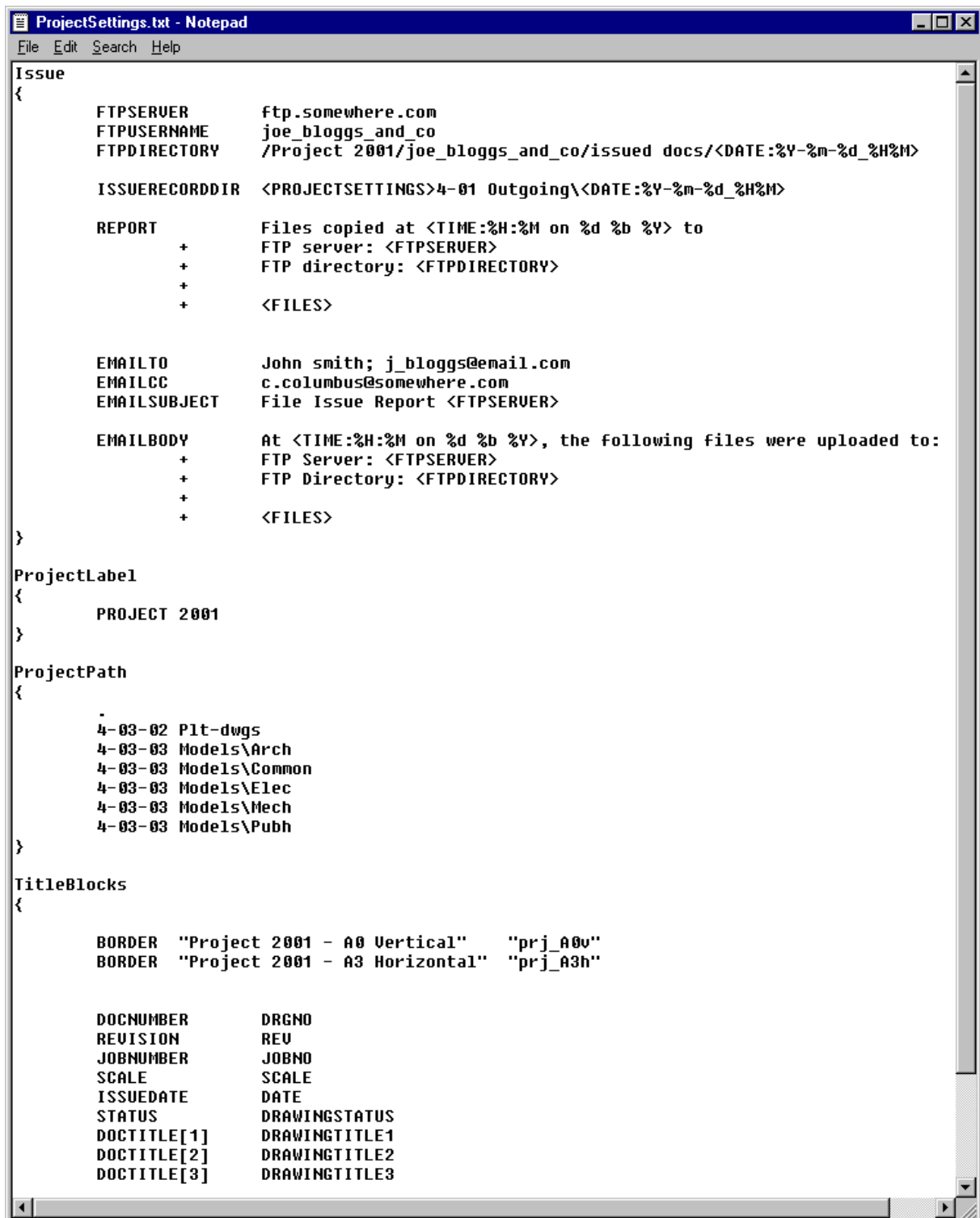
Document Security

Some applications e.g. MS Word have the ability to password protect files to prevent them from being viewed. If this option has been implemented, a preview will not be available.

* Access to network locations or FTP sites is only available in Columbus Professional

2.11 ProjectSettings.txt file

ProjectSettings.txt files should be created and edited using an ASCII text editor such as Notepad. This file can provide default settings for a project. A sample file can be found in the Columbus installation sample folder.



```

ProjectSettings.txt - Notepad
File Edit Search Help

Issue
{
    FTPSERVER      ftp.somewhere.com
    FTPUSERNAME    joe_bloggs_and_co
    FTPDIRECTORY   /Project 2001/joe_bloggs_and_co/issued docs/<DATE:%Y-%m-%d_%H%M>

    ISSUERECDIR    <PROJECTSETTINGS>4-01 Outgoing\<DATE:%Y-%m-%d_%H%M>

    REPORT         Files copied at <TIME:%H:%M on %d %b %Y> to
    +             FTP server: <FTPSERVER>
    +             FTP directory: <FTPDIRECTORY>
    +             <FILES>

    EMAILTO        John smith; j_bloggs@email.com
    EMAILCC        c.columbus@somewhere.com
    EMAILSUBJECT   File Issue Report <FTPSERVER>

    EMAILBODY      At <TIME:%H:%M on %d %b %Y>, the following files were uploaded to:
    +             FTP Server: <FTPSERVER>
    +             FTP Directory: <FTPDIRECTORY>
    +             <FILES>
}

ProjectLabel
{
    PROJECT 2001
}

ProjectPath
{
    .
    4-03-02 Plt-dwgs
    4-03-03 Models\Arch
    4-03-03 Models\Common
    4-03-03 Models\Elec
    4-03-03 Models\Mech
    4-03-03 Models\Pubh
}

TitleBlocks
{
    BORDER "Project 2001 - A0 Vertical" "prj_A0v"
    BORDER "Project 2001 - A3 Horizontal" "prj_A3h"

    DOCNUMBER      DRGNO
    REVISION       REV
    JOBNUMBER      JOBNO
    SCALE          SCALE
    ISSUEDATE      DATE
    STATUS         DRAWINGSTATUS
    DOCTITLE[1]    DRAWINGTITLE1
    DOCTITLE[2]    DRAWINGTITLE2
    DOCTITLE[3]    DRAWINGTITLE3
}

```

The location of the ProjectSettings.txt file relative to the files being viewed is very important. During certain operations Columbus will look for a ProjectSettings.txt file. First it will look in the same folder as the file being viewed. If one is not found, Columbus will work its way up the file system folder structure until it can go no further. You can use this feature to provide varying functionality at different levels of a project structure, but we would recommend that you always maintain one at the root of the project's

folder structure.

The ProjectSettings.txt file is used in each project area for the following operations:

- Issuing documents
 - Default email notification details
 - Default FTP Settings
 - Default local folder location
 - Default reference file paths
- AutoCAD
 - [Working with AutoCAD drawings](#)
 - [Working with AutoCAD drawings](#)

ProjectSettings file syntax

TAB TAB characters are treated as spaces and are ignored by Columbus.
 < > Special commands are enclosed by angled brackets. e.g. < PROJECTSETTINGS> & <DATE...>
 { } The value within the enclosing curly bracket parentheses is used with the preceding heading e.g.
 ProjectLabel { PROJECT 2001 }
 " " Values contained within the double quotation marks are only used as descriptions for AutoCAD title blocks.
 + Add a new line

Date and time formatting

The following syntax is used for automatically generating a dated folder name with the file issue module.

%a Abbreviated weekday name
 %A Full weekday name
 %b Abbreviated month name
 %B Full month name
 %c Date and time representation appropriate for locale
 %d Day of month as decimal number (01 - 31)
 %H Hour in 24-hour format (00 - 23)
 %I Hour in 12-hour format (01 - 12)
 %j Day of year as decimal number (001 - 366)
 %m Month as decimal number (01 - 12)
 %M Minute as decimal number (00 - 59)
 %p Current locale's A.M./P.M. indicator for 12-hour clock
 %S Second as decimal number (00 - 59)
 %U Week of year as decimal number, with Sunday as first day of week (00 - 53)
 %w Weekday as decimal number (0 - 6; Sunday is 0)
 %W Week of year as decimal number, with Monday as first day of week (00 - 53)
 %x Date representation for current locale
 %X Time representation for current locale
 %y Year without century, as decimal number (00 - 99)
 %Y Year with century, as decimal number
 e.g. <DATE:%Y-%m-%d_%H%M>

Issue*

FTP SERVER: Host name or IP address to be used with the file issue module e.g.

Host name: ftp.somewhere.com
 IP address: 230.34.34.62

FTP USERNAME: FTP user name required to access the FTP site and used with the file issue module e.g.

joe_bloggs_and_co

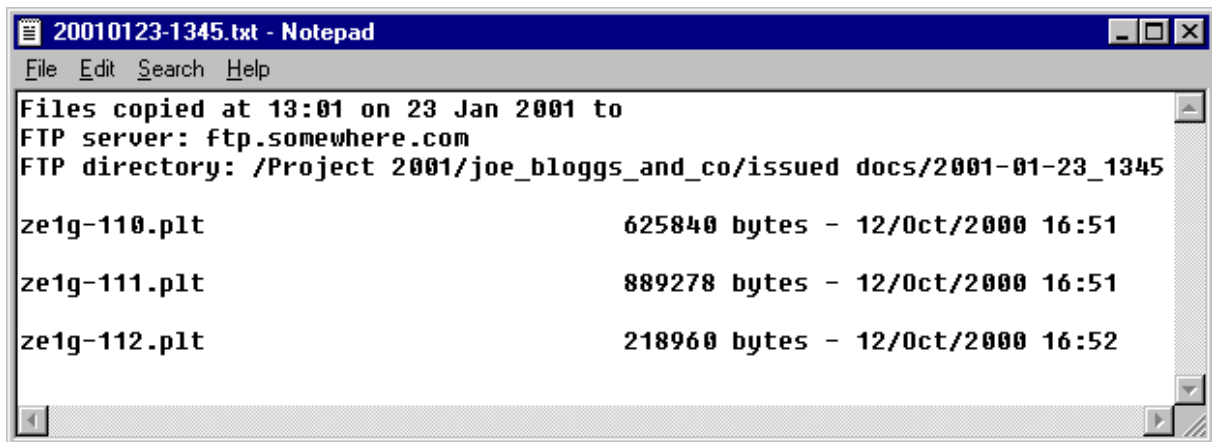
FTPDIRECTORY: The folder to be created on the FTP server when using the file issue module. Using the example in the graphic above a new folder will be created on the FTP server called:

/Project 2001/joe_bloggs_and_co/issued docs/2001-01-23_1345

ISSUERECDIR: The folder to be created on the local server or hard disk when using the file issue module. Using the example in the graphic above a new folder will be created below the location of the ProjectSettings.txt file in a sub-folder called:

4-01 Outgoing\2001-01-23_1345

REPORT: When using the 'Generate Report' option during issuing you can customise the information displayed. In the ProjectSettings.txt example above the following report would be created:



```
20010123-1345.txt - Notepad
File Edit Search Help
Files copied at 13:01 on 23 Jan 2001 to
FTP server: ftp.somewhere.com
FTP directory: /Project 2001/joe_bloggs_and_co/issued docs/2001-01-23_1345

ze1g-110.plt                625840 bytes - 12/Oct/2000 16:51
ze1g-111.plt                889278 bytes - 12/Oct/2000 16:51
ze1g-112.plt                218960 bytes - 12/Oct/2000 16:52
```

The following commands can be used in the customisation of a report: <TIME.....>, <DATE.....>, <FTP SERVER>, <FTP DIRECTORY>, <ISSUERECDIR> and <FILES>

