MST Viewer (.Net)®

A MS Technology Product

Digital Imaging and Document Management Solutions

Developer Guide

Version 1.00.20

P.O. Box 471843
Charlotte, NC 28247

Tel: (704) 544 – 3403
Fax: (704) 544 – 0262
Email: info@ms-technology.com

www.ms-technology.com

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1. API's of MST Viewer

1.1 Loading Documents

Sub **LoadViewer**(*strLoadDocXML* As **String**)
      Member of **PlugVBComLib**.**IMSVBCom**

Parameters Info

a) **strLoadDocXML:** An Xml stream defining one or more documents to be rendered.

e.g.
<xml>
<Documents>
<Document>
<WorkingSetName>XXX</WorkingSetName>
<DocumentName>XXX</DocumentName>
<DocumentRetrieveURL>http://XXX</DocumentRetrieveURL>
<ECMDocumentId>XX</ECMDocumentId>
<RenderingMode>DuringDownload</RenderingMode>
</Document>
</xml>

1.2 Page Navigation

- Sub **NextPage**(string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Next Page' action.

  The XML needs to be in the below format:

  e.g.
  <xml>
  <Action>
  <Type>NextPage</Type>
  </Action>
  </xml>

- Sub **PreviousPage**(string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Previous Page' action.

  The XML needs to be in the below format:

  e.g.
  <xml>
  <Action>
  <Type>PreviousPage</Type>
  </Action>
  </xml>

- Sub **GoToPage_Document**(string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Goto Page' action w.r.t. document ID.

  e.g.
  <xml>
  <Action>
  <Type>GoToPage_Document</Type>
  <WorkingSetName >XXX</ WorkingSetName>
  <ECMDocumentId>XXX</ECMDocumentId>
  <Document_PageNo >XXX</ Document_PageNo >
  </Action>
  </xml>

- Sub **GoToPage_WorkingSet**(string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Goto Page' action w.r.t. Working Set.

  e.g.
  <xml>
  <Action>
  <Type>GoToPage_Workingset</Type>
  <WorkingSetName >XXX</ WorkingSetName>
  <WorkingSet_PageNo>XX</WorkingSet_PageNo>
  </Action>
  </xml>

1.3 Document Navigation

- Sub **NextDocument**(string strActionXML)
    Member of **PlugVBComLib**.**IMSVBCom**
  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Next Document' action.

    The XML needs to be in the below format:
    e.g.
    <xml>
    <Action>
    <Type>NextDocument</Type>
    </Action>
    </xml>

- Sub **PreviousDocument**(string strActionXML)
    Member of **PlugVBComLib**.**IMSVBCom**
  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Previous Document' action.

    The XML needs to be in the below format:
    e.g.
    <xml>
    <Action>
    <Type>PreviousDocument</Type>
    </Action>
    </xml>

- Sub **GoTo_Document**(string strActionXML)
    Member of **PlugVBComLib**.**IMSVBCom**
  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Goto Document' action.
    e.g.
    <xml>
    <Action>
    <Type>GoTo_Document</Type>
    < WorkingSetName>XXX</WorkingSetName>
    <ECMDocumentId>XXX</ECMDocumentId>
    </Action>
    </xml>

1.4 Document Comparison

- Sub **Split_Horizontal_WorkingSet**(string strActionXML)
    Member of **PlugVBComLib**.**IMSVBCom**

    Parameters Info

    a) **strActionXML:** An Xml stream defining 'Horizontal Split' action w.r.t. working set.
    e.g. w.r.t. WS
    <xml>
    <Action>
    <Type>Split_Horizontal_WorkingSet</Type>
    <WorkingSetName>XXX</WorkingSetName>
    <Split_Screen_Top>
        <WorkingSet_PageNo>XXX</WorkingSet_PageNo>
    </Split_Screen_Top>
    <Split_Screen_Bottom>
        <WorkingSet_PageNo>XXX</WorkingSet_PageNo>
    </Split_Screen_Bottom>
    </Action>
    </xml>

- Sub **Split_Horizontal_Document**(string strActionXML)
    Member of **PlugVBComLib**.**IMSVBCom**

