MSTECHNOLOGY

THE LEADER IN DIGITAL IMAGING AND DOCUMENT MANAGEMENT SOLUTIONS

MST Viewer for .NET

A MS Technology Product

Digital Imaging and Document Management Solution

User Manual

Version 14.10.05

Licensing and Copyright Information

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If you find a typographical error in this manual, or if you have thought of a way to make this manual better, we would love to hear from you, feel free to share with us at **info@ms-technology.com**.

Table of Contents

1. Getting Started

This section lets you get acquainted with various sections covered in this user manual which further helps you in understanding the product in a better and complete way. This user guide also contains key features with the system requirements for proper installation and use of product.

1.1 Brief about User Guide

Welcome to the user guide of the MST Viewer. This user guide has been designed in such a way that the user is able to understand the software in an efficient and effective manner. So we recommend you to carefully go through the user guide before launching the product and keep it in a safe, easily accessible place for future reference.

1.2 Overview

MST Viewer is a powerful and robust document viewing solution that allows users to view images and documents located in their Enterprise Content Management (ECM) system. Its main function is to render file formats including PDF, TIFF, JPEG, BMP, PNG, MS Office files, IBM proprietary file formats, CAD, and many others. It also allows users to manipulate, redact, annotate, create, and print documents and images stored in your ECM repository.

1.3 Need of the Product

There is no other advanced viewer available in the market that handles all standard image file formats (JPEG, bitmap, TIFF files, etc.), MS Office, CAD most importantly IBM proprietary file formats and PDF, with the number of advanced features. MST Viewer can also be customized to fit your exact requirements.

1.4 Features

MST Viewer is loaded with rich features that make it complete and outstanding. The following are some of the features of the viewer:

User Interface options:

- Resizable, free floating window
- Thumbnail image selection
- File menu image selection
- Customize to support corporate branding using your logo, colors, and labels
- Customizable toolbar, add remove buttons at runtime
- Document Info. at status bar
- Splitter Panes
- Tree View (for quickly browsing through the documents)

- User Friendly User Interface

Viewing Images:

- Auto detection of image formats
- View images and documents from your local hard drive or network
- Streamed image display avoids dead time when downloading new images
- Multiple page support
- Ultra fast image display, zooming, scrolling, rotation
- Fit to height or width
- Rotation in 90 degree increments
- Thumbnails
- Aspect ratio correction
- Pan button
- Working Set / Multi-Part Document Support

Create and Annotate:

- Create new documents easily using cut, copy, paste, merge, and save functionality
- Annotate ANY format supported and save the document with annotations without modifying the original document.
- Draw freehand or use standard annotation shapes
- Insert bitmaps
- Merge the annotation with the image
- Ability to resize objects and the annotation will remain linked with the underlying image
- Rotate annotation data
- Add sticky notes with text edit capability

Manipulation:

- Crop, paste, merge, and save
- Image Cleanup
- Image Enhance
- Scale-to-gray resizing for 1bit images
- Bilinear Interpolation for resizing Bi-Level images
- Bi-Cubic Interpolation for resizing color images

Printing

- High resolution printing (300, 600, 1200 dpi)
- Print Selected Area

Saving (Saving to multiple formats)

- PDF
- JPEG
- TIFF
- MODCA
- IOCA
- BMP
- GIF

1.5 Benefits

MST Viewer provides benefits in a variety of following ways:

- **Reduce Overhead and Increase Productivity**: Allows companies to reduce a number of applications to one efficient universal document and image viewer.
- **File Formats**: Supports over 75 common and proprietary file formats.
- **Email and Fax**: Email and/or fax images and documents directly from MST Viewer application.
- **Annotations**: Access to a number of different annotations including, but not limited to redaction, line, arrow, rectangle, circle, text, note, highlighter, pen stamp, watermark and eraser.
- **Internal Development**: All file formats are developed by in-house MST developers and do not use any third party APIs. This gives you the ability to have customization, prompt resolutions to issues, and release control.
- **Individual Release Control**: Reduces deployment and upgrade cost. Every customer has their own release version of the product.

1.6 Supported File Formats

MST Viewer supports the following file formats:

TIFF	MS Office: (Word, Excel, PowerPoint)
JPEG	IBM: (MO:DCA, IOCA, PTOCA)
PNG	PDF
BMP	Email: (MSG, EML)
GIF	CAD: DWG, DXF
JFIF	WBMP
PCX	ASCII
DCX	PPM
JPEG 2000	PGM
Sun Raster Formats	PBM
	RTF

1.7 Compression Types

MST Viewer supports following compression types:

> Run Length Encoding (RLE)
> G3 (CCITT Fax 3)
> Modified G3 (Huffman)
> G4 (CCITT Fax 4)
> LZW
> Packed Bits
> JPEG
> ABIC
> IBM MMR

2. Install and Uninstall

This section provides the minimal configuration needed to begin with the installation process and also guides on how to install and uninstall the product.

2.1 System Requirements

Before continuing further with the installation, please make sure you have the minimum system requirements as specified below:

Windows XP or higher
Minimum 512 MB RAM
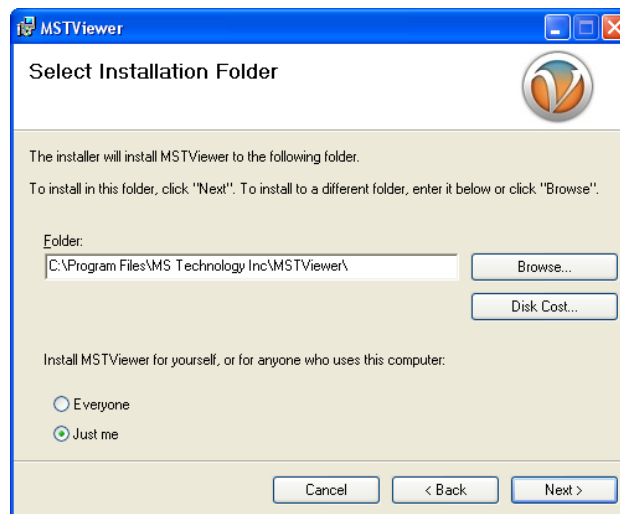50 MB available hard disk

2.2 Install the Software

Before you start installing MST Viewer, make sure that software installer file is available on the computer. Perform the following steps to install the software:

1. Double click on the setup.exe.
2. The **MST Viewer Setup Wizard** is displayed.

3. Click **Next**.
   The **Select Installation Folder** screen is displayed.

4. At the 'Select Installation Folder' screen, either browse to the location where you would like to save the program or allow at the default location. Also, indicate whether you want the software to be accessible to '**Everyone**' or '**Just me**'.

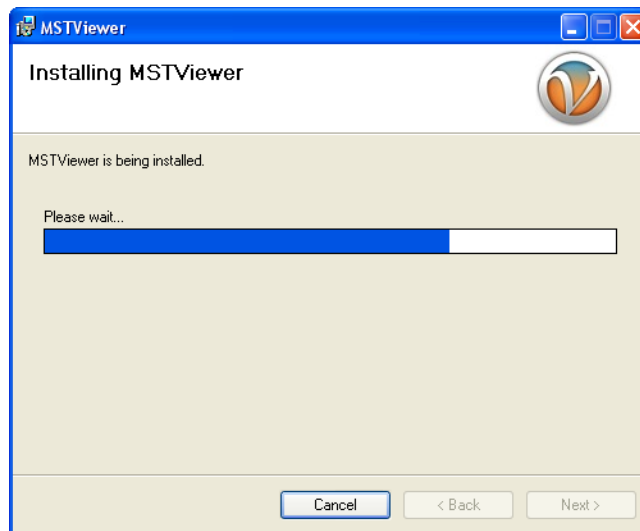   'Everyone' option means that all user accounts on the computer will have access to the software.
   'Just me' option means that software will install and available to your user account only.

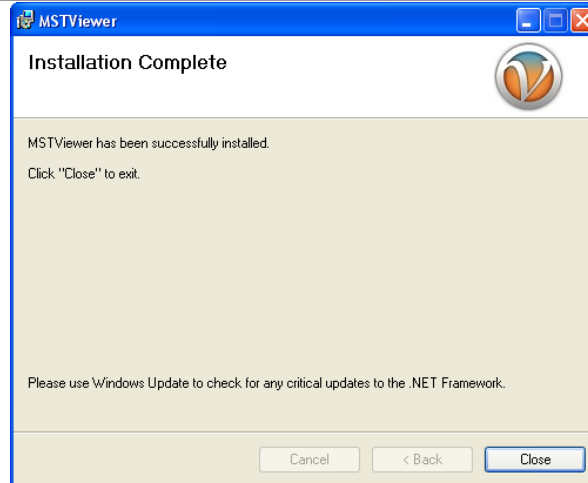☞ It is advisable to select 'Just Me' option.

5. Click **Next**.
   The **Confirm Installation** screen appears.
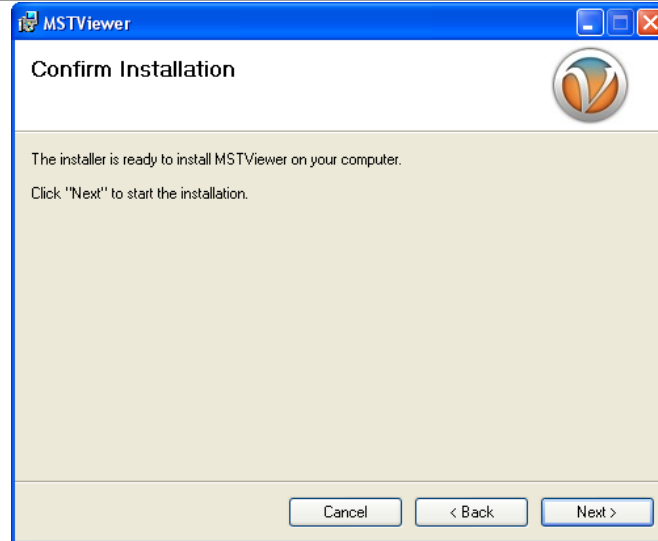
6. Click **Next**.
7. The setup starts installing the software.

8. Wait until the setup completes its installation.
9. Once done, click **Next**.
   The **Installation Complete** screen appears.

10. Click **Close**.

MST Viewer has been successfully installed on the system.

2.3 Uninstall the Software

MST Viewer can be removed from the computer if you no longer need it and can be uninstalled by using one of the following method, both located on the Start menu:

- Uninstall from All Programs List
- Uninstall from Control Panel

☞ Before uninstalling MST Viewer, make sure that it is not running.