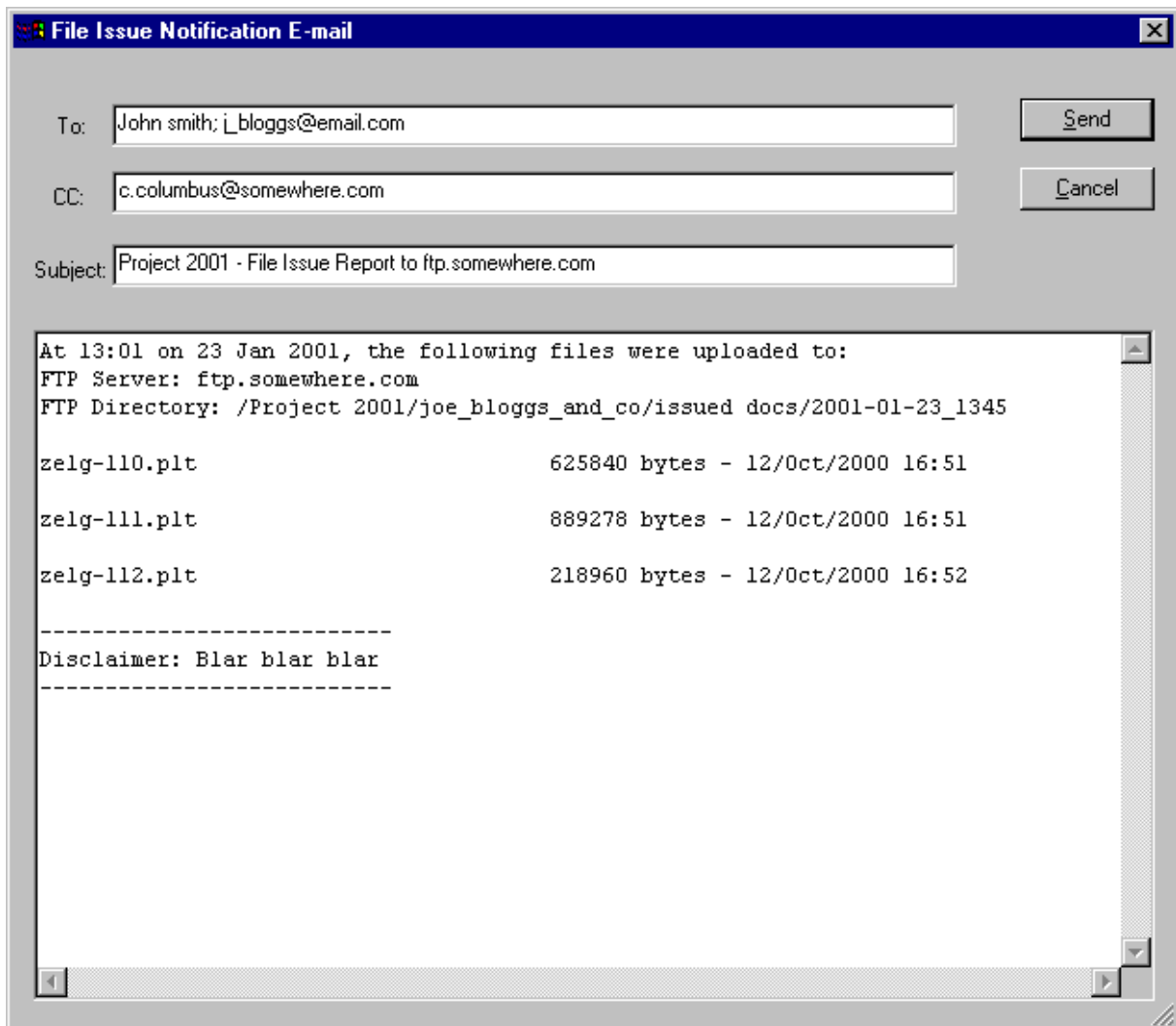
EMAILTO: The addresses of email notification when using the file issue module. Each addressee should be separated with a semi-colon and space:

John smith; j_bloggs@email.com

EMAILCC: As above except these appear as CC entries in the email notification.

EMAILSUBJECT: The subject of email notification when using the file issue module. This can be customized to suit the project needs.

EMAILBODY: When using the 'Send Email Notification' option during issuing, you can customise the body text of the email. In the ProjectSettings.txt example above the following email would be created:



ProjectLabel

The value within the enclosing parentheses is used to set AutoCAD's Projectname system variable when using reference files and the 'Project Files Search Path'. For more details see:

[Working with AutoCAD drawings](#) in the appendix.

ProjectPath

The path and folder names enclosed in the curly bracket parentheses are used to automatically create a list of folders in AutoCAD's 'Project Files Search Path'. The listed folders are also used to find reference files of a drawing being issued using the file issue module. For more information see:

[Working with AutoCAD drawings](#) in the appendix.

TitleBlocks

The AutoCAD plug-in for Columbus can automatically extract title block information. Any number of different title blocks, together with their attributes, can be mapped so that the details are available via Columbus.

The first line within the enclosing parentheses should be the word 'BORDER' followed by double quotation marks containing any title block description, which is then followed by the AutoCAD block name of the title block. This should also be contained in double quotation marks e.g.

```
BORDER "Project 2001 - A0 Vertical" "prj_A0v"
```

If several title blocks have the same attribute tag values you can simply add another line with a different description and block name e.g.

```
BORDER "Project 2001 - A0 Vertical" "prj_A0v"
```

BORDER "Project 2001 - A3 Horizontal" "prj_A3h"

The following lines are the mappings of Columbus data fields to the title block attribute tag values.

The Columbus values should precede the title block attribute tag values e.g.

Columbus	AutoCAD
DOCNUMBER	DRGNO
REVISION	REV
JOBNUMBER	JOBNO
SCALE	SCALE
ORIGINATOR	DRNBY
ISSUEDATE	DATE
STATUS	DRAWINGSTATUS
DOCTITLE[1]	DRAWINGTITLE1
DOCTITLE[2]	DRAWINGTITLE2
DOCTITLE[3]	DRAWINGTITLE3
DOCTITLE[4]	DRAWINGTITLE4
JOBTITLE[1]	JOBTITLE1
JOBTITLE[2]	JOBTITLE2
JOBTITLE[3]	JOBTITLE3
JOBTITLE[4]	JOBTITLE4

For more information see: [Working with AutoCAD drawings](#) in the appendix.

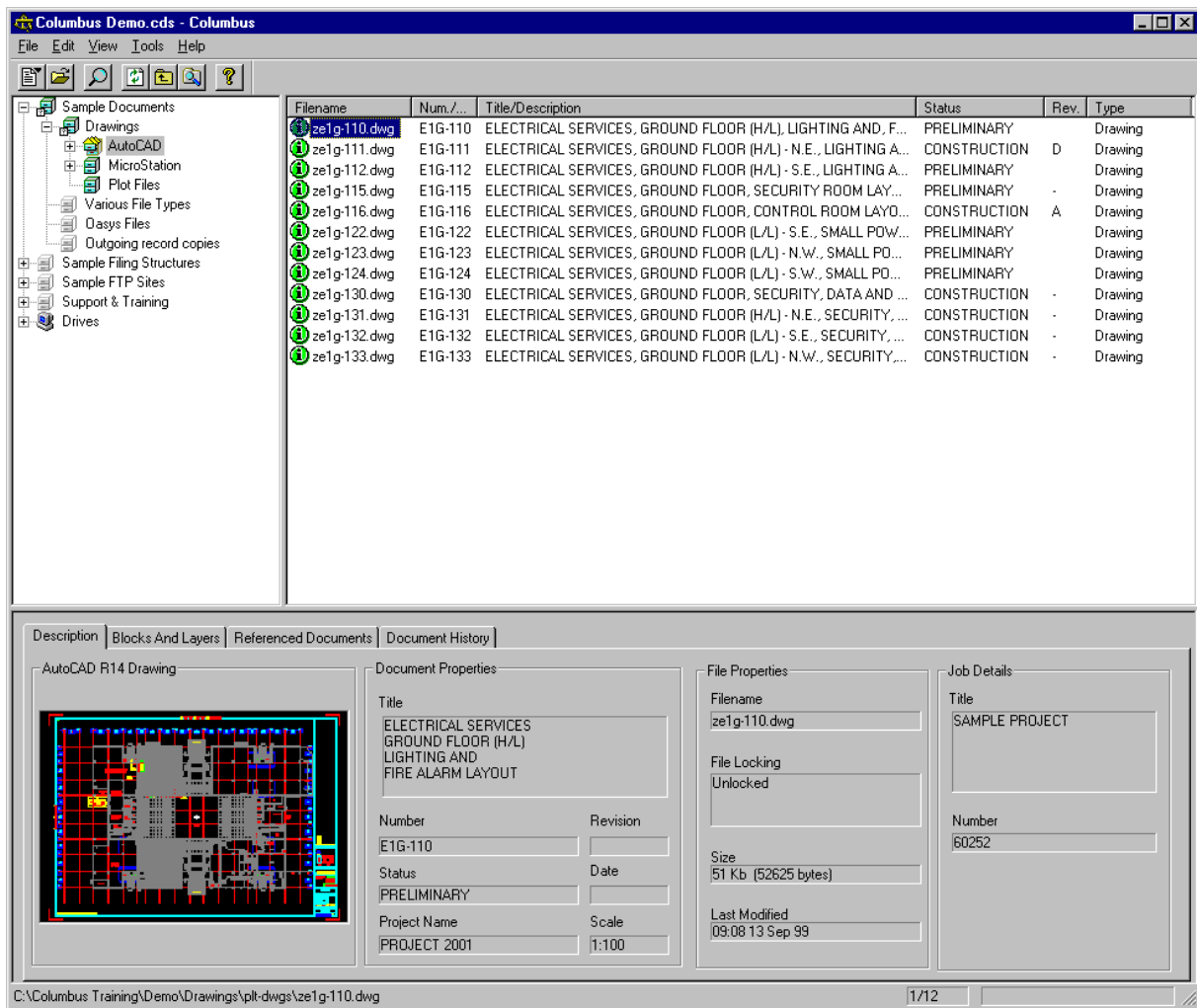
* Access to network locations or FTP sites is only available in Columbus Professional

3 Using Columbus

3.1 The Columbus interface

Introduction

Columbus has been designed to look similar to Windows Explorer. It adopts the same basic layout and utilities, right click context sensitive menus etc, to produce an uncluttered interface. Three frames are provided instead of two with the third frame displaying the document details and a preview.



Frames

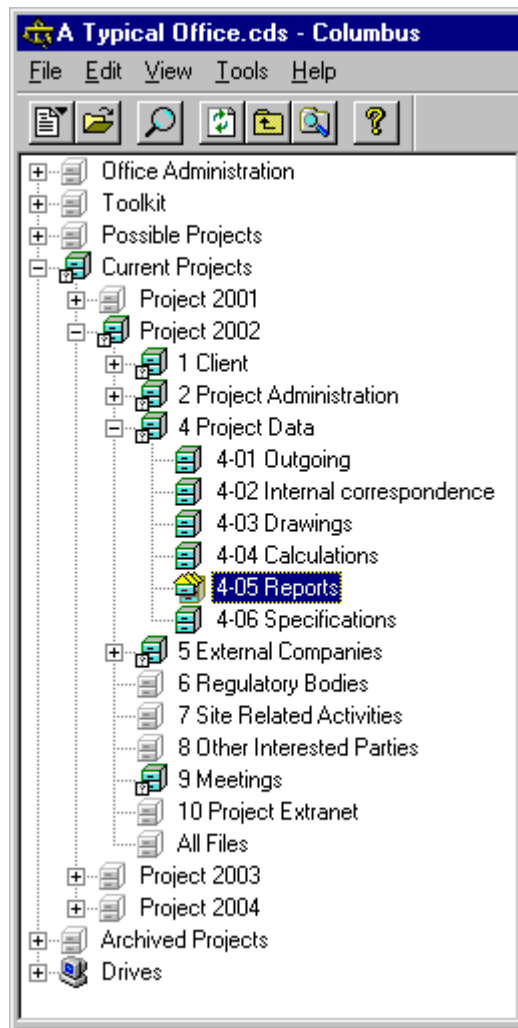
The Columbus Window is divided into three frames for showing:

1. Folder hierarchies 'Columbus Folder Structure Frame'
2. A list of files in a folder
3. The properties of a selected file

Columbus Folder Structure Frame

This frame displays the Columbus folder structure. You navigate in a similar way to using Windows Explorer. When a folder is selected, the documents which meet the criteria of the folder structure will be displayed in the Document List Frame.

Drives in current use can also be navigated by selecting 'Drives', which is always at the bottom















of the folder tree.

Document List Frame

The Document List Frame displays the following properties.

- Document Filename
- Number or reference (if available)
- Title or description (if available)
- Status (if available)
- Revision (if available)
- Document type or extension
- Size
- Last Modified date

The list can be sorted on any of these fields and an arrow shows the active sorting column and order.