Uninstall from All Programs List

Perform the following steps to remove MST Viewer that is installed on the system through All Programs List:

1. Click **Start** > **All Programs** > **MST Viewer** > **Uninstall**.
2. A message is displayed asking your confirmation to remove the software.
3. Click Yes.
4. A progress bar appears that will safely remove the software.

MST Viewer has been successfully uninstalled from the system.

Uninstall from Control Panel

Perform the following steps to remove MST Viewer that is installed on the system through Control Panel:

1. Click **Start** > **Control Panel** and then do one of the following:

   - Windows 7 or Vista users: Click **Programs and Features**.
   - Windows XP users: Click **Add or Remove Programs**.

2. It may take a bit of time to populate the long alphabetical list of programs installed on the system.
3. Select MST Viewer and then do one of the following:

   - Windows 7 or Vista users: Click **Uninstall**.
   - Windows XP users: Click **Change/Remove** button (to the right of the program).

4. A confirmation message is displayed asking your confirmation to uninstall the software.
5. Click Yes.

MST Viewer has been successfully removed from the system.

3. Understanding Interface

A user interface is the means by which you are able to communicate with the application. MST Viewer interface is user friendly and provide quick access to all important functions.

Menu Bar   Toolbar

Thumbnail View   Document View Area
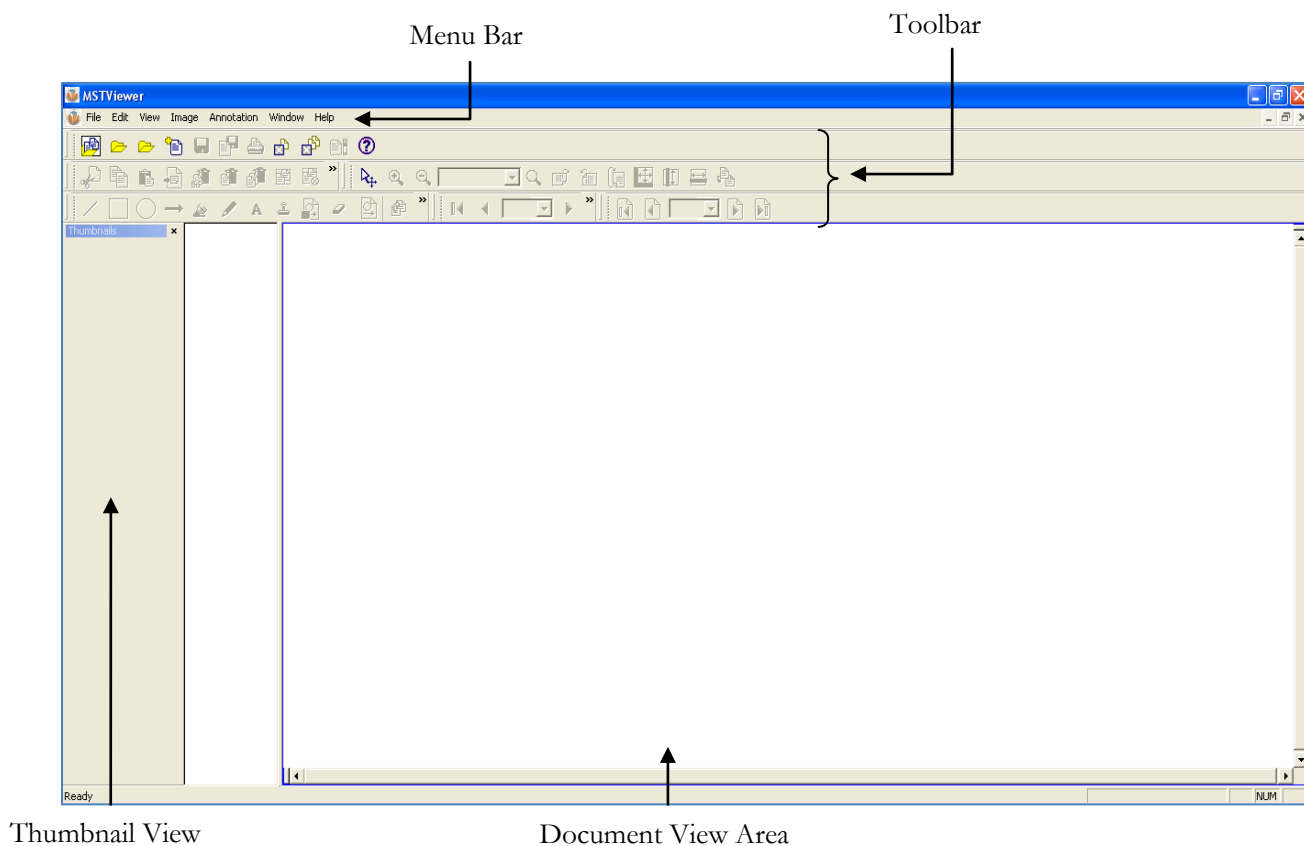
The following are the components in the application user interface.

- **Menu Bar**: It is the top most bar of the application interface that contains all the available features of the application. It has seven menu options:

    - File Menu
    - Edit Menu
    - View Menu
    - Image Menu
    - Annotation Menu
    - Window Menu
    - Help Menu

Menu	Options	Options Description
File	Open... Ctrl+O Open Working Set... Append in Working Set... New Working Set Scan Document Fax Document Send Document Close Ctrl+W Close All Ctrl + Shift + W Save Ctrl+S Export F12 Upload Print Ctrl+P Print Selected Area Print Preview Print Setup Print Configure Preferences ... Table Of Contents 1 300px-DuckTales_(Main_title) (Copy).jpg 2 Blue hills.jpg 3 Sunset.jpg 4 DSR.xls Exit	**Open**: Opens a previously saved file or document. **Open Working Set**: Opens documents in a Working Set **Append in Working Set**: Appends multiple documents in an opened Working Set **New Working Set**: Creates a new Working Set **Scan Document**: Scan a document **Fax Document**: Fax a document **Send Document**: Send any document to other person via mail **Close**: Closes an active document but does not quit application **Close All**: Closes all opened documents **Save**: Saves an active document with its current filename and location **Export**: Saves an active document to another location with the same or different filename **Print**: Prints an active document **Print Selected Area**: Prints the selected portion of an active document **Print Preview**: Shows how the file will look when you print it **Print Setup**: Shows various printing options such as paper size, orientation, etc. **Print Configure**: Shows configuration settings of the printer **Exit**: Closes all opened documents and quit application

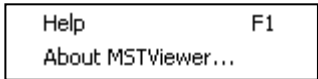|			
Edit	Cut Ctrl+X Copy Ctrl+C Paste Ctrl+V Insert Page Insert Delete Selected Delete Re-Order Pages Ctrl+R Close Document Ctrl+F4 Delete Document Ctrl+Delete Delete All Documents Ctrl+Shift+Delete Select All Pages Ctrl+Shift+A Deselect All Pages Ctrl+Shift+D Crop Page Ctrl+Shift+C PDF Text Search Ctrl+Shift+F Advance PDF Search Ctrl+Shift+S PDF Redaction Ctrl+Shift+R		**Cut**: Cuts the selected text or image or annotation from a page **Copy**: Copies the selected text or image or annotation from a page **Paste**: Inserts the copied text or image or annotation at the insertion point (cursor) **Delete Selected**: Delete selected file or document **Re-Order Pages**: Assigns the order of the pages in a document **Close Document**: Closes an active document in a Working Set **Delete Document**: Deletes selected document from the Working Set **Delete All Documents**: Deletes all opened document from the Working Set but does not quit application **Select All Pages**: Selects all pages of a document in a Working Set **Deselect All Pages**: Deselect all the selected pages of a document
View	First Page Home Previous Page PageUp Next Page PageDown Last Page End Go To Page... Ctrl+G First Document F7 Prev Document Ctrl+Alt+PageUp Next Document Ctrl+Alt+PageDown Last Document F8 Toolbars ▶ ✔ Status Bar ✔ TreeView Ctrl+F12 ✔ Thumbnails Ctrl+F11 Search From MOSS Ctrl+Shift+F Metadata Hide Annotations F11 Ruler Auto Resize ▶		**First Page**: Display the first page of an active document **Previous Page**: Display the previous page of an active document **Next Page**: Display the next page of an active document **Last Page**: Display the last page of an active document **Go To Page**: Go to the specified page of a document **First Document**: Display the first page of the first document opened in a Working Set **Prev Document**: Display the previous document opened in a Working Set **Next Document**: Display the first page of a next document opened in a Working Set **Last Document**: Display the first page of the last document opened in a Working Set **Status Bar**: Displays the status bar **Tree View**: Displays the tree view of

		the document opened in a Working Set
		Thumbnails: Displays the thumbnail view of the documents opened in a Working Set
		Hide Annotations: Allows you to toggle the visibility of individual annotations
		Ruler: Displays ruler on the file
		Auto Resize: Resize the file or document either vertically or horizontally
Image	Enhance Ctrl+E Zoom In + Zoom Out - Custom Zoom… Ctrl+M Actual Size Shift+A Fit in Window Shift+F Fit To Width Shift+W Fit To Height Shift+H Rotate Right Ctrl+Arrow Right Rotate Left Ctrl+Arrow Left Rotate 180 Ctrl+Arrow Down Custom Rotate… WaterMark Invert Ctrl+Alt+I Magnifying Lens Alt+L Image Properties Ctrl+Alt+Enter Copy Image To Clipboard Ctrl+Shift+I Copy Text To Clipboard Ctrl+Shift+T	**Enhance**: Enhances a page of a document
		Zoom In: Increases the magnification percentage of an active document
		Zoom Out: Decreases the magnification percentage of an active document
		Custom Zoom: Resize the document with a specified size
		Actual Size: Bring the document in its actual size
		Fit in Window: Resize the document to fit entirely in the window
		Fit To Width: Resize the document to fit the width of the window
		Fit to Height: Resize the document to fit the height of the window
		Rotate Right: Rotate the page of an active document in a clockwise direction
		Rotate Left: Rotate the page of an active document in an counterclockwise direction
		Rotate 180: Rotate the page of an active document in a 180° direction
		WaterMark: Inserts a watermark in an active document
		Invert: Invert the color of an active page
		Magnifying Lens: Magnifies a specific part of an image
		Image Properties: Displays properties of an image
		Copy Image to Clipboard: Copies images of an active document to

		clipboard **Copy Text to Clipboard**: Copy selected text of an active document to clipboard
Window	 New Window Cascade Tile Horizontally Tile Vertically ✔ 1 WS18528	**New Window**: Opens another window with a copy of active documents **Cascade**: Arrange (open windows) in such a way so that they overlap each other, with the title bars visible **Open Documents List**: Displays list of all opened documents. An active document has a check mark besides it.
Help	Help F1 About MSTViewer…	**Help**: Open user manual for assistance **About MST Viewer**: Check the product version and licensing information