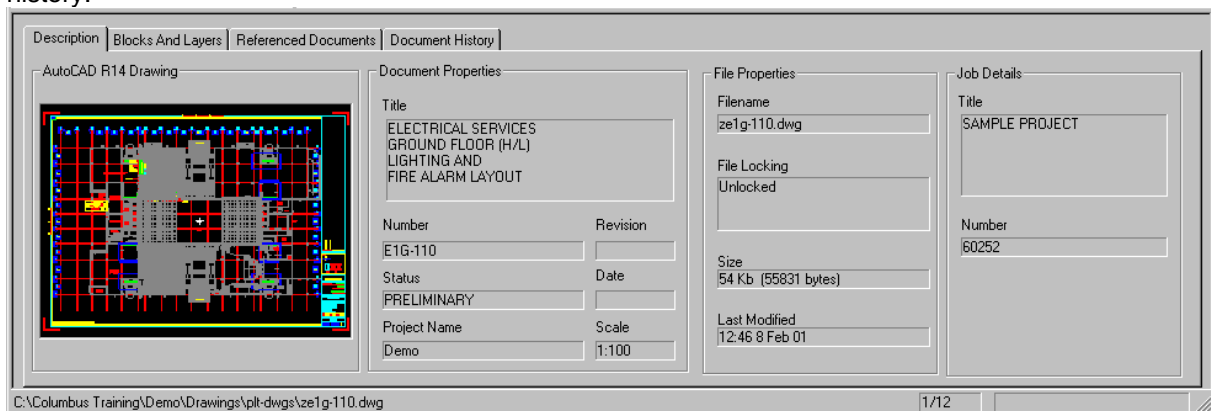
Filename	Num./Ref.	Title/Description	Status	Rev.	Type
 ze1g-110.dwg	E1G-110	ELECTRICAL SERVICES, GROUND FLOOR (H/L), LI...	PRELIMINARY		Drawing
 ze1g-111.dwg	E1G-111	ELECTRICAL SERVICES, GROUND FLOOR (H/L) - ...	CONSTRUCTION	D	Drawing
 ze1g-112.dwg	E1G-112	ELECTRICAL SERVICES, GROUND FLOOR (H/L) - S...	PRELIMINARY		Drawing
 ze1g-115.dwg	E1G-115	ELECTRICAL SERVICES, GROUND FLOOR, SECUR...	PRELIMINARY	-	Drawing
 ze1g-116.dwg	E1G-116	ELECTRICAL SERVICES, GROUND FLOOR, CONTR...	CONSTRUCTION	A	Drawing
 ze1g-122.dwg	E1G-122	ELECTRICAL SERVICES, GROUND FLOOR (L/L) - S...	PRELIMINARY		Drawing
 ze1g-123.dwg	E1G-123	ELECTRICAL SERVICES, GROUND FLOOR (L/L) - N...	PRELIMINARY		Drawing
 ze1g-124.dwg	E1G-124	ELECTRICAL SERVICES, GROUND FLOOR (L/L) - S...	PRELIMINARY		Drawing
 ze1g-130.dwg	E1G-130	ELECTRICAL SERVICES, GROUND FLOOR, SECUR...	CONSTRUCTION	-	Drawing
 ze1g-131.dwg	E1G-131	ELECTRICAL SERVICES, GROUND FLOOR (H/L) - ...	CONSTRUCTION	-	Drawing
 ze1g-132.dwg	E1G-132	ELECTRICAL SERVICES, GROUND FLOOR (L/L) - S...	CONSTRUCTION	-	Drawing
 ze1g-133.dwg	E1G-133	ELECTRICAL SERVICES, GROUND FLOOR (L/L) - N...	CONSTRUCTION	-	Drawing

Document Properties Frame

This frame displays a preview and the properties of the selected document. The appearance of the properties frame changes based on the type of file selected.

AutoCAD drawing example:

Description (title, number status, revision, etc.) blocks, layers, referenced documents, document history.



Adjusting the Frames

Frames can be adjusted by selecting the frame border and dragging as required. Column sizes can be adjusted by selecting the appropriate divider and dragging as necessary. If a divider is double-clicked then the column will automatically resize to fit the maximum size of the text contained within the column.

Menu Bar

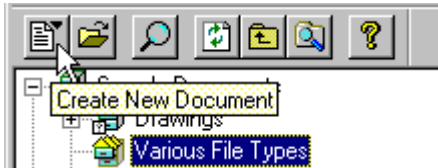
The pulldown menus are available from the menu bar at the top of the Columbus window. You can Choose menu options in one of the following ways:

- Select menus and sub-menus with your mouse.
- On your keyboard hold down the ALT key and enter the underlined letter in the menu name. For example, to open a new CDS file, hold down **ALT** while pressing **F** to open the file menu. Then choose the **Load CDS File...** option.



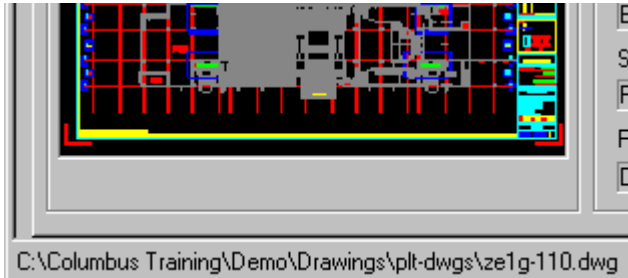
Toolbar

When you move your mouse over a toolbar button, a Tool Tip displays the name of the action that will be undertaken.



Status Bar

The status bar is located in the bottom left hand corner of the program window



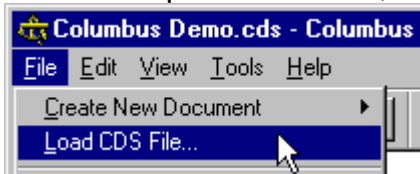
The information displayed in the status bar is either, the path, filter (e.g. *.dwg) and file count, of the selected folder, or if a file is selected, the full path to that file.

3.2 Opening a CDS file

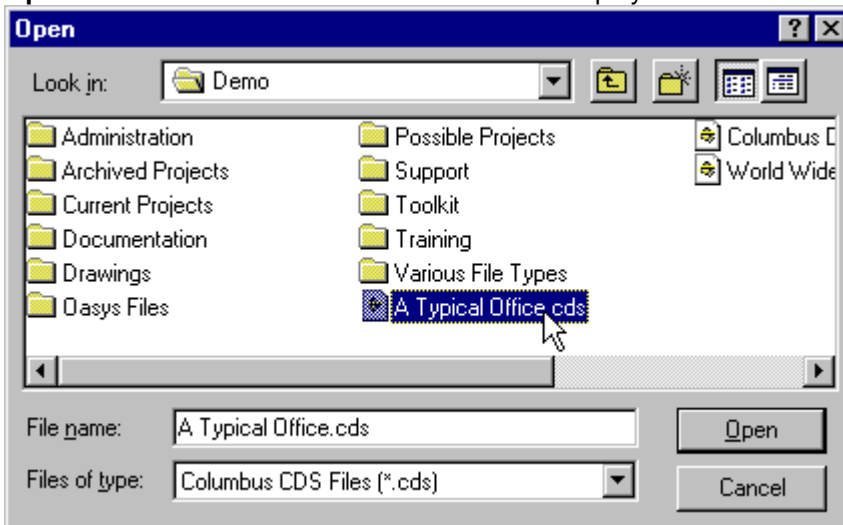
To open a CDS file select the Open button on the toolbar



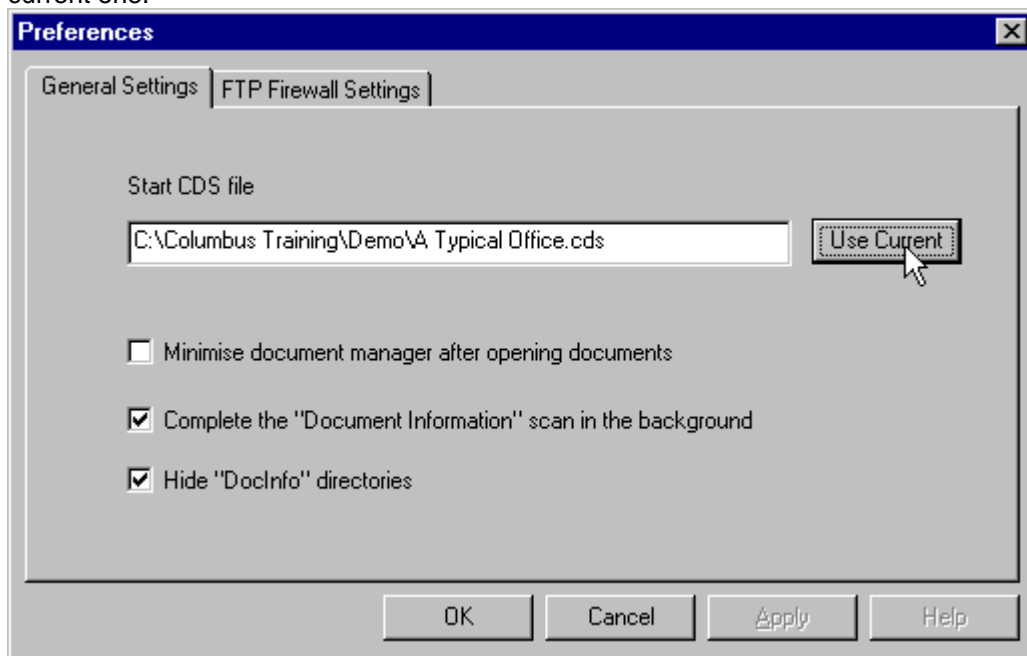
or select **File | Load CDS file...**, from the menu bar



This will open a standard Windows dialog box. Navigate to the required CDS file, select it and choose **Open**. A Columbus folder structure will now be displayed in the Columbus Folder Structure Frame.

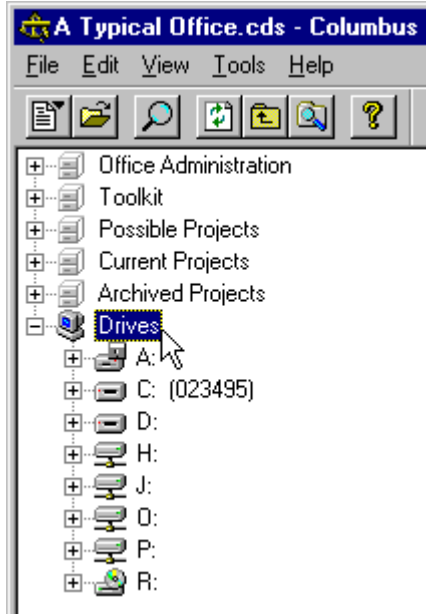


To choose which CDS file is accessed each time Columbus is opened choose **View | Preferences ...** in the General Settings tab. There is an option to enter the preferred CDS file to use, or to choose the current one.



3.3 Working with local drives

Occasionally it is necessary to access documents that are stored on CD's, floppy disks, local hard disks or mounted network drives. When Columbus starts, it checks to see what drives you have and adds them to the Columbus folder structure*.



* Access to network locations or FTP sites is only available in Columbus Professional

3.4 Finding documents

Columbus was specifically designed not to rely on a database system to find your documents. By organising your Columbus folder structure to suit your project needs, you can avoid the need to use search engines and the associated constraints. Because your Columbus folder structure does not need to mirror your file system folder structure your project files can be located anywhere: On your LAN or WAN networks as well as on the Internet*.

* Access to network locations or FTP sites is only available in Columbus Professional

3.5 Viewing documents


Columbus uses Stellant® Viewer Technology© and the Rasterex RxHighX™ engine, which allows it to view and print most commercial document formats. Once the Columbus viewer is open most documents are very quick to display and the keyboard up and down arrow keys can be used to scroll quickly through any list of documents.

A full listing of file formats are available on the website www.oasys-software.com/columbus/


Columbus uses the Stellant® viewing engine to view non drawing files. When you select a document for viewing, the status bar will briefly indicate which viewing engine is being used.

Opening the Viewer

Select a file in the Document List Frame and either select **Columbus Viewer...** from the right click

menu or the View Document button  from the toolbar. The Columbus viewer will open.

Once the Columbus viewer is open you can resize it to suit. You can additionally select whether you want the viewer to be always on top by selecting the **Always On Top** option from the view menu or by

using the Always On Top button  from the toolbar.

Viewer options

Use the mouse right-click to display all the options to change the type and size of the document being viewed. These options will change depending on the type of document.



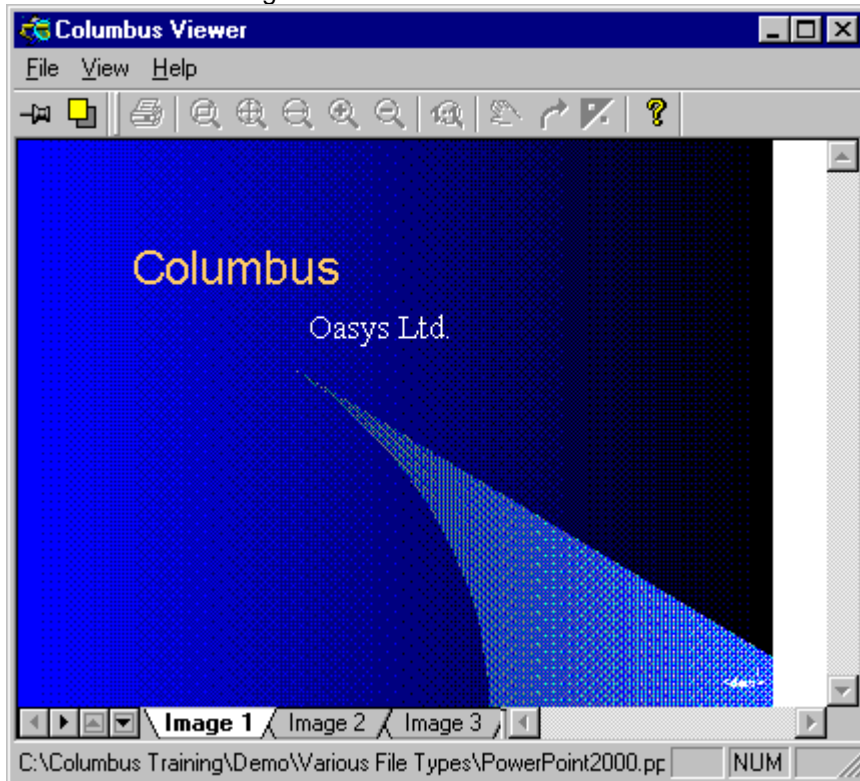
Note: Printing from the viewer will only print the displayed image and will not try to open the document. If you want Columbus to print the document using an associated application, right-click the document name in the Document List Frame and select **Print**.