- **Toolbar**: Frequently accessing tools through the menu bar is little bit clumsy. MST Viewer has floating toolbars with several buttons that can be easily access to quickly perform any action. The toolbars can be dragged to any location so as not to hinder the view of the document. If too many toolbars are visible, then they can be temporarily hide by **View** -> **Toolbars**.
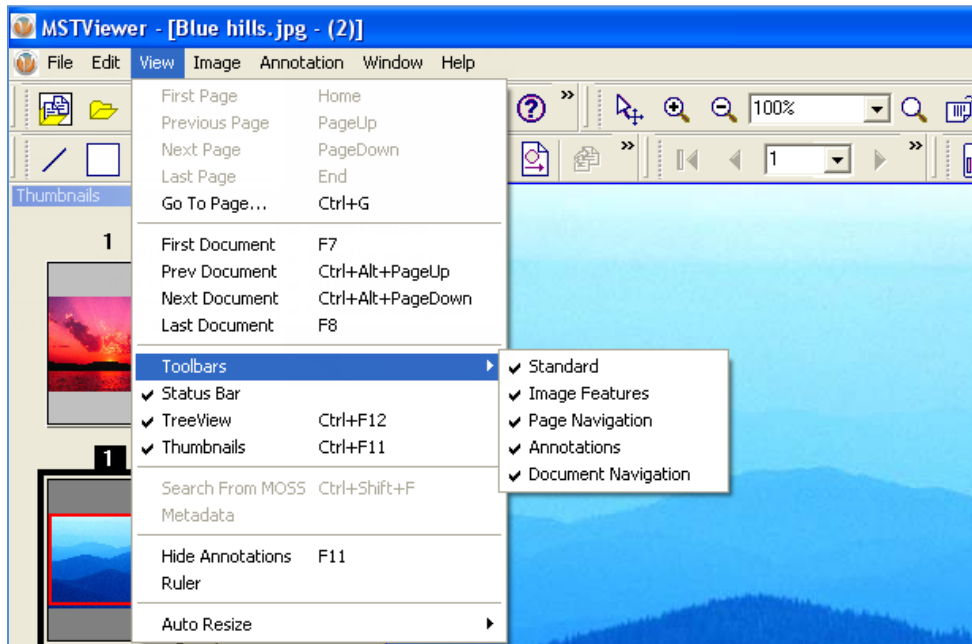
There are 5 toolbars available:

1. Standard Toolbar

Open Working Set · Open Document · Save Document · Print Document · Close All Documents · Help

Append in Working Set · New Document · Save As · Close Document · Scroll Document
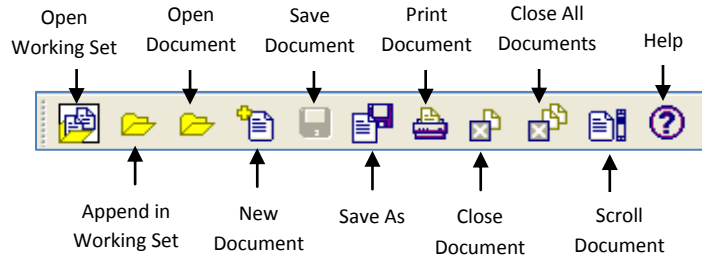
2. Image Features Toolbar

Normal · Zoom Out · Custom Zoom · Rotate Left · Fit To Window · Window Width

Zoom In · Rotate Right · Rotate 180 · Window Length · Invert Image

3. Page Navigation Toolbar

First Document · Last Document

Previous Document · Next Document

4. Annotation Toolbar

Line · Circle · Highlight · Text · Sticky Note · Show/Hide Annotation · Bring To Front

Rectangle · Arrow · Pen · Stamp · Eraser · Sent to Back
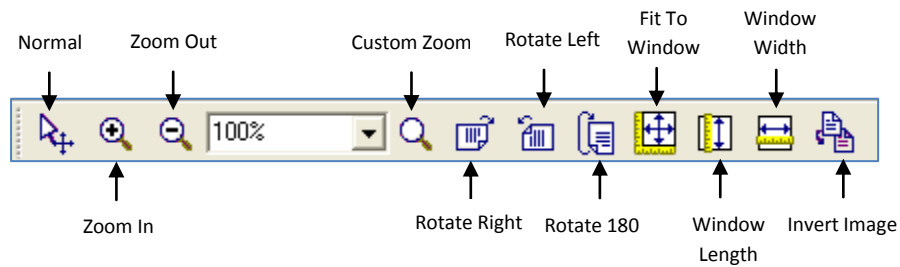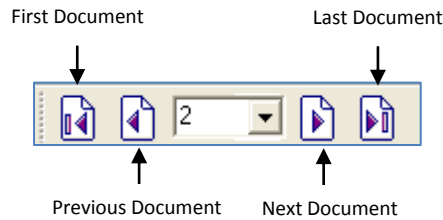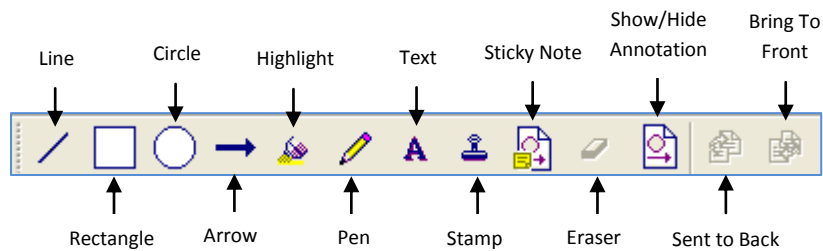
5. Document Navigation Toolbar

First Page · Last Page

Previous Page · Next Page
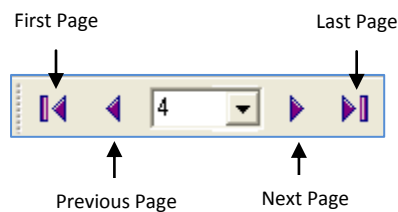
4. Common Tasks

This section lists some common operations that can be performed while managing the MST Viewer.

4.1   Open Document

The document can be opened in the MST Viewer in two ways:

> ➢ Using Menu
> ➢ Using Icon

Open a Document Using Menu

Perform the following steps to open a document using menu option:

1. On the **File** menu, click **Open**.
2. The **Open** Dialog box is displayed.
3. Navigate and find the file to open.
4. Once you found it, select it and click **Open**.
5. If the selected file is supported will be opened in the application.

Open a Document Using Icon

Perform the following steps to open a document using icon:

1. Click **Open** button displayed on the Standard toolbar.
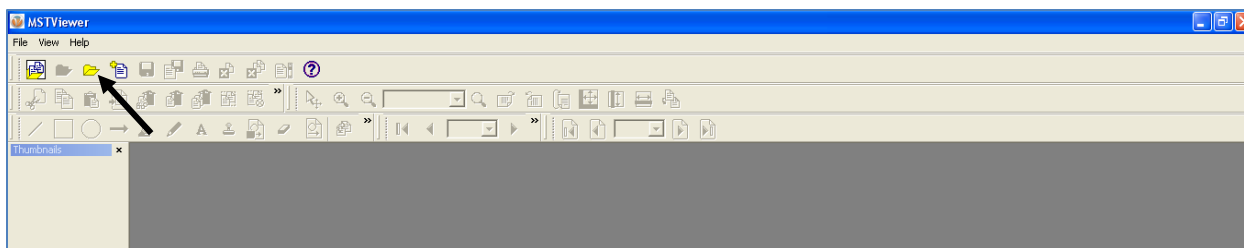
2. The **Open** Dialog box is displayed.
3. Navigate and find the file to open.
4. Once you found it, select it and click **Open**.
5. If the selected file is supported will be opened in the application.

☞ To open multiple documents, press CTRL key and select multiple documents.

4.2 Working with Working Set

Working Set is a collection of documents. With the help of Working Set, you can:

> ➢ View multiple documents in a single document window.
> ➢ Browse documents and pages from Tree View or Thumbnail.
> ➢ Scan documents and add them on working set.
> ➢ Create custom documents in a working set which can be converted to single or multi-page documents.

Document No.   Page No. for a Working Set
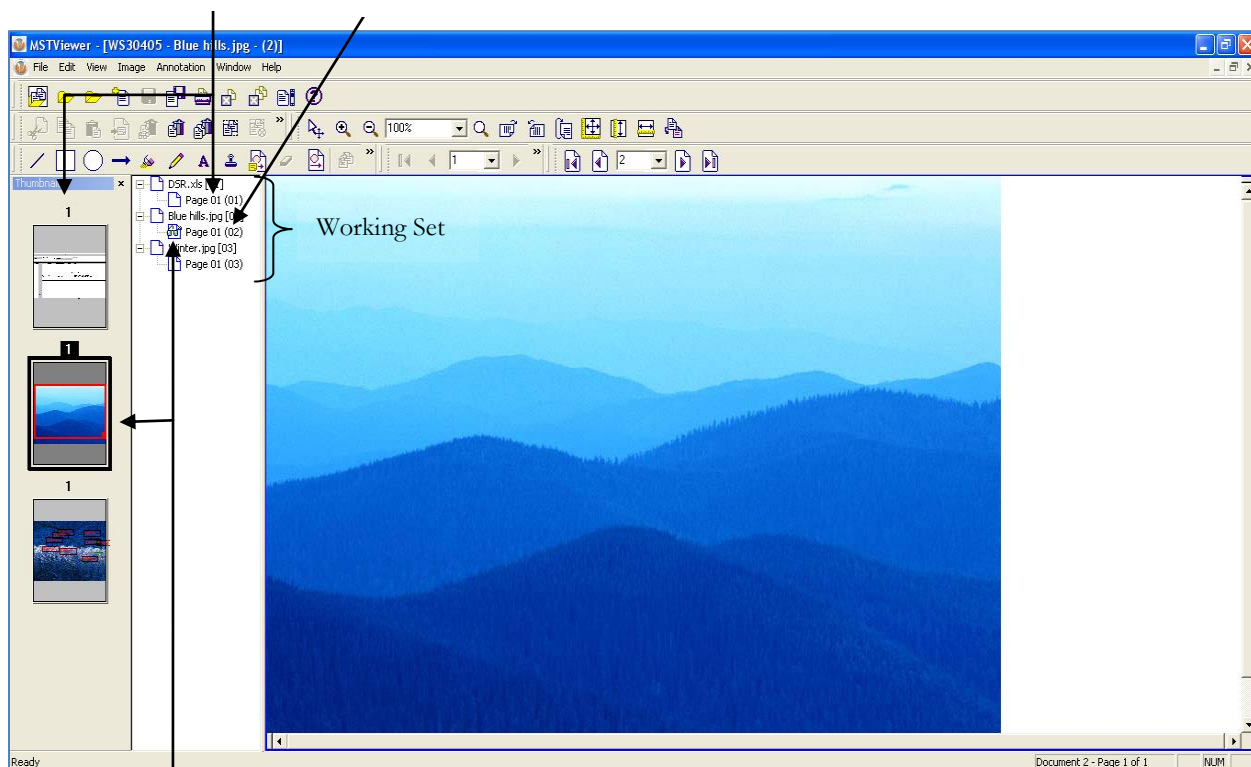
Working Set

Currently Selected Document

4.3 Open Document in a Working Set

In a working set, one or more documents can be opened in a tree view or thumbnail view by performing the following steps:

1. On the **File** menu, click **Open Working Set** OR click the Open Working Set button displayed on the Standard toolbar.
2. The **Open Working Set** dialog box is displayed.
3. Navigate and find the file to open.
4. Once you found it, select it and click **Open**.
5. If the selected file is supported will be opened in the application.