Copy and paste from the viewer

With some text-based documents such as MS Word and Excel, you can select text in the viewer, right click and copy. The copied text can then be pasted into another document.

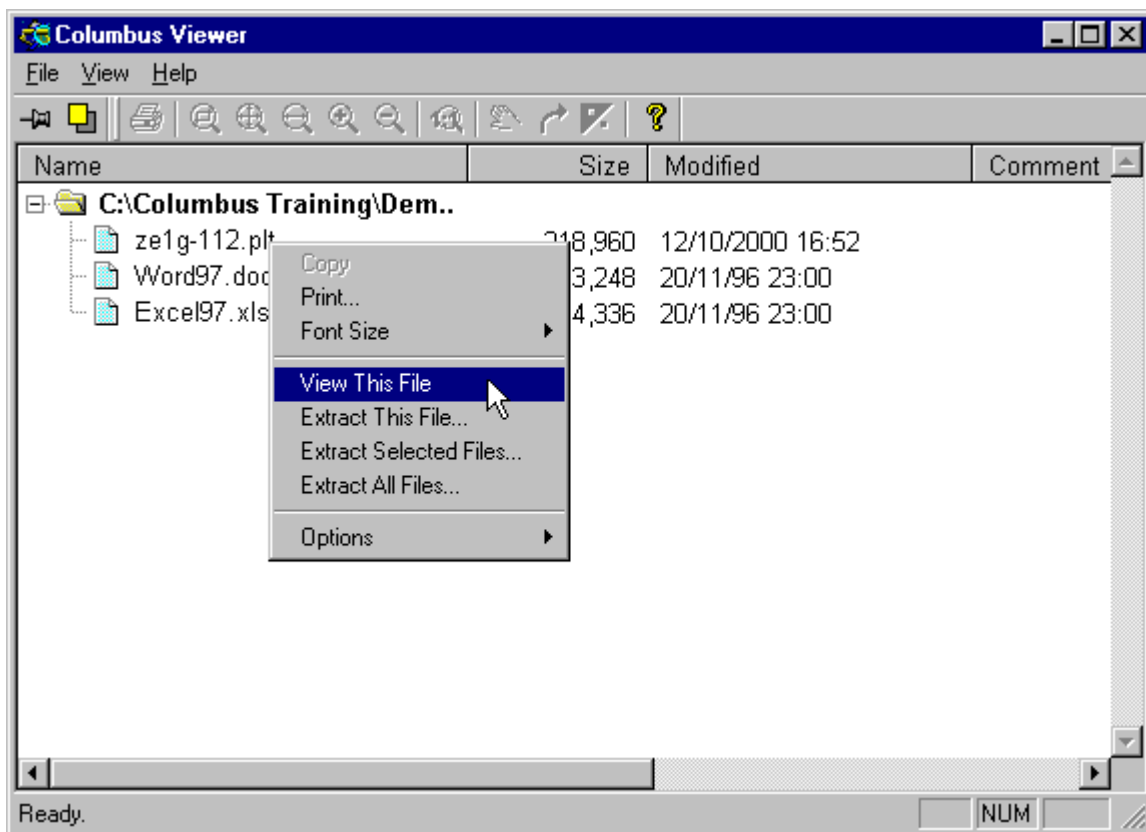
Viewing multiple page documents

If your documents contains multiple pages you can view each page separately by selecting the tabs at the base of the viewing window.



Viewing zipped files


Columbus can extract and view zipped files without the need for additional software. The ability to unzip is provided by the viewer. When you choose the 'View This File' option, Columbus will automatically extract the file and open a new viewing window to display its contents.



Compare documents*

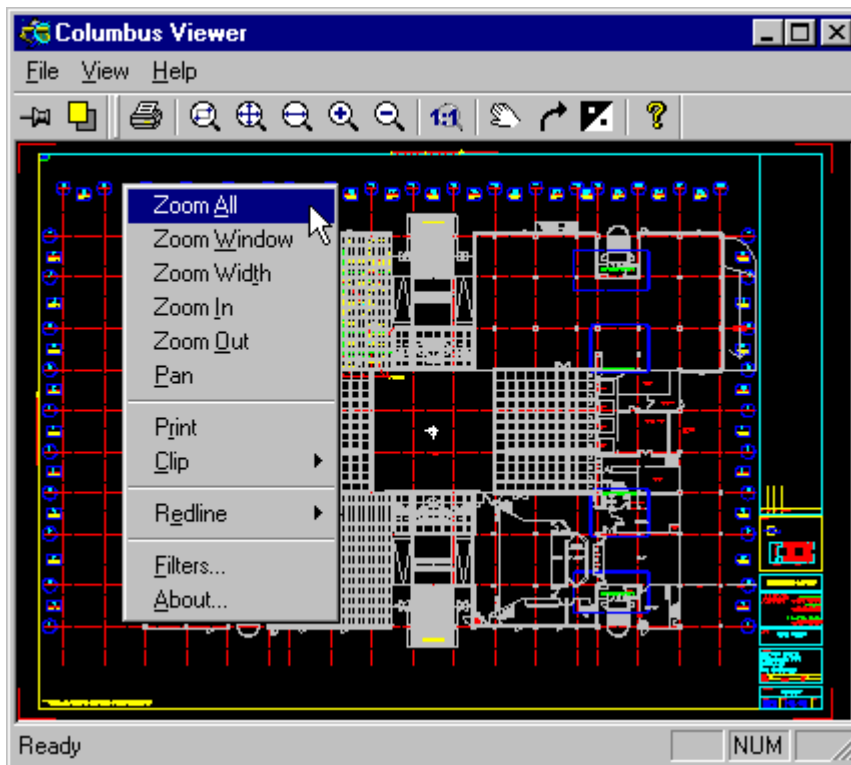
You can visually compare documents by opening an additional viewing window and selecting the pin view button from the toolbar



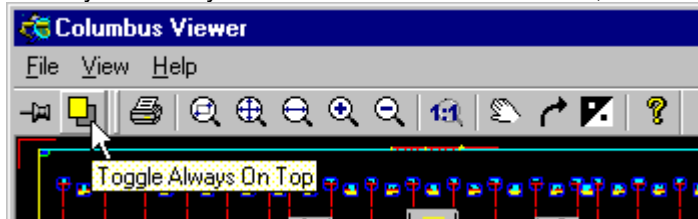
Once you have 'Pinned' the window the view will not change when you select another document. You can then view another document by either selecting **Columbus Viewer...** from the right click menu or the View Document button  from the toolbar.

Viewing drawing and plot files

When a drawing or plot file is selected the viewer toolbar will become active.



When you move your mouse over a toolbar button, a Tool tip provides a description of that feature.



Printing drawing files

Currently there is no option within the viewer to control the pen colour and line thickness mappings in order to show CAD drawings as they would appear when plotted. So if you use the Columbus viewer to print a coloured drawing like the example above, using a mono printer, the lines and text will be printed with grey scales and the line thickness will appear as a default width. Some printers may allow you to print black only, but this must be set-up using your printer properties option.

Printing to scale is possible using the 'Print Scale' option on the print document dialog box.

Note:

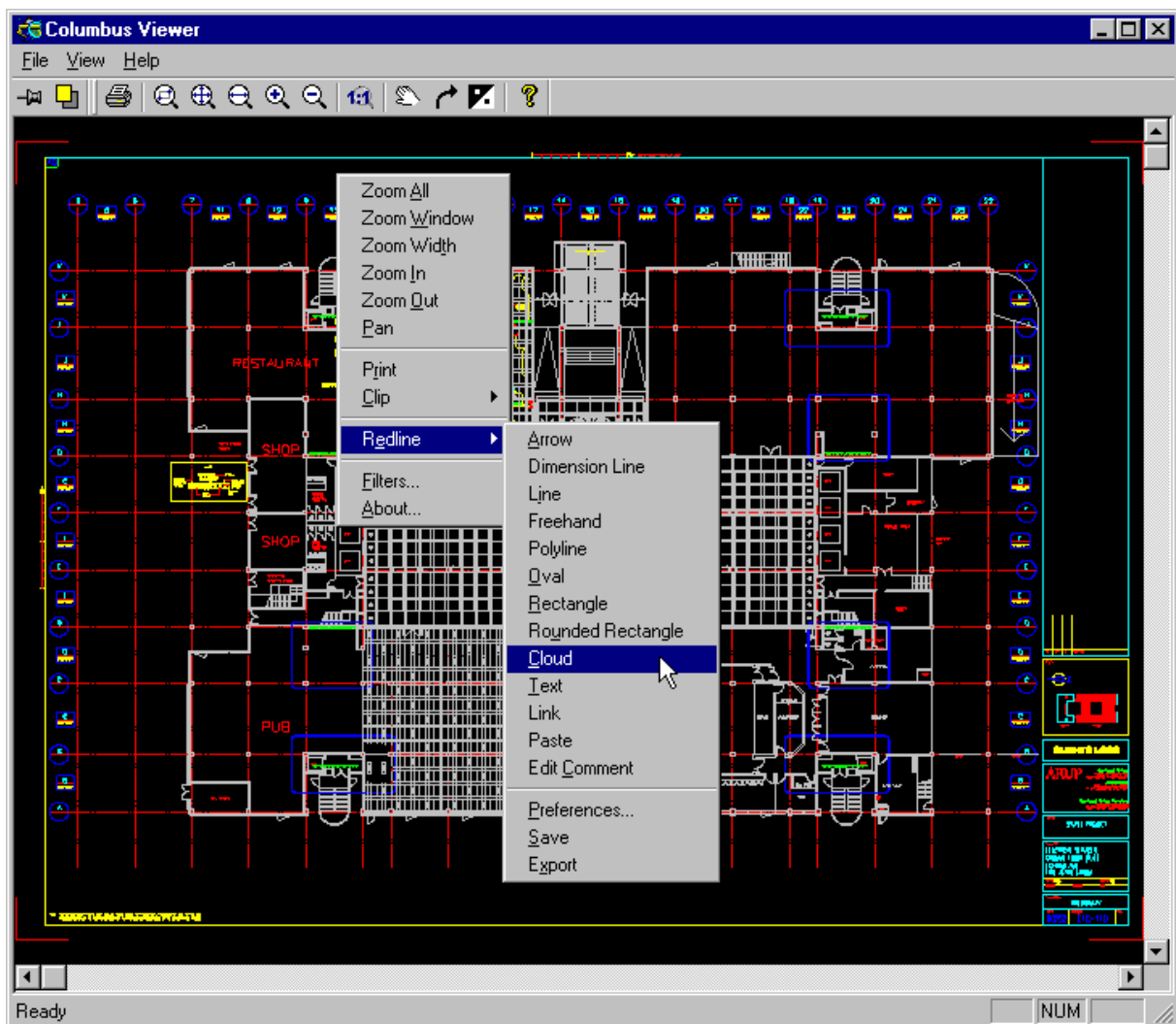
When printing 'to scale' metric .dwg and .dgn files, you will need to apply an additional factor of 25.4 rounded to the nearest integer e.g. 4 to 1 = 102 to 1

Printing plot files

In the case of printing HPGL/2 plot files, the pen colour and line thickness mappings are included in the file so the output will be as expected.

Redlining documents*

When viewing drawings you are able to create and save comments using the redlining option from the right click menu option.



Select the type of comment you want from the menu. If you need to change a comment use the **Edit Comment** option and then select the comment to edit.

You can set your default preferences for colours and text from the **Preferences** option

To save your comments use the **Save** option. This will create a separate redline file with a different extension in the same folder as the viewed drawing. Whenever the viewer is opened it will by default display any redline file associated with the drawing, providing it is in the same folder.

* Redlining, document comparison, access to network locations or FTP sites is only available in Columbus Professional

3.6 Creating new documents from templates

Columbus was designed so that you are not restricted to creating a new document only with Columbus. Documents which were created long before Columbus was installed, can be viewed and edited in the same way.

Columbus uses templates to create new documents. You can setup any number of templates for any existing application that you use, or may use in the future. You can also arrange your templates into Standard or Office folders.

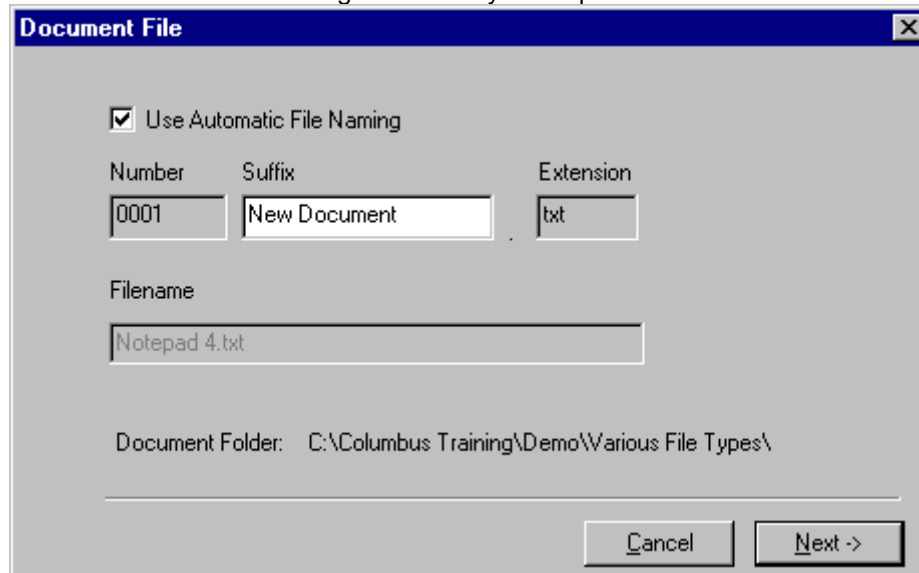
Note: For more information about setting up document templates see: [Document templates](#)

A useful feature in Columbus is being able to name, create and file a new document all at the same time before you begin to edit it. This helps documents from being saved in the wrong location.

Automatic file naming

When using the **New Document** option you can choose to use the Columbus Automatic File Naming utility by using the checkbox in the document file dialog box.

When Columbus generates a document for the first time in a folder, you will be offered a file name beginning with '0001' followed by the name of the template name (suffix) and file extension. The suffix can be renamed in the dialog box to suit your requirements.



The next time you create a new document, in the same folder, the prefixed number will be 0002 irrespective of whether the file type is the same or not. When you create another new document in an empty folder, or where the Automatic File Naming utility has not been used in the new folder before, the prefixed number will be 0001. Columbus creates a file in the selected folder called 'FileCount' to track the number sequences.

Creating a new document

Step 1

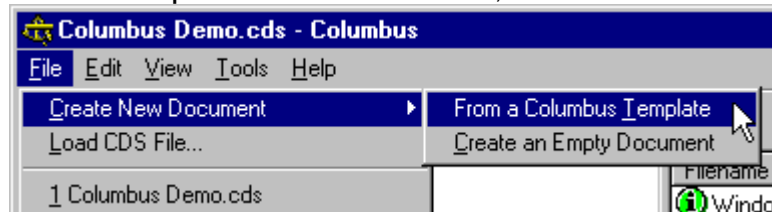
Navigate to the **Sample Documents\Various File Types**

Step 2

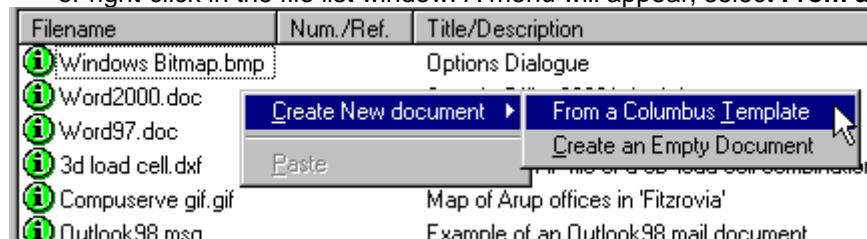
Select the Create New Document button on the toolbar



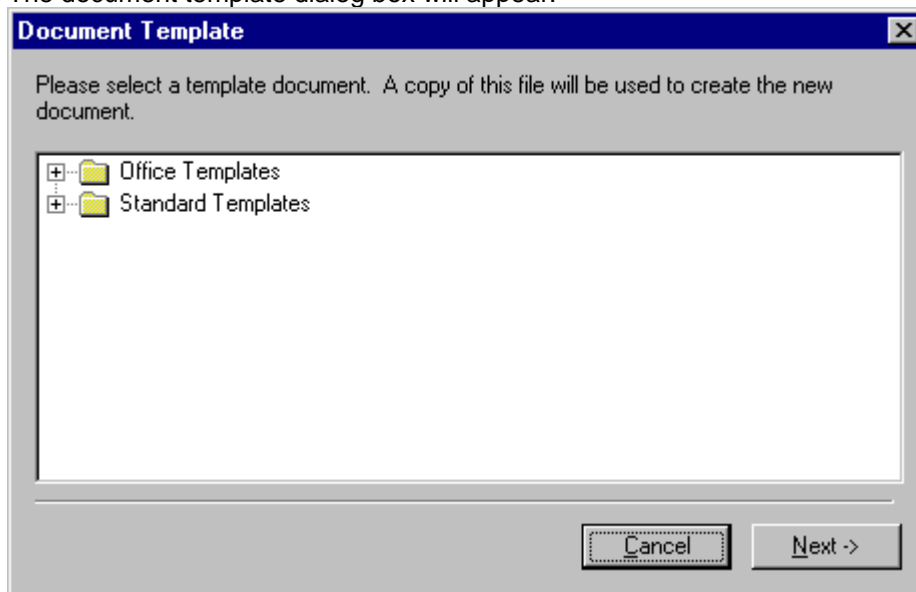
or select **File | Create New Document...**, from the menu bar



or right-click in the file list window. A menu will appear, select **From a Columbus Template** option.

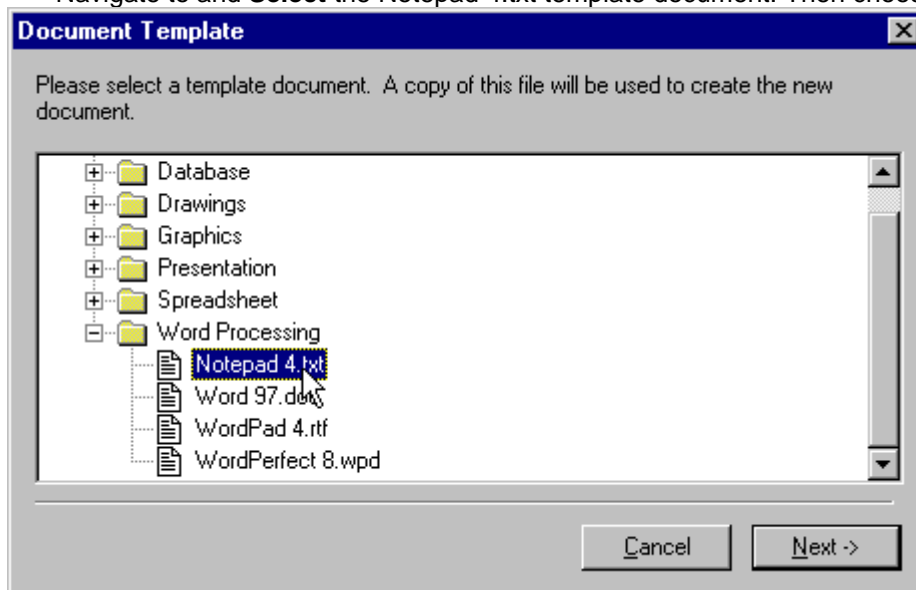


The document template dialog box will appear.



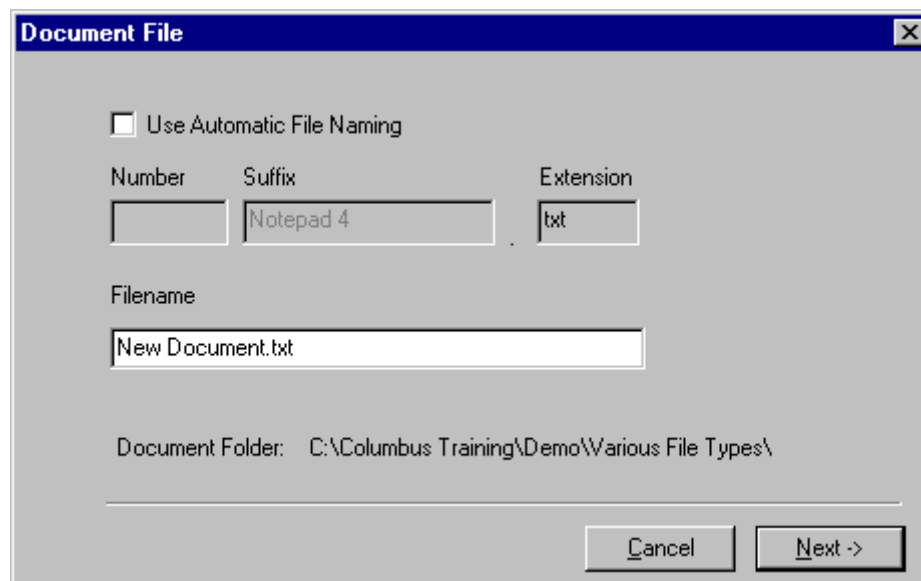
Step 3

Navigate to and **Select** the Notepad 4.txt template document. Then choose **Next**.

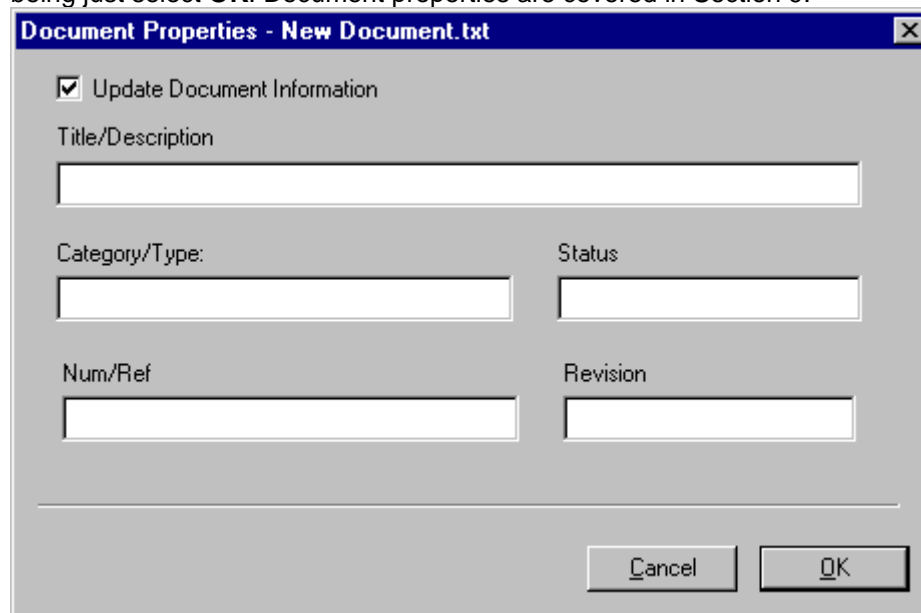


Step 4

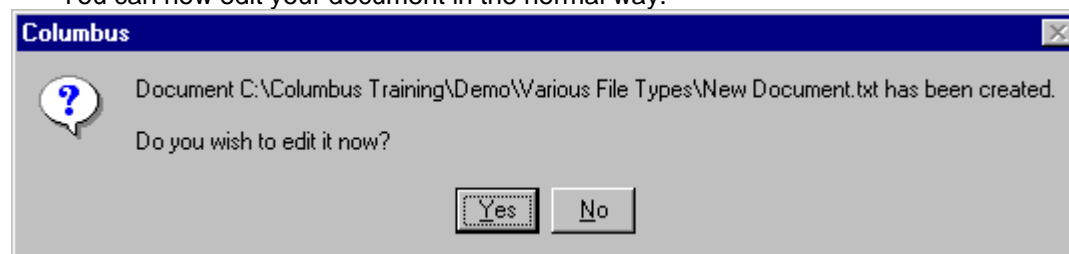
Type the filename of the document in the filename window **New Document.txt** making sure you include the file extension, then pick **Next**

**Step 5**

The following dialog box will appear in which you can add document properties, but for time being just select **OK**. Document properties are covered in Section 9.

**Step 6**

Columbus will now offer the choice of whether to edit the new document now or not, select **Yes**. You can now edit your document in the normal way.

**Step 7**

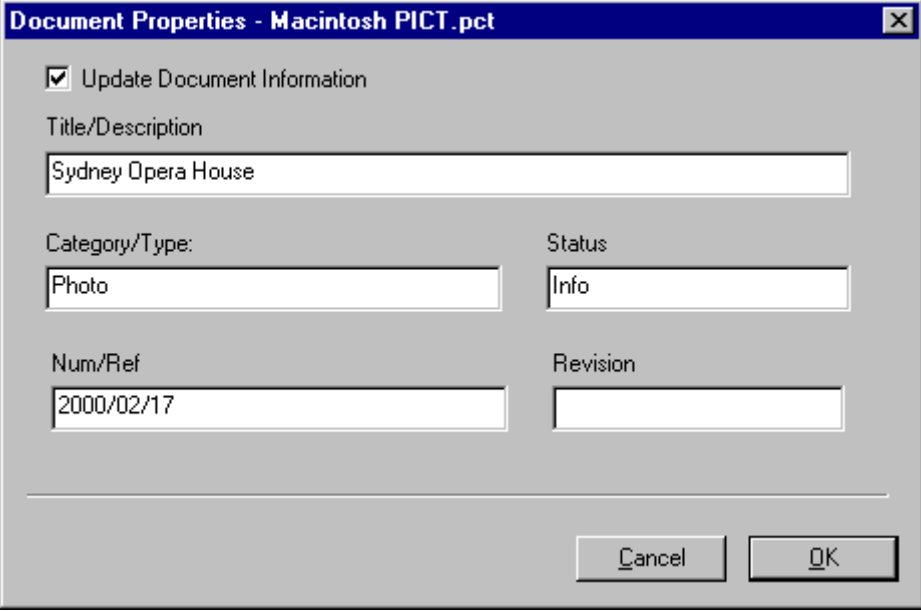
Make some changes and save your document. There is no need to use the 'Save As' option

because the document has already been saved to a folder. If you now view your document with the Columbus viewer you will see your changes.