4.4 Append Document in a Working Set

In a working set, multiple documents can be appended by performing the following steps:

1. On the **File** menu, click **Append in Working Set** or click the Append in Working Set button displayed on the Standard toolbar.
2. The **Append in Working Set** dialog box is displayed.
3. Navigate and find the file to append.
4. Once you found it, select it and click **Open**.
5. If the selected file is supported will be opened in the application.
6. Repeat the process to append multiple documents.

4.5 Save Document

The document can be saved in one of the several formats to the user's workstation or to a folder on a network drive. MST Viewer supports saving files to the following formats:

- Plain Text (ASCII)
- TIFF
- JPEG
- GIF
- Bitmap
- MODCA
- IOCA
- PDF

Perform the following steps to save a document:

1. On the **File** menu, click **Save** OR click the Save button displayed on the Standard toolbar.

Perform the following steps to save a document in a different format:

1. Click **Save As** button displayed on the Standard toolbar
2. The **Export** dialog box is displayed.
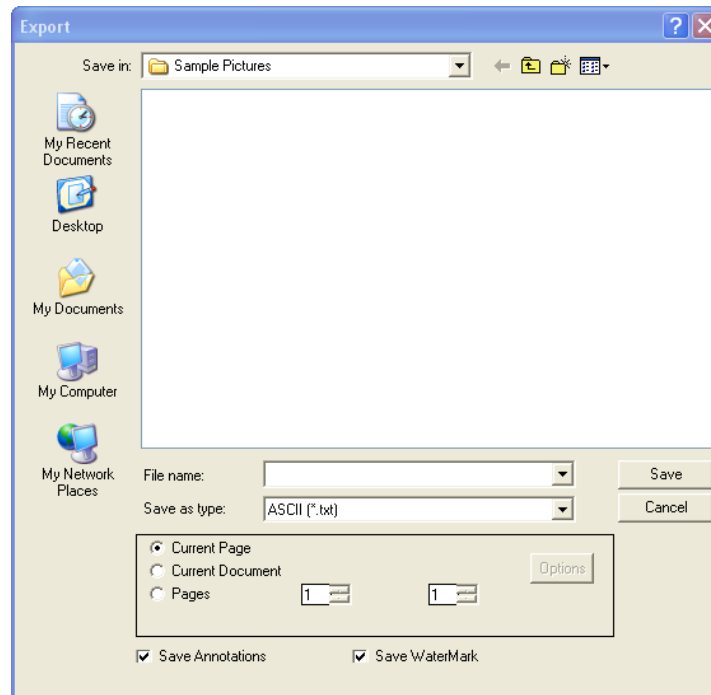
3. In the navigation pane (the left pane), select the folder in which you want to save the file and navigate to the path.
4. In **File Name** box, enter the name of the file.
5. In **Select as type** drop down box, select the format in which you want to save the file.
6. Select the required option from the list of available save options:

- **Current Page**: To save the current page only.
- **Current Document**: To save all pages of the current document.
- **Pages**: To save some specified pages, then enter the page numbers using arrow keys.

7. Click on **Save Annotation** checkbox if you want to save annotation made in the file.
8. Click on **Save Watermark** checkbox if you want to save watermark created in the file.
9. Once done, click **Save**.
10. The document has been successfully saved in a different format.

4.6 Print Document

The document can be printed by performing the following steps:

1. Open the document that you want to print.
2. On the **File** menu, click **Print**.
3. The **Print** dialog box is displayed.

4. Under **Printer** group, select the printer you want to use (if it is not selected).
5. Under **Print Range** group, specify the portion of the document that you want to print. If you click **Pages**, you have to enter the page numbers or page ranges you want to include.
6. Under **Copies** group, select the number of copies that you want to print.
7. Once done, click **OK**.

To print selected area:

1. Open the document that you want to print.
2. If you want to print only a part of the document, select the desired portion of the document.
3. On the **File** menu, click **Print Selected Area**.
4. The **Print** dialog box is displayed.
5. Under **Printer** group, select the printer you want to use (if it is not selected).
6. Under **Copies** group, select the number of copies that you want to print.
7. **Once** done, click **OK**.

☞ To see how your document looks before you print it, go to the **File** menu and select **Print Preview**. This will generate a preview of how your document will look like when it's printed on paper.

To adjust Printer Settings:

1. Open the document that you want to print.
2. On the **File** menu, click **Print Setup**.
3. The **Print Setup** dialog box is displayed.
4. Select the printer you want to use (if it is not selected) under **Printer** group.
5. Under **Paper** group, select the paper size in **Size** drop down box. This drop down box lists the paper sizes supported by the current printer as well as industry standard sizes.
6. Under **Orientation** group, specify the paper orientation as portrait or landscape.
7. If the printer is available on the network, click on the **Network** button and connect the printer.
8. Once done, click **OK**.

4.7   Scan Document

MST Viewer provides a functionality through which documents, images or any other file can be scanned and can be viewed in a viewer. Perform the following steps to scan document:

1. On the **File** menu, click **Scan Document**.
2. The **MSTScanner (Select Source)** is displayed.
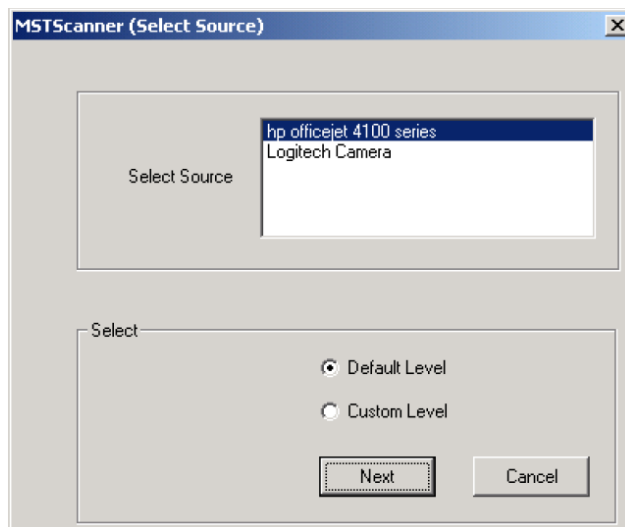
3. Under **Select Source**, select the device for scanning document.
4. Select the required option from Default Level or Custom Level. If *Default Level* is set, the application will scan document with default resolution, scaling and pixel type. If *Custom Level* is set, the application provides options to specify resolution, scaling and pixel type.
5. Once done, click **Next**.
6. The application starts scanning the document.
7. Wait until application scans document successfully.
8. Once the image has been scanned, a small thumbnail preview will be displayed in **MSTScanner (Preview)** dialog box with following four options:
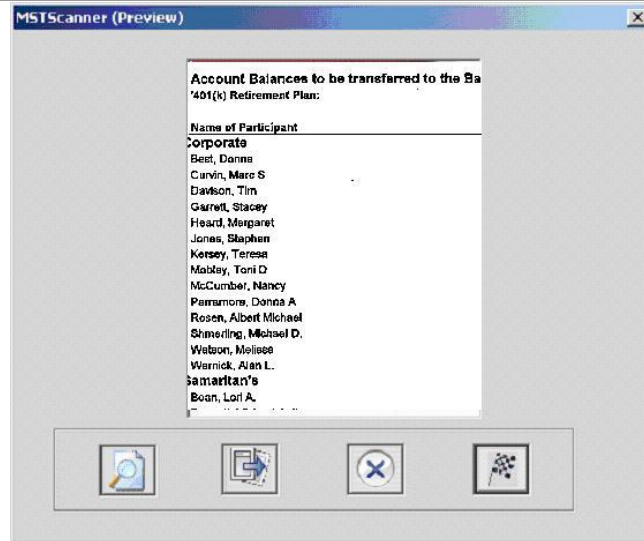
- **Preview**: Scans other document without adding the currently scanned image to the Working Set.
- **Next**: Add currently scanned image to the Working Set and scans another continuing the same session (using the same device and settings).
- **Cancel**: Discard currently scanned image and return to the application, closing the current session.
- **Finish**: Add currently scanned image to the Working Set and return to the application, closing the current session.

4.8   Send Document via Mail

MST Viewer provides a functionality through which scanned documents, images, annotated file, or any other type of file can be send to any person via email. Perform the following steps to send a document.