Alternatively you can create an empty ASCII text document by choosing **File | Create New Document | Create an Empty Document** then follow the procedures as documented above.

3.7 Creating document properties

For most files you can right-click and select **Properties** to manually add your own information which is then displayed in Columbus in the Document List Frame and Properties Frame. This can be useful to describe a file's content e.g. 'Photograph taken from the North Entrance'.



AutoCAD drawing properties can be created automatically when using the Columbus.arx program supplied with Columbus.

For more information regarding AutoCAD drawings see: [Working with AutoCAD drawings](#) in the appendix.

When document properties are created, Columbus stores the information in a file with the extension .din.

For more information see: [DIN & HIS files](#) in the appendix.

3.8 Windows Explorer functions

If you were to copy a file using Windows Explorer the Columbus document properties would not be automatically copied, you would need to copy these separately. Using Columbus's functions to cut, copy, paste, delete and rename files ensures that their associated document property files (DIN and HIS) are modified too.

Cut

Select a file or files, right-click and select **Cut** from the pop-up menu.

Cut will copy the selected file or files to the clipboard, together with any associated DIN and HIS files so that they can be pasted or moved to another folder.

Copy

Select a file or files, right-click and select **Copy** from the pop-up menu.

Copy will copy the selected file or files, together with any associated DIN and HIS files to the clipboard ready to paste into another folder.

Paste

Will paste a previously selected file or files, together with any associated DIN and HIS files into another folder.

To paste a file, having copied or cut using Columbus, navigate to the target folder and right-click in a blank area, then select **Paste** from the pop-up menu.

Rename

To rename a file, right-click the file and select **Rename** from the pop-up menu. Columbus will rename the file and any associated DIN and HIS files. As with Windows Explorer you can only rename one file at a time.

Also a single click on the file name will place an edit cursor in the file name allowing you to rename it.

Delete

Select a file or files, right-click and select **Delete** from the pop-up menu in the file list window. This will also delete any associated DIN and HIS files.

Create New Folder

By using the right-click menu Columbus will create a new folder in the current location. This item will only be available when the current list is set to show directories (i.e. when using a *.* filter).

Drag 'n' drop

You can also drag files from the Columbus Document List frame onto another application. In this case, it will not attempt to copy any associated DIN and HIS files.

Note: You cannot drag files from another application onto Columbus. Use Explorer's right-click option to cut or copy, then using Columbus, use the right-click option to paste it into a Columbus folder. If the file or files you selected with Explorer had any associated DIN and HIS files, Columbus will automatically locate these and cut or copy these as well.

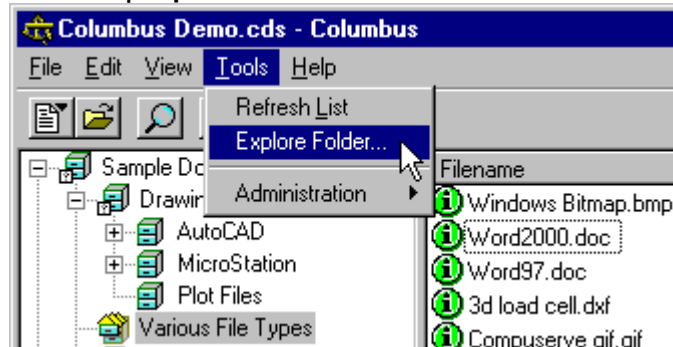
Opening a Windows Explorer session

Sometimes a task can only be performed using Windows Explorer i.e. creating a new folder or changing the system properties of a file. To open an Explorer session in the correct location you can use Columbus's 'Explore Folder' feature. Select the required folder and then choose the **Explore**

Folder button on the toolbar



Or **Tools | Explore Folder...** from the menu bar



Columbus will start a Windows Explorer session at the selected folder location.

This is also a useful way of locating a file, as the folder structure shown in Columbus will not necessarily mirror the true folder structure of the file system

Warning: If you cut, copy, paste, delete or rename documents using Windows Explorer, you will also need to do the same with any associated DIN and HIS files.

3.9 Issuing files

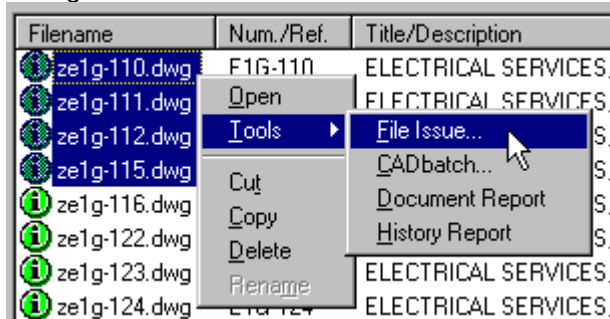
The File Issue tool can copy any number of documents of any type, including some that may contain references to other files, e.g. AutoCAD and MicroStation reference files, to a dated issue folder on the file system. At the same, it can also FTP a copy to a project web site and post an email notification to

other parties. This is configurable on a per-project basis through the ProjectSetting.txt file. For more information see: [ProjectSettings.txt file](#).

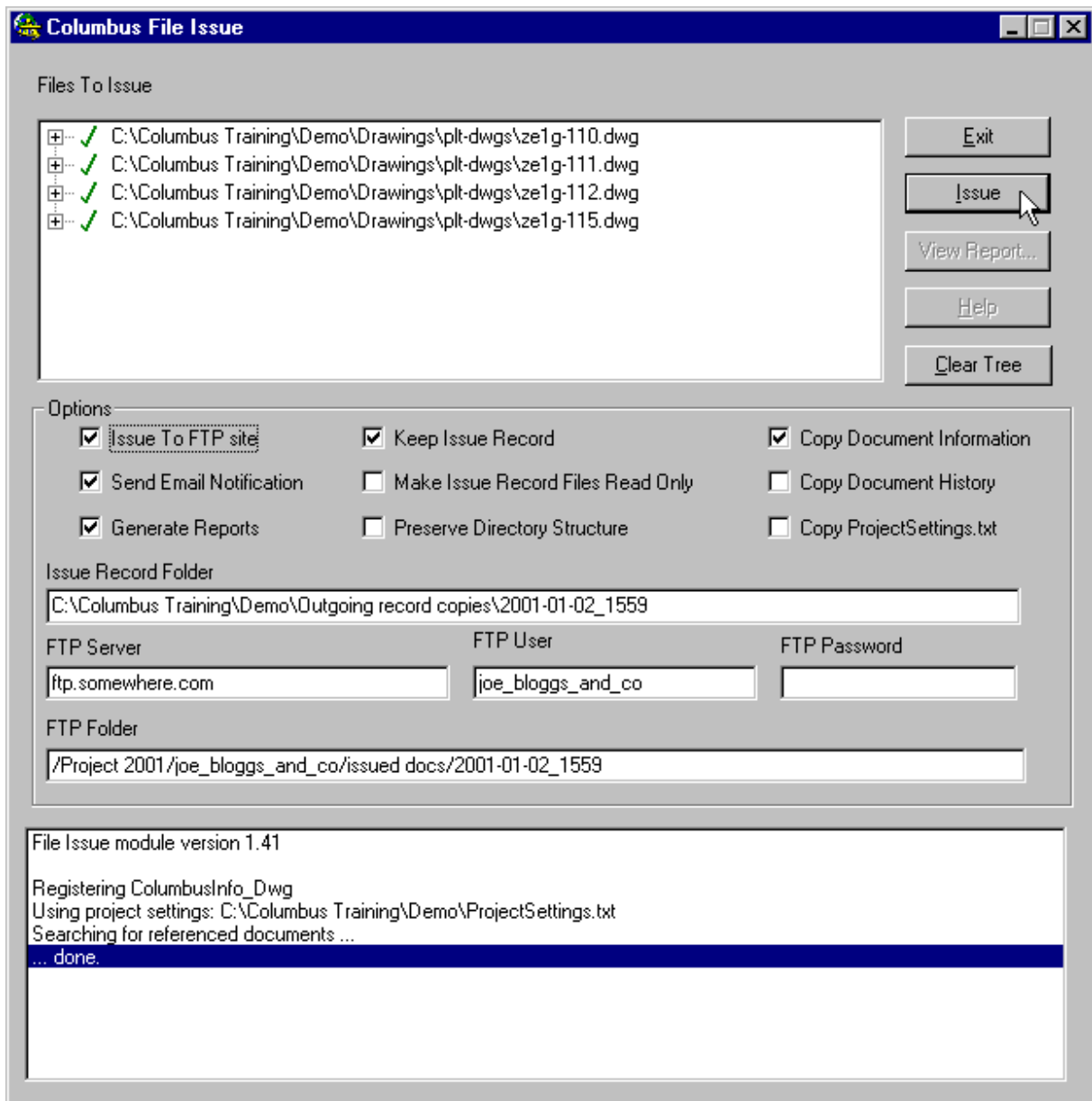
If the 'Generate Reports' checkbox is selected a report is produced which can be viewed by clicking the **View Report...** button. The same report is included in the email notification by way of a transmittal note. Two types of report are created, a human readable .TXT file which lists each file in the issue along with its references, date and size, and an .ISS file that can be used to input the data into database programs.

Select documents for issue

Select the files to be issued from the Document List Frame and then select **Tools | File Issue**, from the right-click menu.



The files to be issued will then be shown in the 'File Issue' dialog box as a tree view that can be expanded, with any referenced files being displayed as branches. A green tick or a red cross will be displayed next to each of the files in the tree to indicate whether or not the file was located successfully.



You can, if you wish, add more documents to the issue list by returning to the Columbus window and selecting more files and then selecting **Tools | File Issue**, from the right-click menu.

Note: The issue folders and email information used, will be taken from the ProjectSettings.txt file relative to the first file selected. For more information see: [ProjectSettings.txt file](#)

File Issue options*

Select/deselect your required issue options using the check boxes. Their functions are as follows:



Issue to FTP Site

This enables Columbus to issue the listed documents to an FTP site. The information can be entered

manually each time or can be picked up automatically from the ProjectSettings.txt file. The password, when required, must be entered manually.

Keep Issue Record

This copies the listed documents into an issue record folder. The issue record folder information location and name can be entered manually or can be picked up automatically from a ProjectSettings.txt file.

This option would normally be checked to provide an archive of all documents issued on each project.

Copy Document Information

This option will copy any associated DIN files into a docinfo sub-folder, below the issue record folder.

This option would normally be checked to help the recipients of the information find documents more easily. This information may also be used by a database system.

Send Email Notification This uses any MAPI compliant email system to send an email notification to the recipients listed in the ProjectSettings.txt file. The ProjectSettings.txt file just provides defaults which you can alter at the time of issue.

Make Issue Record Files Read Only

This will make the copied files read only.

Copy Document History

This option will copy any associated HIS files into a docinfo sub-folder, below the issue record folder.

Generate Reports

This generates TXT and ISS report files and places them in the issue record folder. The files provide a simple list of the documents issued. The ISS file can be used with a database system.

Preserve Folder Structure

If you want the listed documents to be copied using the same folder structure, then this option should be checked. The folder structure created will be relative to the location of the ProjectSettings.txt file used.

If this option is not checked all the listed documents will be copied into the same folder.

Copy ProjectSetting.txt

A copy of the ProjectSettings.txt file used is placed into the issue folders. If 'Preserve Folder Structure' is also selected, then it is copied into the root folder.

Send Issue

If the default issue folders are correct, then type in your password if required and press the **Issue** button. If not, simply amend the folder paths to suit before pressing the issue button.

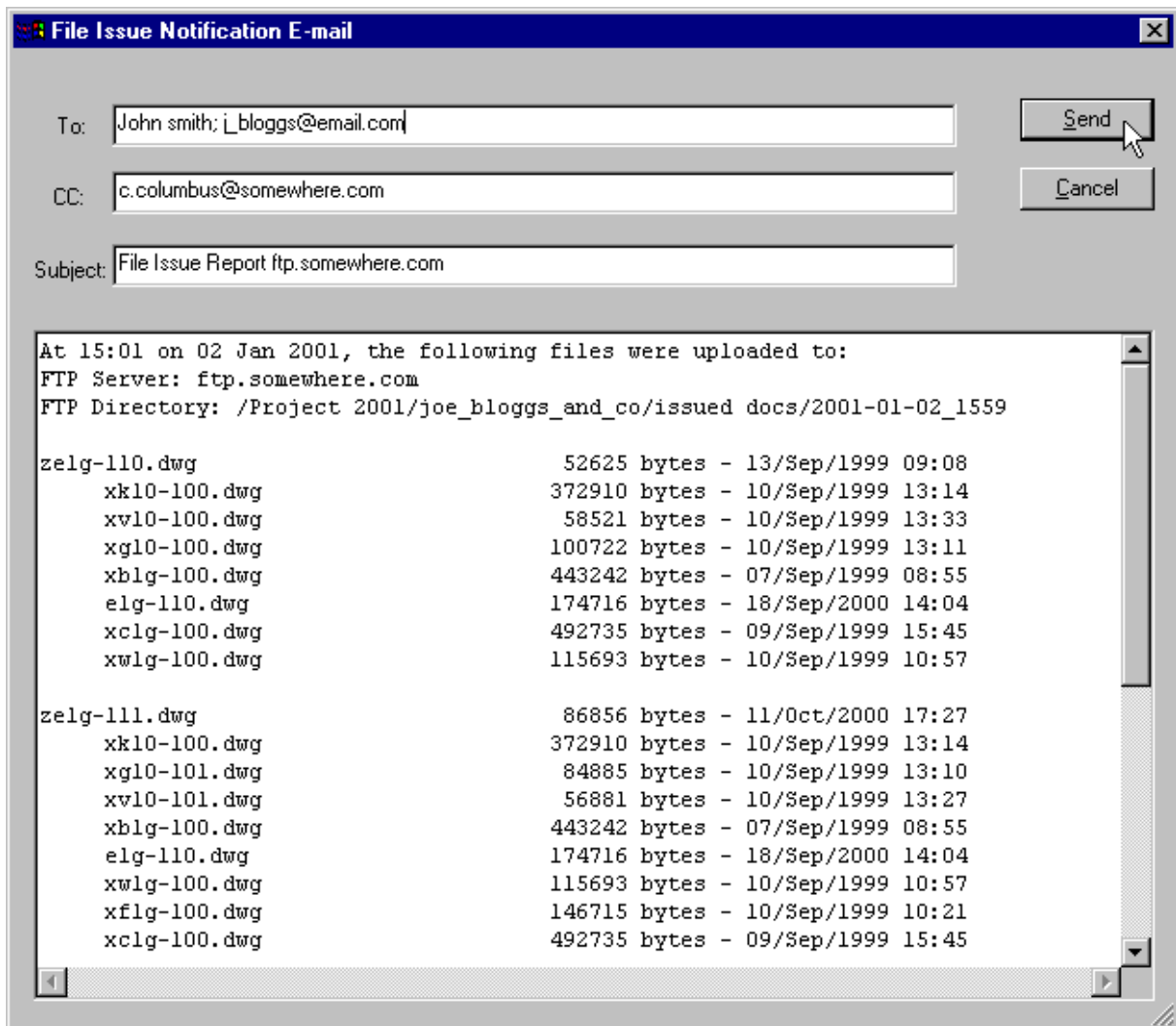
The progress of the file issuing process will be shown in the bottom pane of the application window and on the taskbar when minimized.

Email Notification

Only displayed when the email notification option has been checked.

If you are running a MAPI compliant email system such as Microsoft Exchange, Columbus will detect it and use it to generate the email. If not, the email facility will be disabled.

You can add any additional comments and amend the list of recipients and subject to suit your requirements before sending the email.



Note: To amend the default list of email recipients, change the ProjectSettings.txt file in your project. For more information see: [ProjectSettings.txt file](#).

If you subsequently need to review or print previous issues, you only need to browse to the 'Issue Record Folder' with Columbus. This will contain a copy of all the data as it was on the day of issue, including any reference files and DIN information (if applicable).

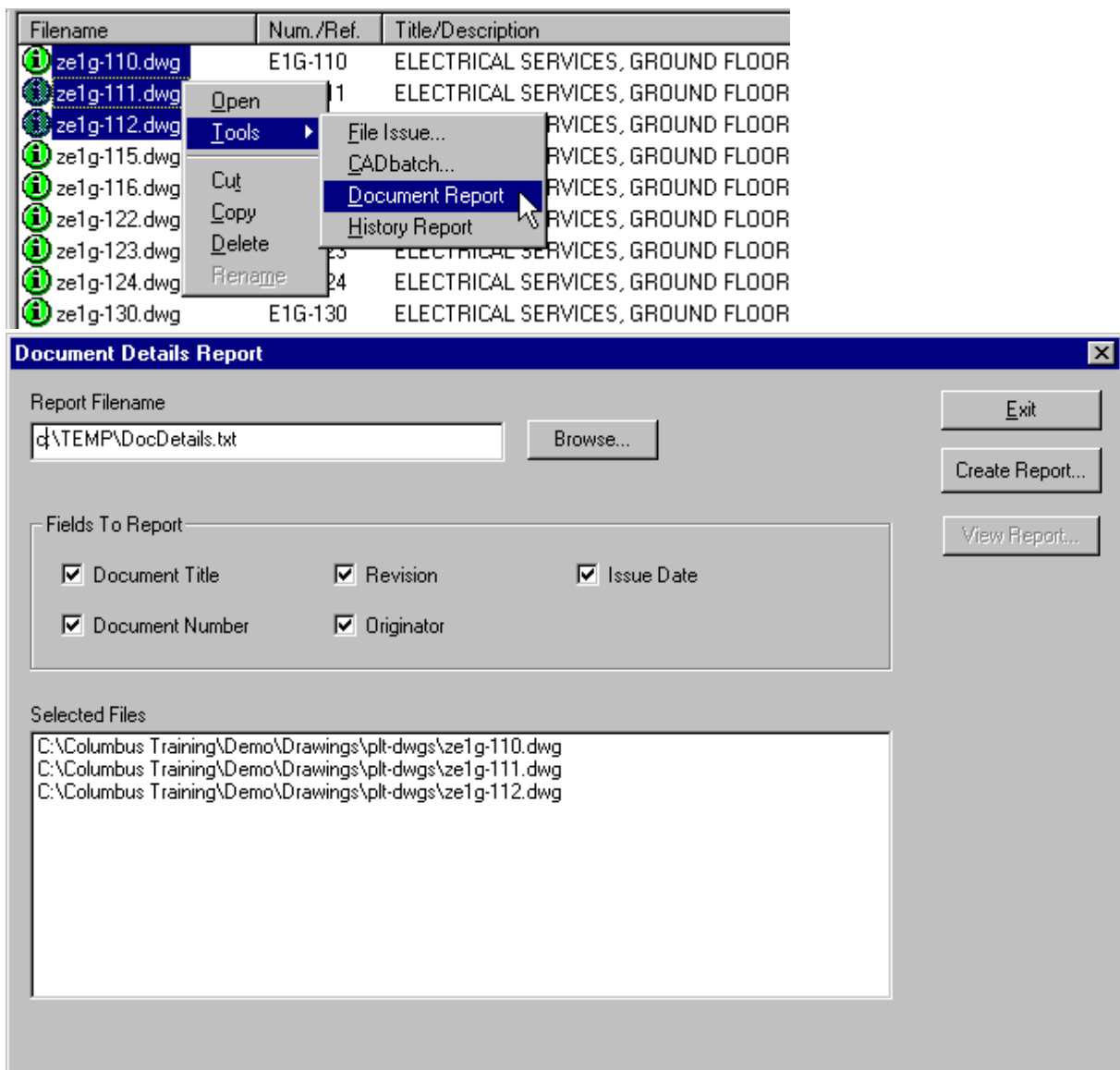
Issuing to CD

Whilst you can use the File Issue tool to copy your documents directly to a writable CDrom or DVDrom drive (by modifying the path in the Issue Record Folder field) you may also want the documents to be viewable via Columbus even though the recipient may not have used Columbus before. This can be achieved by copying additional files to the CD to create a run-time version of Columbus using the pack 'n show utility

* Access to network locations or FTP sites is only available in Columbus Professional

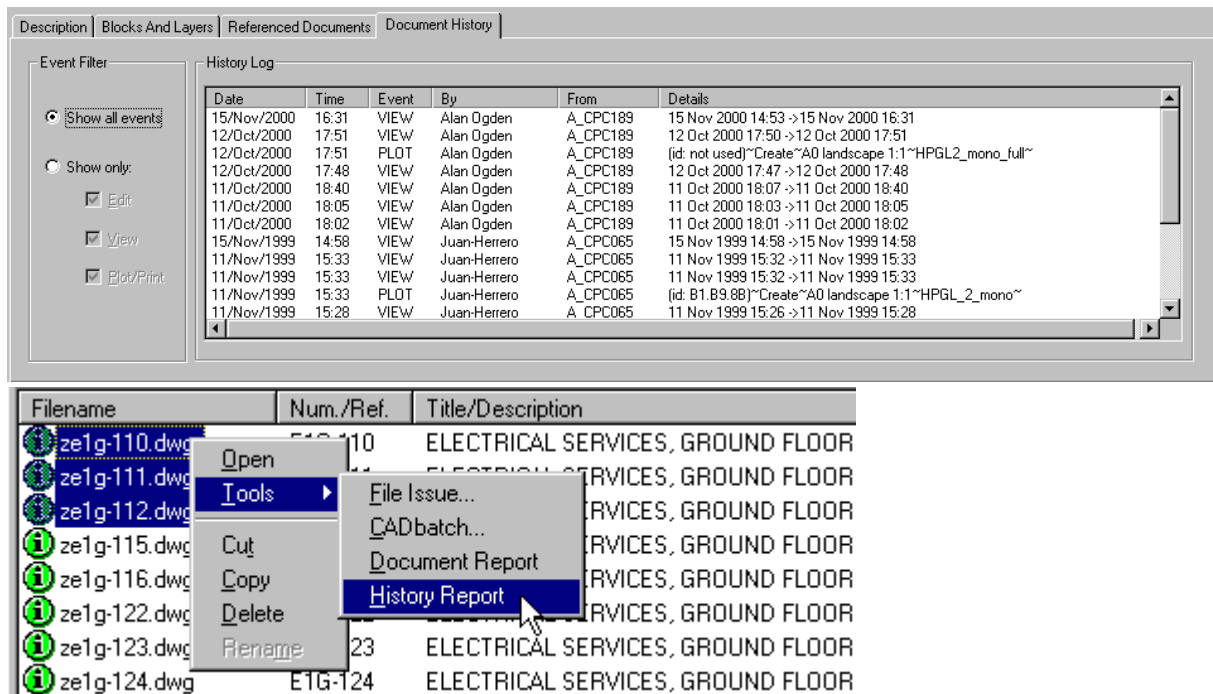
3.10 Document report

Sometimes it is necessary for a user to create their own reports on a number of documents. This program, is invoked using the 'Document Report' option from the right-click pop-up menu, creates a tab-separated file, which can then be imported into spreadsheet or database programs.



3.11 History report

The history report shows the edits history of a document throughout its lifetime. The history log can be used for auditing and quality assurance.



Note: This is currently only supported for AutoCAD drawings.

3.12 Scanning

NOTE: This feature is only fully functional in the 'Professional Edition'.

Though the module will work in the 'Personal Edition' it won't be possible to save scanned documents.

Description

Columbus includes a module called "Columbus Acquire" for scanning multi or single page documents from any TWAIN compatible device. These are typically scanners, but other devices such as digital cameras are supported. Images are saved as multi-page TIFF or PDF files. Most importantly, there is no need to purchase additional software (i.e Adobe Acrobat writer is NOT required).

Typically, the module is used as part of a "create new document" process, where documents are saved directly to a folder in the Columbus structure, and document information (DIN) is added.

Key Features

- Scan directly to PDF or TIFF without purchasing additional software.
- Create multi-page documents using a single page scanner (i.e. a document feeder is not required).
- "Assemble" documents from multiple sources (e.g. acquire 50 pages from a high speed scanner low resolution b/w scanner, and add a high quality image low compression image from a different source, without have to acquire everything at high quality).
- Insert, replace or remove pages anywhere after scanning. (current under development).

Usage

To create a new document with Columbus Acquire:

1. Right click in the file list or from the File menu select "create new document | acquire from scanner".
2. Select your scanner with the "advanced button".
3. Press "acquire".
4. The software that appears next is provided by your scanner vendor. You should ensure that you select the relevant mode (we recommend 200 or 300 dpi, black and white mode). Select an option to begin scanning.

5. If you were using a single page scanner, keep pressing the "Acquire" button until all pages have been scanned.
6. Press "Next" and select the filename.
7. Enter the metadata (i.e. title, author, etc.)

Known Limitations / Bugs / Items for development

- It doesn't report the fact that a scanner might not be installed.
- Colour and grey scale images are not compressed when using PDF format.
- Colour images appear as black and white due to some unknown bug.
- Uncompressed images are currently kept in the temporary directory until the destination file is created, taking up too much space. This is currently considered a serious limitation, as it limits the amount of pages that can be scanned.
- Need to allow saving to simple formats such as BMP.

File Sizes and Compression

Columbus Acquire uses a highly efficient compression algorithm for compressing black and white images (CCITT G4). Typically, an A4 uncompressed black and white A4 page will be over 1 megabyte in size, however by using CCITT G4 compression it will be reduced to under 50 kilobytes. When producing a multi-page tiff, we compress colour and grey scale images with "packbit" compression, however, this is not as efficient (500kb for an A4 page), and cannot be used when outputting PDF files. Other compression schemes are being investigated.

4 Appendix

4.1 Summary of Columbus file locations

Sample files

\Oasys\Columbus\Sample

This folder contains sample files if selected during the installation process. Currently this folder contains a sample of a ProjectSettings.txt files and a DomainSettings.txt file.

Office CDS file

\Oasys\DomainSettings

Your Office CDS file should be accessible to all users so we recommend storing it in the above folder, but this location is not mandatory.