1. On the **File** menu, click **Send Document**.
2. The **Send Email** dialog box is displayed.
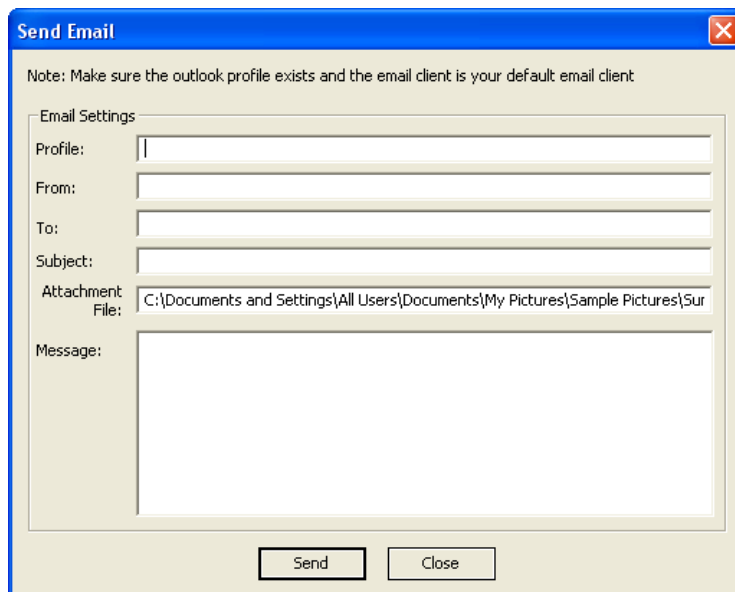
3. Enter details in the respective fields.
4. Once done, click **Send**.
5. The email has been sent to the selected recipients successfully.

4.9   Fax Document

MST Viewer provides a functionality through which scanned documents, images, annotated file, or any other type of file can be fax instantly. Simply provide the recipients fax number, that's it. Perform the following steps to fax any document.

1. On the **File** menu, click **Fax Document**.
2. The **MST Fax Wizard** dialog box is displayed.

3. Enter the name of the document in **Document Name** text box field.
4. Enter the details of the sender in **Sender's Details** group box.
5. Enter the details of the recipient in **Receiver's Details** group box.
6. Once done, click **OK**.
7. The document has been faxed to the selected recipient successfully.

4.10   Add Watermark

A watermark is a visible embedded overlay that enhances the appearance of document by adding an image or text that identifies document contents as confidential information. It is used to print text or graphic behind document text.

Watermarks are transparent, and therefore any text or object printed over a watermark is clearly visible.

Perform the following steps to insert watermark:

1. On the **Image** menu, click **Watermark**.
2. The **MSTViewer Watermark** dialog box is displayed.
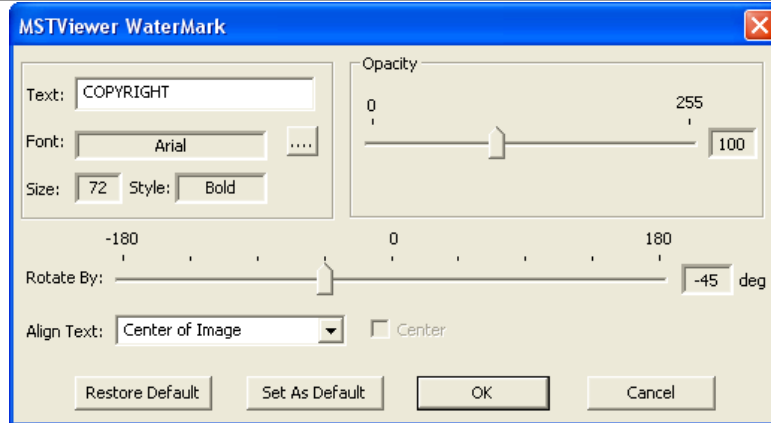
3. Enter the text in **Text** field.
4. Select the formatting options in **Font** field.
5. Select the transparency by dragging the slider in **Opacity** group.
6. Rotate the text by dragging the slider in **Rotate By** field.
7. Select the alignment option from the **Align Text** drop down box.
8. Click on **Set as Default** button to make existing property values as default values.
9. Click on **Restore Default** button to restore default properties.
10. Once done, click **OK**.
11. The watermark has been inserted to the document successfully.

4.11   Customizing Toolbars/Buttons

The toolbars can be shown or hidden and will display exactly the items depending upon your needs. Perform the following steps to customize toolbar:

1. On the **File** menu, click **Preferences**.
2. The **Configuration** dialog box is displayed.
3. Go to the required tab and configure the toolbar by doing any of the following:

   ➢ *To view toolbar*: Click **View Toolbar** checkbox to view toolbar.
   ➢ *To add items to the toolbar*: Select the items by clicking on the checkboxes under **Select Icons** group box that you want to appear in the toolbar.
   ➢ *To remove items from the toolbar*: Deselect the items by clicking on the checkboxes under Select Icons group box to remove from the toolbar.

4. When you finished configuring the toolbar, click **OK**.
5. Restart the application so as to make changes effective in the application.
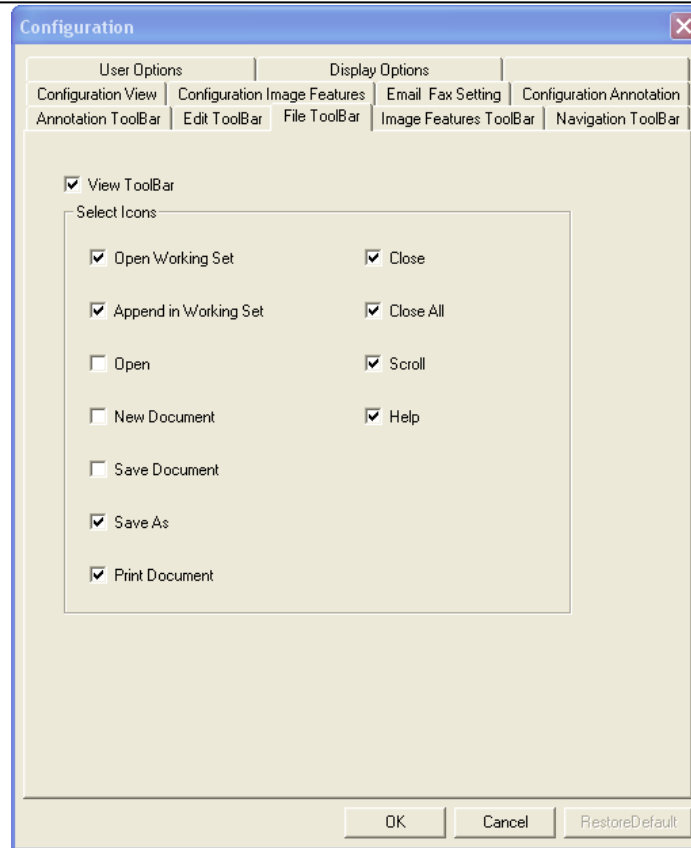
☞	Disabled toolbars will not appear in any way in the viewer.
☞	Disabled icons will not appear in the toolbar in any way in the viewer.
☞	Toolbar settings maintained in Preferences will persist next time when the viewer is opened.

4.12   Setting Default Properties

Default properties are the standard options that are automatically set and can be changed depending upon your needs. If changes are made, then the application will apply those changes and will remember as a default setting for the working area.

Perform the following steps to set default properties for the viewer:

1.   On the **File** menu, click **Preferences**.
2.   The **Configuration** dialog box is displayed.
3.   Click **User Options** tab.
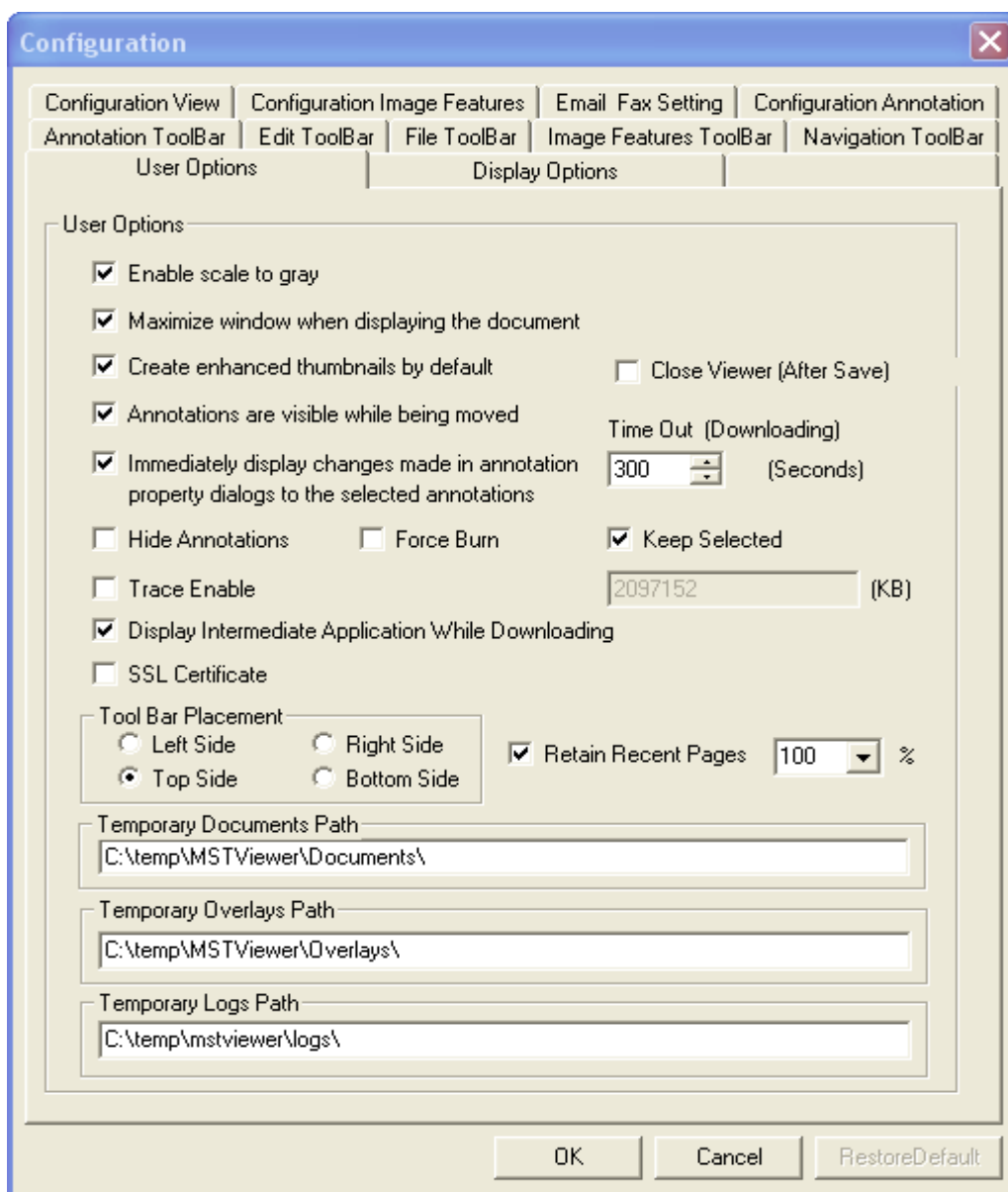
Field Name	Field Description
Enable scale to gray	To enhance an image. If unchecked, Enhanced option is disabled in Image menu
Maximize window when displaying the document	Opens document in a maximized window
Create enhanced thumbnail by default	Enhances thumbnail images
Close Viewer (After Save)	Closes viewer after saving changes
Annotations are visible while being moved	Will display all annotation on the document clearly while moving
Immediately display changes made in annotation property dialogs to the selected annotations	Reflect changes (color change, etc.) made in the annotation property dialog box before clicking OK button. If unchecked, then changes will be reflected after clicking OK button
Hide annotation	Hides all annotations
Keep selected	Selected annotation will remain active until and unless we click on normal icon
Trace enabled	Size of the log file
Toolbar placement	Location where the toolbar is to be placed – top, bottom, left, right
Temporary Documents Path	Path where the documents are stored
Temporary Logs Path	Path where the log files are stored

4. Select or unselect the required options depending upon your needs.
5. Once done, click **OK**.
6. The default properties have been saved successfully.

4.13   Setting Display Properties

The display properties can be set for the viewer by performing the following steps:

1. On the **File** menu, click **Preferences**.
2. The **Configuration** dialog box is displayed.
3. Click **Display Options** tab.
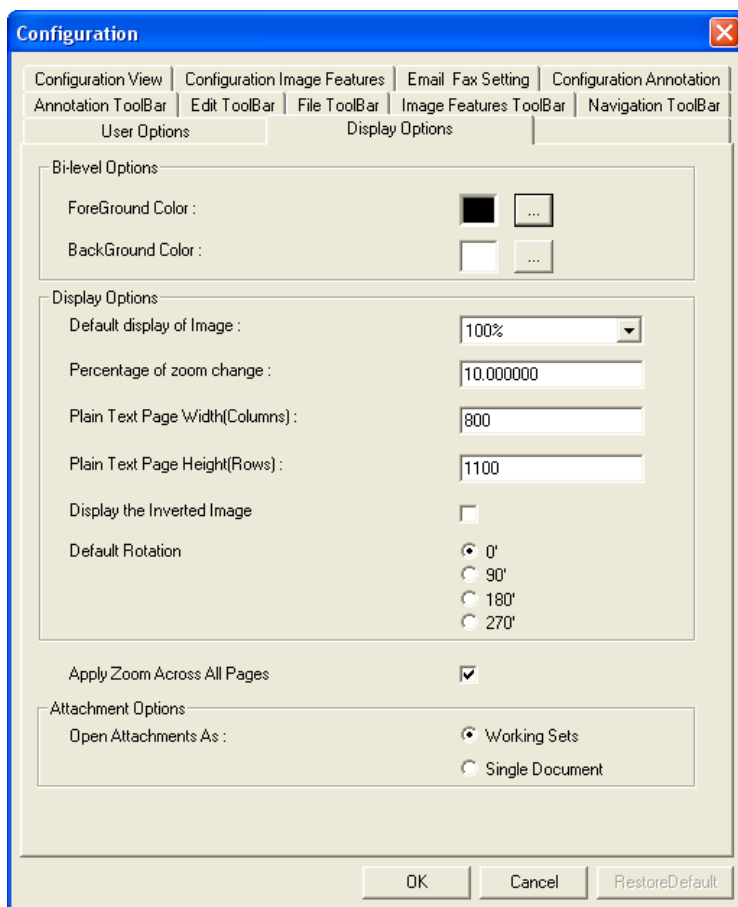
Field Name	Field Description
Foreground color	To change the color of the text
Background color	To change the background color of an image
Default display of image	Size of an image as compared to its original size
Percentage of zoom change	Percentage in the magnification of an image every time you zoom it
Plain text page width (columns)	Number of columns to display in a text file. The size ranges from 100 to 2200
Plain text page height (rows)	Number of rows to display in a text file. The size ranges from 100 to 2200

Display the inverted image	Inverts the color of the displayed image
Default Rotation	Rotate an image at 0°, 90°, 180°, 270° with respect to the actual image position
Apply zoom across all pages	Set all pages with same magnification

4. Select or unselect the required options depending upon your needs.
5. Once done, click **OK**.
6. The modified changes will reflect when you reopen the document again.

5. Annotation

Annotations are comments, notes, explanations, or other types of external remarks that can be added to a selected part of the document to explain or illustrate its meaning.

MST Viewer provides tools to enable you to freely write your own comments to the document and can share with others. It provides facility to add comments via sticky notes, apply digital stamps and much more thus making MST Viewer an ideal solution for business work flow. It also allows you to save, copy, paste and print annotation and contents.

Annotation marks are saved within a MO:DCA image file as annotation data that is kept separate from the image data. Whenever we make some annotations, a file with the same name with an extension .t_l is created in the current directory. Any annotation that is NOT burned-in (embedded) is put in this file. These marks can also be merged with the image data in a process known as burning-in. To save annotations to any file type other than MO:DCA or TIFF, we save .t_l file. The .t_l file is a GOCA file. Once annotations are burned-in a MO:DCA document, they become part of the base image but still can be manipulated by the annotation functions.

MST Viewer has a full range of annotation tools. Following is a list of the annotation and markup tools included in MST Viewer, with a brief description of their functionality.

5.1 Line

This annotation tool draws a horizontal, vertical, or lines at 45° with adjustments: color, thickness, and transparency. Perform the following steps to draw a line:

1. On the **Annotation** menu, click **Line** OR click on the Line icon from the Annotation toolbar OR use shortcut key **CTRL** + **ALT** + **L**.
2. Click where you want the line to begin, and then drag the mouse to the place where it should end, and release the mouse button.

Edit Properties of Line

1. Select the annotation.
2. Right click and click **Properties**.
3. The **Line Properties** dialog box is displayed.
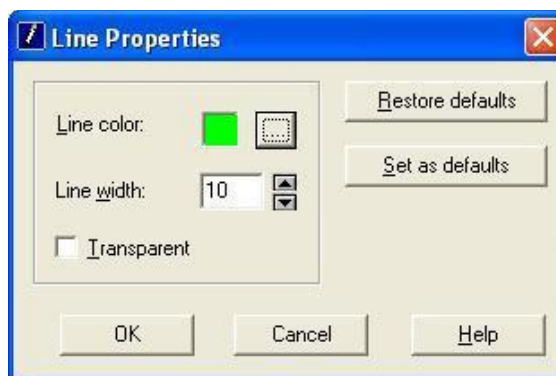
4. *To change the color of the line*: Click on the Line color button. The color palette is displayed. Select the required color.
5. *To change the width of the line*: Enter the required value in Line Width text box OR maximize or minimize the up or down arrows.
6. Click on the **Transparent** checkbox to make line transparent.
7. Click on **Set as defaults** button to make existing property values as default values.
8. Click on **Restore defaults** button to restore default properties.
9. Once you finished, click **OK**.

5.2 Rectangle

This annotation tool draws a rectangle with adjustments: line and fill color, thickness, and transparency. Perform the following steps to draw a rectangle:

1. On the **Annotation** menu, click **Rectangle** OR click on the Rectangle icon from the Annotation toolbar OR use shortcut key **CTRL** + **ALT** + **R**.
2. Click on the screen and drag diagonally and release the mouse button.

Edit Properties of Rectangle

1. Select the annotation.
2. Right click and click **Properties**.
3. The **Rectangle Properties** dialog box is displayed.
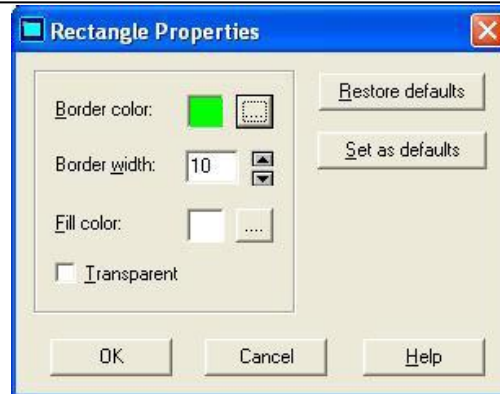
4. *To change the color of the border of the rectangle*: Click on the Border color button. The color palette is displayed. Select the required color.
5. *To change the width of the rectangle*: Enter the required value in Border Width text box OR maximize or minimize the up or down arrows.
6. *To fill color inside the rectangle*: Click on the Fill color button. The color palette is displayed. Select the required color.
7. Click on the **transparent** checkbox to make rectangle transparent.
8. Click on **Set as defaults** button to make existing property values as default values.
9. Click on **Restore defaults** button to restore default properties.
10. Once you finished, click **OK**.

5.3 Circle

This annotation tool draws a circle with adjustments: line and fill color, thickness, and transparency. Perform the following steps to draw a circle:

1. On the **Annotation** menu, click **Circle** OR click on the Circle icon from the Annotation toolbar OR use shortcut key **CTRL** + **ALT** + **C**.
2. Click on the screen and drag diagonally and release the mouse button.

Edit Properties of Circle

1. Select the annotation.
2. Right click and click **Properties**.
3. The **Circle Properties** dialog box is displayed.

Circle Properties

Border color: [green]

Border width: 10

Fill color:

☐ Transparent

Restore defaults

Set as defaults

OK   Cancel   Help

4. *To change the color of the border of the circle*: Click on the Border color button. The color palette is displayed. Select the required color.
5. *To change the width of the circle*: Enter the required value in Border Width text box OR maximize or minimize the up or down arrows.
6. *To fill color inside the circle*: Click on the Fill color button. The color palette is displayed. Select the required color.
7. Click on the **Transparent** checkbox to make circle transparent.
8. Click on **Set as defaults** button to make existing property values as default values.
9. Click on **Restore defaults** button to restore default properties.
10. Once you finished, click **OK**.

5.4 Arrow

This annotation tool draws a horizontal, vertical or 45° arrow with adjustments: color, thickness, arrowhead length and angle. Perform the following steps to draw an arrow:

1. On the **Annotation** menu, click **Arrow** OR click on the Arrow icon from the Annotation toolbar OR use shortcut key **CTRL** + **ALT** + **A**.
2. Click where you want the arrow to begin, and then drag the mouse to the place where it should end, and release the mouse button.