This area will not be overwritten by subsequent installations of Columbus or its upgrades.

Project Template CDS files

\Oasys\DomainSettings\Project Template CDS Files

Your project template CDS files are only used with the Project Setup Wizard. We recommend storing these in the above folder but this location is not mandatory.

Project CDS files

The project CDS files are automatically located in the root of the newly created file system folder structure when using the Project Setup Wizard.

If you manually create your project CDS file it should also be located in the root of the project's folder structure.

ProjectSetting.txt

To take advantage of the Issuing and AutoCAD functions provided with Columbus, you should manually make a copy of the ProjectSetting.txt file from the sample folder

(\Oasys\Columbus\Sample), and copy it to the root of the project's folder structure. This copy can then be edited to suit the project requirements.

You may find it easier to copy the sample ProjectSettings.txt file into the **DomainSettings** folder and then modify it to suit your general office requirements. You can then copy this version into the root of a new project folder structure and only perform minor modifications

Standard document templates

\Oasys\Columbus\Support\Templates

Some standard document templates are provided with Columbus but you can add more if you wish by copying them to the above folder and creating any sub-folders as necessary. Templates in this folder structure will be available for use with the 'Create New Document' function under the heading

'Standard Templates'.

Office document templates

\Oasys\DomainSettings\Templates

Your company and office specific document templates can be copied into sub-folders as necessary, in the following location. Templates in this folder structure will be available for use with the 'Create New Document' function under the heading **'Office Templates'.**

4.2 DomainSettings Folder

Optionally you can create a folder called DomainSettings. Folders and files located in this folder will be automatically searched by Columbus. Folders and files contained in the DomainSettings folder will not be overwritten if you upgrade your current version of Columbus. Therefore, if you have any files, which you have customised for your office, you are recommended to store them here and not in one of the folders below the Columbus installation folder.

Other Oasys products are designed to share information stored in the DomainSettings folder.

4.3 Working with AutoCAD drawings

To enable the following functions, the Columbus.arx file must be loaded into the AutoCAD session by selecting this during the installation process. WARNING: If AutoCAD is installed after Columbus, then it will be necessary to either reinstall Columbus or use the Enterprise Deployment tool.

Extracting title block attributes

By mapping your AutoCAD title block attribute tag names to Columbus, in the ProjectSettings.txt file, you can extract this data automatically so that it can be viewed from Columbus.

```
TitleBlocks
{
    BORDER    "Project 2001 - A0 Vertical"    "prj_A0v"
    BORDER    "Project 2001 - A3 Horizontal"  "prj_A3h"

    DOCNUMBER      DRGNO
    REVISION       REV
    JOBNUMBER      JOBNO
    SCALE          SCALE
    ISSUEDATE      DATE
    STATUS         DRAWINGSTATUS
    DOCTITLE[1]    DRAWINGTITLE1
    DOCTITLE[2]    DRAWINGTITLE2
    DOCTITLE[3]    DRAWINGTITLE3
    DOCTITLE[4]    DRAWINGTITLE4
    JOBTITLE[1]    JOBTITLE1
    JOBTITLE[2]    JOBTITLE2
    JOBTITLE[3]    JOBTITLE3
    JOBTITLE[4]    JOBTITLE4
}
```

A detailed example of mapping your title block attribute tag names can be found in the section entitled [ProjectSettings.txt file](#)

Warning: Don't manually create document properties for AutoCAD drawings as any information you enter will be overwritten when the drawing is saved by a workstation which has the Columbus arx program loaded.

Third party drawings

The title block information from drawings received from external companies can also be extracted for use with Columbus. This is achieved by adding another set of TitleBlock mappings for each external company. You will then need to save each drawing in AutoCAD. Alternatively you can use Oasys CADbatch to process a selection of drawings with out saving them.

```
TitleBlocks
{
    BORDER "Project 2001 - A0 Vertical" "prj_A0v"
    BORDER "Project 2001 - A3 Horizontal" "prj_A3h"

    DOCNUMBER      DRGNO
    REVISION        REV
    JOBNUMBER       JOBNO
    SCALE           SCALE
    ORIGINATOR      DRNBY
    ISSUEDATE       DATE
    STATUS          DRAWINGSTATUS
    DOCTITLE[1]     DRAWINGTITLE1
    DOCTITLE[2]     DRAWINGTITLE2
    DOCTITLE[3]     DRAWINGTITLE3
    DOCTITLE[4]     DRAWINGTITLE4
    JOBTITLE[1]     JOBTITLE1
    JOBTITLE[2]     JOBTITLE2
    JOBTITLE[3]     JOBTITLE3
    JOBTITLE[4]     JOBTITLE4
}

TitleBlocks
{
    BORDER "Architect - A0 Vertical" "A0"
    BORDER "Architect - A3 Horizontal" "A3"

    DOCNUMBER      DWGNUMBER
    REVISION        REVISION
    JOBNUMBER       JOBNUMBER
    SCALE           SCALE
    ISSUEDATE       DATE
    STATUS          STATUS
    DOCTITLE[1]     TITLE1
    DOCTITLE[2]     TITLE2
    DOCTITLE[3]     TITLE3
}
```

Setting the project files search path

AutoCAD provides two methods in which to find a drawing's reference files. The first is by saving the

full path for each referenced file within the dwg file. This works well until the drawings are copied to another area where the path then becomes invalid. The second method is to use the Projectname variable to store the search path for the drawing. This also works well but the search paths must be added manually to each workstation, which is time consuming and difficult to manage with many workstations. Columbus can add the Projectname variable and set AutoCAD's 'Project Files Search Path' automatically, via the ProjectSettings.txt file located in the projects root folder. Once the ProjectSettings.txt file is configured, any workstation accessing drawings in that project area will use AutoCAD's 'Project Files Search Path' to locate its Xref's. The folder names to be added to the ProjectSettings.txt file should be relatively pathed from the location of the ProjectSettings.txt file to the folder to be search. In the example below a '.' is used to search the same location as the ProjectSettings.txt file.

```
ProjectLabel
{
    PROJECT 2001
}

ProjectPath
{
    .
    4-03-02 Plt-dwgs
    4-03-03 Models\Arch
    4-03-03 Models\Common
    4-03-03 Models\Elec
    4-03-03 Models\Mech
    4-03-03 Models\Pubh
}
```

A new line should be used for each folder. The order in which the folders are listed will determine the order in which AutoCAD will look for its reference files. The top most folder will be searched first. For more information see: [ProjectSettings.txt file](#).

Drawing Properties

When an AutoCAD drawing is saved, the Columbus.arx program will automatically write the following properties into a DIN and HIS file. These can then be viewed in the File List and the Properties Frames. The [Document report](#) module can be used to export some of the information for use with a spreadsheet or database program.

Description tab

- Drawing title (up to four lines)
- Drawing number
- Drawing revision
- Drawing status
- Drawing date
- Project Name (AutoCAD projectname variable)
- Drawing scale
- Job number
- Job title (up to four lines)
- Drawing filename
- File locking status (locked or unlocked)
- Drawing file size (Kb and bytes)
- Last modified date

Blocks and layers (scrollable lists)

Referenced documents (including saved paths where applicable)

Document history.

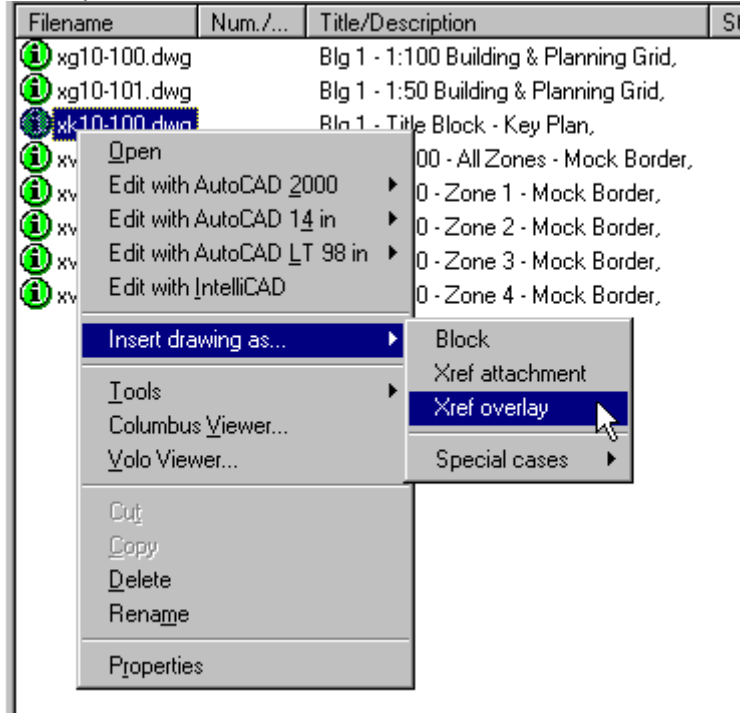
- Date
- Time
- Event (edit, view or print/plot)
- By (user log on name)
- From (PC or workstation name)

Details

Insert blocks and Xref's

If there is an AutoCAD session active, you can use Columbus to insert one drawing file into another.

Select the file to be inserted from the Document List Frame, right-click and choose the **Insert drawing as...** option.



If you select the Xref attachment option Columbus will attach the file without saving it's path. If you need save the path then choose one of the options in the special cases sub menu.

4.4 DIN & HIS files

What are they?

DIN stands for **D**ocument **I**nformation. DIN files are simple text files that contain the property data assigned to a document. For instance they will typically have entries for author, description, status etc. HIS* stands for **H**istory and contains a record of operations on a file.

* This is currently only supported for AutoCAD drawings

Where are they stored?

DIN files, like HIS files are stored in a sub folder below the location of a document. The sub-folder is named **docinfo**.

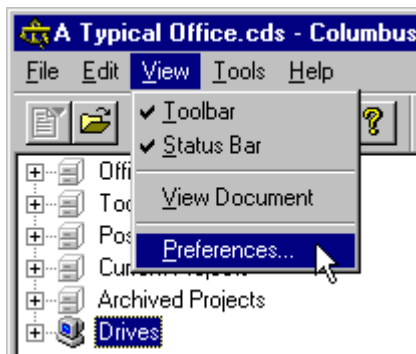
How are DIN files created?

The Columbus installation includes a data enabler for AutoCAD. This application (Columbus.arx), will extract key information from the drawing and create DIN and HIS files from it.

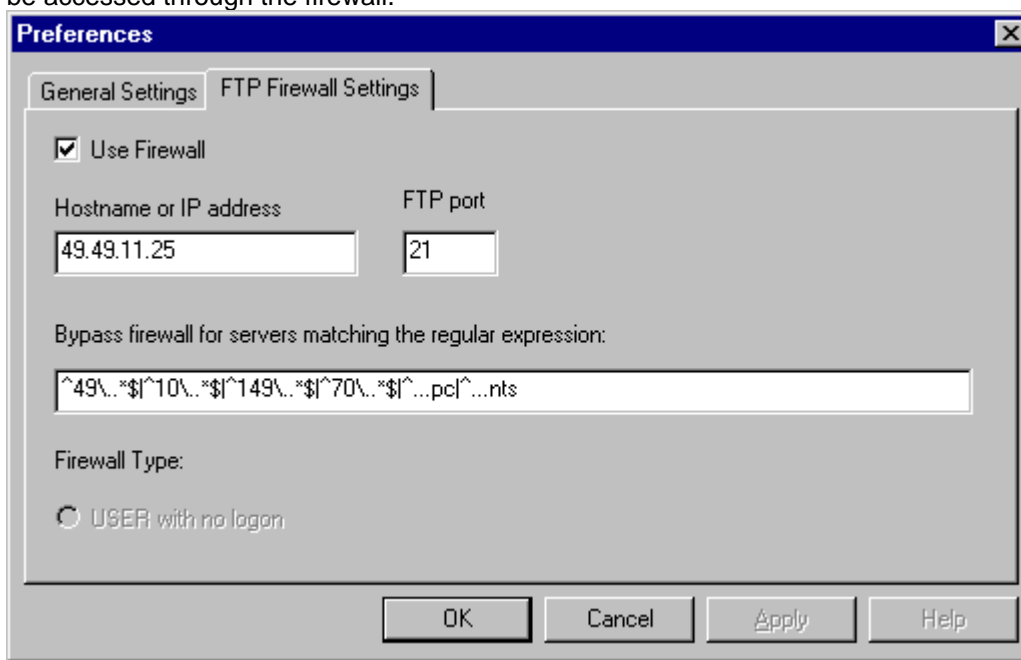
You can assign property data to all other document types by simply right

4.5 FTP Firewall settings

If you are using a firewall or proxy in you office to access the internet, you may need to tell Columbus to access external FTP sites via that proxy*. This can be done from the **View | Preferences FTP Firewall Settings** tab.



In this tab you can enable using the firewall, set the name or IP address of the firewall and the FTP port to use. You can also provide a regular expression which will tell Columbus which hosts should not be accessed through the firewall.



For a detailed description of this feature and its configuration refer to the training manuals which are available via the Columbus web site.

* Access to FTP sites is only available in Columbus Professional