Edit Properties of Arrow

1. Select the annotation.
2. Right click and click **Properties**.
3. The **Arrow Properties** dialog box is displayed.
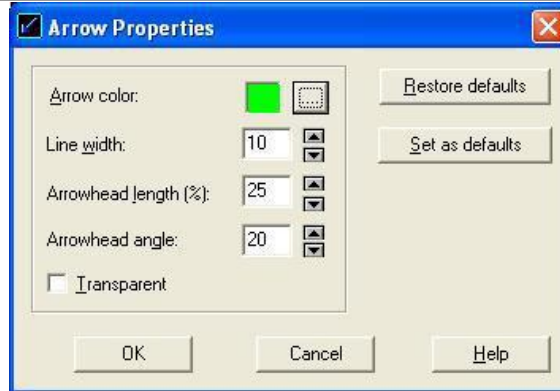
4. *To change the color of an arrow*: Click on the Arrow color button. The color palette is displayed. Select the required color.
5. *To change the width of an arrow*: Enter the required value in Line Width text box OR maximize or minimize the up or down arrows.
6. *To set arrowhead length and angle*: Enter the required value in Arrowhead length and Arrowhead angle text box OR maximize or minimize the up or down arrows.
7. Click on the **Transparent** checkbox to make arrow transparent.
8. Click on **Set as defaults** button to make existing property values as default values.
9. Click on **Restore defaults** button to restore default properties.
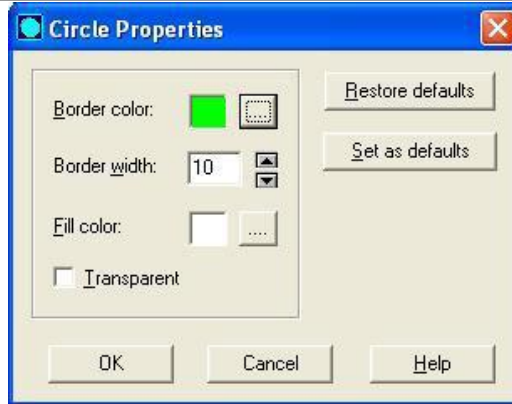10. Once you finished, click **OK**.

5.5 Highlighter

People use creative methods to draw attention to items of interest when they mark up a paper document, such as underlining, highlighting, circling words in a sentence. This annotation tool provides a similar feature for marking up information displayed in the viewer. Perform the following steps to draw highlighter:

1. On the **Annotation** menu, click **Highlighter** OR click on the Highlight icon from the Annotation toolbar OR use shortcut key **CTRL** + **ALT** + **H**.
2. Click on the screen and drag diagonally and release the mouse button.

Edit Properties of Highlighter

1. Select the annotation.
2. Right click and click **Properties**.
3. The **Highlighter Properties** dialog box is displayed.
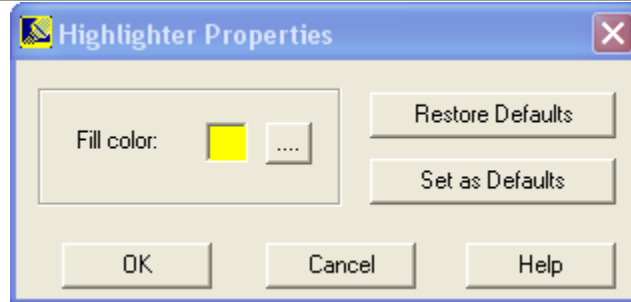
4. *To fill color inside highlighter*: Click on the Fill color button. The color palette is displayed. Select the required color.
5. Click on **Set as defaults** button to make existing property values as default values.
6. Click on **Restore defaults** button to restore default properties.
7. Once you finished, click **OK**.

5.6 Pen

This annotation tool draws freehand lines and shapes with adjustments: color, thickness, and transparency. Perform the following steps to draw a freehand line:

1. On the **Annotation** menu, click **Pen** OR click on the Pen icon from the Annotation toolbar OR use shortcut key **CTRL** + **ALT** + **P**.
2. Click on the screen and drag the mouse. The line will follow your mouse moves. Release the mouse button to end your drawing.

Edit Properties of Pen

1. Select the annotation.
2. Right click and click **Properties**.
3. The **Pen Properties** dialog box is displayed.
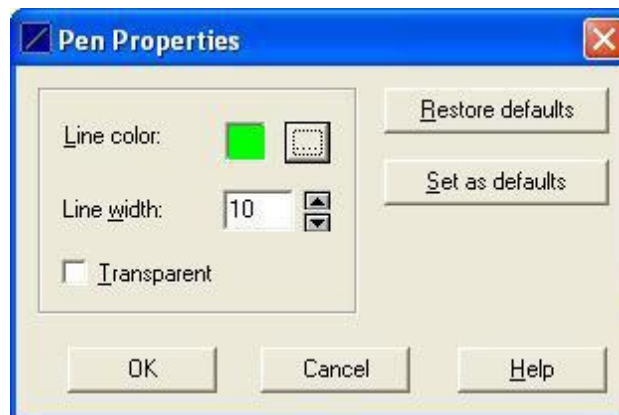
4. *To change the color of freehand line*: Click on the Line color button. The color palette is displayed. Select the required color.
5. *To change the width of freehand line*: Enter the required value in Line Width text box OR maximize or minimize the up or down arrows.
6. Click on the **Transparent** checkbox to make freehand line transparent.
7. Click on **Set as defaults** button to make existing property values as default values.
8. Click on **Restore defaults** button to restore default properties.
9. Once you finished, click **OK**.

5.7 Text

This annotation tool enters text with adjustments: size and color of the fonts and the text box. Perform the following steps to add any text:

1. On the **Annotation** menu, click **Text** OR click on the Text icon from the Annotation toolbar OR use shortcut key **CTRL** + **ALT** + **T**.
2. A cursor will appear on the screen allowing you to type in text.
3. To finish editing the text, click anywhere outside of the text box.
4. To edit the text later, just click on the text. A border with selection handles will appear. The text box can be repositioned by dragging the text box border and the size of the text box can be adjusted by dragging the selection handles.

Edit Properties of Text

1. Select the annotation.
2. Right click and click **Properties**.
3. The **Text Settings** dialog box is displayed.
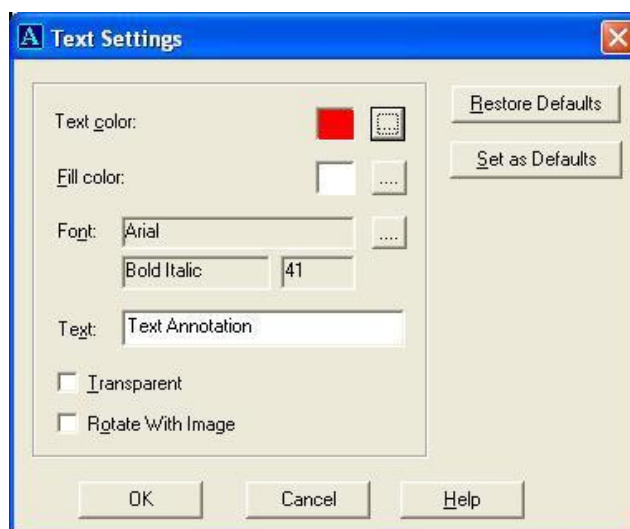
4. *To change the color of the text*: Click on the Text color button. The color palette is displayed. Select the required color.

5. *To fill color in the text box*: Click on the Fill color button. The color palette is displayed. Select the required color.
6. *To change the formatting of text*: Click on the Font button. The font dialog box is displayed. Make required formatting changes.
7. *To edit the text*: Edit the existing text in the Text box.
8. Click on the **Transparent** checkbox to make text transparent.
9. *To rotate text with image*: Click on the **Rotate with Image** checkbox option if you want to rotate text along with an image.
10. Click on **Set as Defaults** button to make existing property values as default values.
11. Click on **Restore Defaults** button to restore default properties.
12. Once you finished, click **OK**.

5.8 Stamp

Just as you would use a rubber stamp, you can stamp images and text anywhere on a document. You can choose either from a list of pre-defined stamps or create your own stamps. Perform the following steps to add stamp:

1. On the **Annotation** menu, click **Stamp** OR click on the Stamp icon from the Annotation toolbar OR use shortcut key **CTRL** + **ALT** + **S**.
2. Click where you want to place the stamp.

Edit Properties of Stamp

1. Select the annotation.
2. Right click and click **Properties**.
3. The **Stamp Properties** dialog box is displayed.
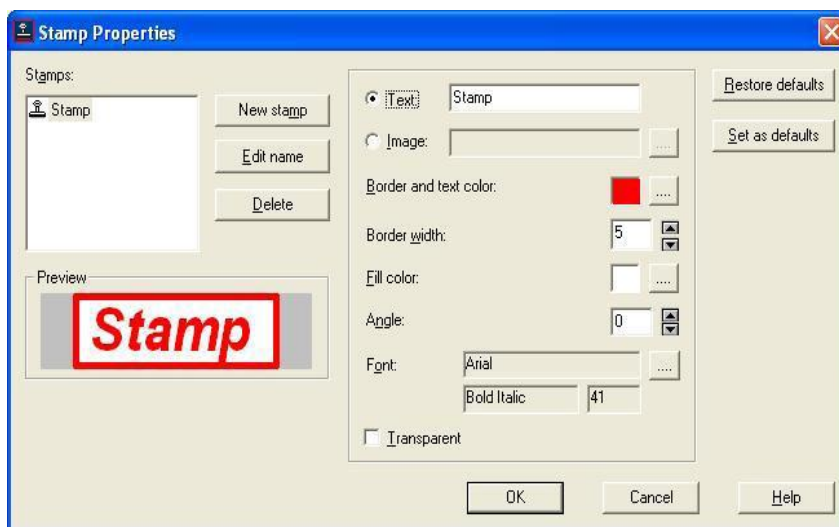
4. *To change the color of the stamp*: Click on the Border and text color button. The color palette is displayed. Select the required color.

5. *To adjust thickness of the stamp*: Enter the required value in the Border width text box OR minimize or maximize the up and down arrows.
6. *To fill color in the stamp*: Click on the Fill color button. The color palette is displayed. Select the required color.
7. *To change the angle of the stamp*: Enter the required value in Angle text box OR minimize or maximize the up and down arrows.
8. *To change the formatting of stamp*: Click on the Font button. The font dialog box is displayed. Make required formatting changes.
9. *To edit the text of the stamp*: Edit the existing text of the stamp in the Text box OR click on the **Edit name** button. Clicking the button will take the cursor to Text box.
10. *To display image in a stamp*: Click on **Image** radio button. Click on Image button. The **Select Stamp Image** dialog box is displayed. Click on **Browse** button and navigate to the image that you want to display. Adjust the height and width of the image in **Resize** group box. Once done, click **OK**.
11. Click on the **Transparent** checkbox to make text transparent.
12. Click on **Set as Defaults** button to make existing property values as default values.
13. Click on **Restore Defaults** button to restore default properties.
14. Once you finished, click **OK**.

☞ As you change the properties of stamp, it will be reflected in Preview section.

To Create New Stamps

All the existing stamps are located in the list of pre-defined stamps. If you want to add a specific stamp, then you can create a new stamp in MST Viewer. Perform the following steps to create a new stamp:

1. On the **Annotation** menu, click **Stamp** OR click on the Stamp icon from the Annotation toolbar OR use shortcut key **CTRL** + **ALT** + **S**.
2. Click where you want to place the stamp.
3. Select the annotation.
4. Right click and click **Properties**.
5. The **Stamp Properties** dialog box is displayed.
6. Click **New Stamp** button.
7. The **New Stamp Properties** button dialog box is displayed.
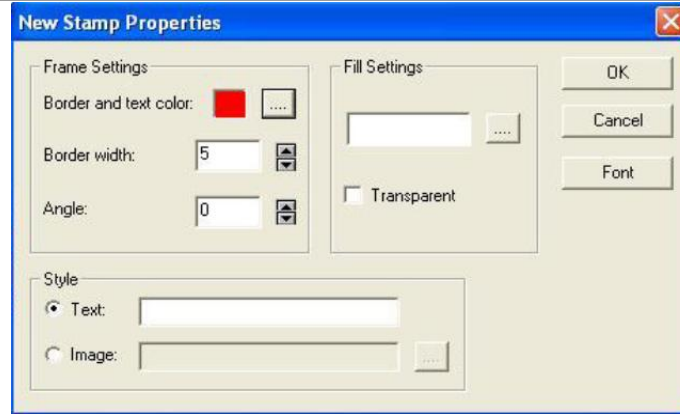
8. Under **Frame Settings** group box, for the new stamp, select the border and text color, thickness and angle in **Border and text color**, **Border width** and **Angle** fields respectively.
9. Under **Fill Settings** group box, if you want to fill the color inside the stamp then click on the button. The color palette is displayed. Select the required color. Click OK. Click on the **Transparent** checkbox to make stamp transparent.
10. Under **Style** group box, select from the available options the type of new stamp either **Text** or **Image**. For Text stamp, enter the name of the stamp in the text box. For Image stamp, click on Image button. The **Select Stamp Image** dialog box is displayed. Click on **Browse** button and navigate to the image that you want to display. Adjust the height and width of the image in **Resize** group box. Once done, click **OK**.
11. Click on the **Font** button to change formatting of text.
12. Once done, click **OK**.
13. The newly created stamp has been created and will be listed in the **Stamps** list box.
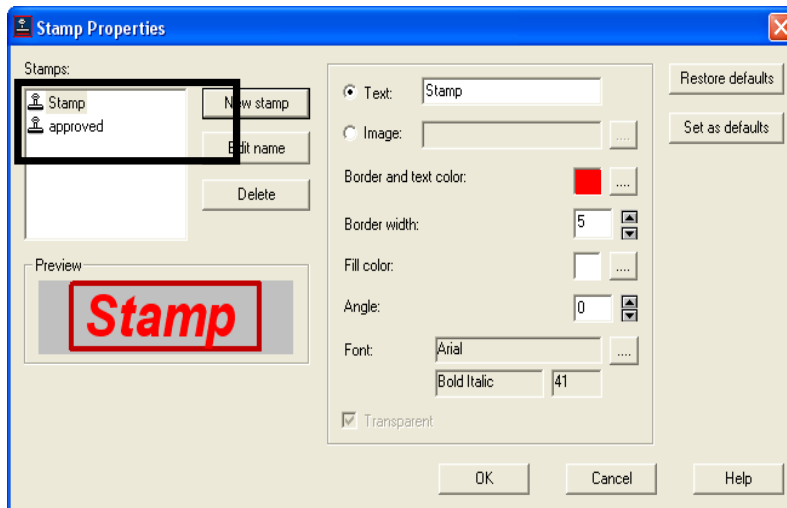
14. Select from the list of stamps the stamp that you want to stamp.
15. Click on **Set as Defaults** button to make newly created stamp as a default stamp.
16. Once done, click **OK**.

Delete a Stamp:

Perform the following steps to delete any existing or pre-defined stamps:

1. On the **Annotation** menu, click **Stamp** OR click on the Stamp icon from the Annotation toolbar OR use shortcut key **CTRL + ALT + S**.
2. Click where you want to place the stamp.
3. Select the annotation.
4. Right click and click **Properties**.
5. The Stamp **Properties** dialog box is displayed.
6. Select the stamp from the list of available stamps in **Stamps** group box.
7. Click **Delete**.
8. The selected stamp has been removed from the list of pre-defined stamps.

☞ You cannot delete all the stamps. There should be atleast one stamp be available in the list.

5.9 Sticky Note

Sticky Note is quite similar to typical sticky note that is stuck with the hard copy documents. It is more efficient and provides a natural and familiar means by which you can add and share comments in the form of a note anywhere on a page over text, images or blank spaces without editing the content. Perform the following steps to add a sticky note:

1. On the **Annotation** menu, click **Sticky Note** OR click on the Sticky Note icon from the Annotation toolbar OR use shortcut key **CTRL + ALT + N**.
2. Click on the screen to stick down your note.
3. It will open a sticky note in edit mode.
4. Enter comments in the note.
5. Once done, click outside of the note to release from sticky note.

Edit Properties of Sticky Note

1. Select the annotation.
2. Right click and click **Properties**.
3. The **Sticky Note Properties** dialog box is displayed.
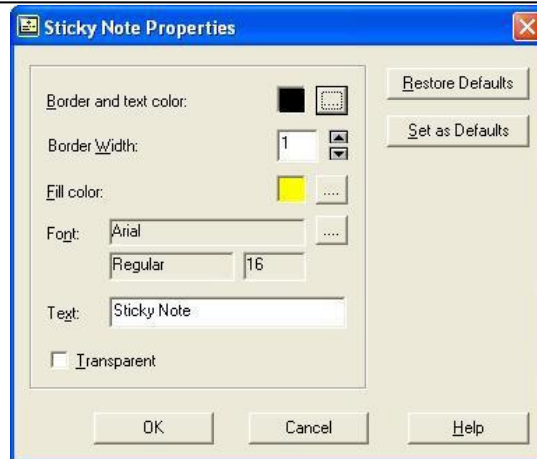
4. *To change the border and text color of the Sticky Note*: Click on the **Border and text color** button. The color palette is displayed. Select the required color.
5. *To adjust thickness of the Sticky Note*: Enter the required value in the **Border Width** text box OR minimize or maximize the up and down arrows.
6. *To fill color in the Sticky Note*: Click on the **Fill color** button. The color palette is displayed. Select the required color.
7. *To change the formatting of Sticky Note*: Click on the **Font** button. The font dialog box is displayed. Make required formatting changes.
8. *To edit the text of the Sticky Note*: Edit the existing text of the Sticky Note in the Text box.
9. Click on the **Transparent** checkbox to make Sticky Note transparent.
10. Click on **Set as Defaults** button to make existing property values as default values.
11. Click on **Restore Defaults** button to restore default properties.
12. Once **you** finished, click **OK**.

☞ Sticky Notes can be shown, hidden or displayed as an icon on a page by selecting option **Show Sticky Note** from **Annotation** menu.

5.10 Mask

This annotation tool is used to hide certain part of a file or document. Perform the following steps to draw mask:

1. On the **Annotation** menu, click **Mask** OR use shortcut key **CTRL** + **ALT** + **M**.
2. Click on the screen and drag diagonally and release the mouse button.

5.11   Setting Priority to Annotations

The priority of the annotation on a document or a page can be set by performing the following steps:

1. Select annotation on a page.
2. *To bring an image in front of annotation*: Select **Bring to Front** option from **Annotation** menu.
3. *To send an image at the back of annotation*: Select **Send to Back** option from **Annotation** menu.

5.12   Making Annotations Permanent

The annotations drawn on a document or a page can be set permanent by performing the following steps:

1. Draw annotation(s) on a document or page.
2. Select annotation(s) that you want to fix.
3. Select **Burn Annotation** option from **Annotation** menu.
4. The selected annotation has been fixed permanently i.e. they will not move now.

6. Short Cut Keys

Short Cut keys provide an easier and quicker method of navigating and using software. Short Cut keys are commonly accessed by using **ALT**, **CTRL**, or **SHIFT** in conjunction with a single letter.

As you begin to memorize shortcut keys, you'll notice that many applications share the same shortcut keys. The below basic shortcut keys are a listing of shortcut keys that will work with almost all IBM compatible computers and software programs. It is highly recommended that all users keep a good reference of the below shortcut keys or try to memorize the below keys. Doing so will dramatically increase your productivity.

Command	Short Cut Key
Open	Ctrl + O
Close	Ctrl + W
Close All Documents	Ctrl + Shift + W
Save As	F12
Print	Ctrl + P
Cut	Ctrl + X
Copy	Ctrl + C
Paste	Ctrl + V
Insert Page	Insert
Delete Selected	Delete
Delete Document	Ctrl + Delete
Delete All Document	Ctrl + Shift + Delete
Select All Pages	Ctrl + Shift + A

Deselect All Pages	Ctrl + Shift + D
Crop Page	Ctrl + Shift + C
First Page	Home
Previous Page	Page Up
Last Page	End
Next Page	Page Down
Go To Page	Ctrl + G
First document	F7
Next Document	Ctrl + Page up
Last Document	Ctrl + Page Down
Previous Document	F8
Thumbnails	Ctrl + F11
Hide Annotations	F11
Enhance	Ctrl + E
Zoom In	+
Zoom Out	-
Custom Zoom	Ctrl + M
Actual Size	Shift + A
Fit in Window	Shift + F
Fit to Width	Shift + W
Fit to Height	Shift + H
Rotate Right	Ctrl + Arrow Right
Rotate Left	Ctrl + Arrow Left
Rotate 180	Ctrl + Arrow Down
Invert	Ctrl + Alt + I
Magnifying Lens	Alt + L
Image Properties	Ctrl + Alt + Enter
Pen	Ctrl + Alt + P
Highlighter	Ctrl + Alt + H
Rectangle	Ctrl + Alt + R
Circle	Ctrl + Alt + C
Line	Ctrl + Alt + L
Arrow	Ctrl + Alt + A
Sticky Note	Ctrl + Alt + N
Stamp	Ctrl + Alt + S
Text	Ctrl + Alt + T