    Parameters Info

    b) **strActionXML:** An Xml stream defining 'Horizontal Split' action w.r.t. Document.
    e.g. w.r.t. Doc
    <XML>
    <Action>
    <Type> Split_Horizontal_Document </Type>
    <WorkingSetName>XXX</WorkingSetName>
    <Split_Screen_Top>
        <ECMDocumentId>XXX</ECMDocumentId>
        <Document_PageNo>XXX</Document_PageNo>
    </Split_Screen_Top>
    <Split_Screen_Bottom>
        <ECMDocumentId>XXX</ECMDocumentId>
        <Document_PageNo>XXX</Document_PageNo>
    </Split_Screen_Bottom>
    </Action>
    </XML>

- Sub **Split_Vertical_WorkingSet**(string strActionXML)
    Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Vertical Split' action w.r.t. working set.
    e.g. w.r.t. Working Set
    <xml>
    <Action>
    <Type>Split_Vertical_Workingset</Type>
    <WorkingSetName>XXX</WorkingSetName>
    <Split_Screen_Left>
        <WorkingSet_PageNo>XXX</WorkingSet_PageNo>
    </Split_Screen_Left>
    <Split_Screen_Right>
        <WorkingSet_PageNo>XXX</WorkingSet_PageNo>
    </Split_Screen_Right>
    </Action>
    </xml>

- Sub **Split_Vertical_Document**(string strActionXML)
    Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  b) **strActionXML:** An Xml stream defining 'Vertical Split' action w.r.t. Document.

    e.g. w.r.t Document
    <XML>
    <Action>
    <Type> Split_Vertical_Document </Type>
    <WorkingSetName>XXX</WorkingSetName>
    <Split_Screen_Left>
        <ECMDocumentId>XXX</ECMDocumentId>
        <Document_PageNo>XXX</Document_PageNo>
    </Split_Screen_Left>
    <Split_Screen_Right>
        <ECMDocumentId>XXX</ECMDocumentId>
        <Document_PageNo>XXX</Document_PageNo>
    </Split_Screen_Right>
    </Action>
    </XML>

- Sub **Remove_Split_Horizontal**(string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Remove Horizontal Split' action.
     e.g.
     <XML>
     <Action>
     <Type>Remove_Split_Horizontal</Type>
     <WorkingSetName>XXX</WorkingSetName>
     </Action>
     </XML>

- Sub **Remove_Split_Vertical** (string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Remove Vertical Split' action.
     e.g.
     <XML>
     <Action>
     <Type>Remove_Split_Vertical</Type>
     <WorkingSetName>XXX</WorkingSetName>
     </Action>
     </XML>

- Sub **Remove_Split** (string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Remove Split' action.
     e.g.

     <XML>
     <Action>
     <Type>Remove_Split</Type>
     <WorkingSetName>XXX</WorkingSetName>
     </Action>
     </XML>

- Sub **Split_Horizontal_SetFocus** (string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Focus shift on Split' action.

  e.g.
  <XML>
  <Action>
  <Type>Split_Horizontal_SetFocus</Type>
  <WorkingSetName>XXX</WorkingSetName>
  <Focus>Top</Focus>
  </Action>
  </XML>

- Sub **Split_Vertical_SetFocus** (string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'Focus shift on Split' action.

  e.g.
  <XML>
  <Action>
  <Type>Split_Vertical_SetFocus</Type>
  <WorkingSetName>XXX</WorkingSetName>
  <Focus>Left</Focus>
  </Action>
  </XML>

- Sub **Scroll_Vertical_PageDown** (string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'PageDown event on vertical scroll' action.

  e.g.
  <XML>
  <Action>
  <Type>Scroll_Vertical_PageDown</Type>
  </Action>
  </XML>

- Sub **Scroll_Vertical_PageUp** (string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'PageUp event on vertical scroll'
     action.
     e.g.
     <XML>
     <Action>
     <Type>Scroll_Vertical_PageUp</Type>
     </Action>
     </XML>

- Sub **Scroll_Horizontal_PageRight** (string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'PageRight event on Horizontal scroll'
     action.
     e.g.
     <XML>
     <Action>
     <Type>Scroll_Horizontal_PageRight</Type>
     </Action>
     </XML>

- Sub **Scroll_Horizontal_PageLeft** (string strActionXML)
  Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  a) **strActionXML:** An Xml stream defining 'PageLeft event on Horizontal scroll'
     action.
     e.g.
     <XML>
     <Action>
     <Type>Scroll_Horizontal_PageLeft</Type>
     </Action>
     </XML>

1.5 Document Closing

- Sub **CloseDocument** (string strActionXML)
     Member of **PlugVBComLib**.**IMSVBCom**

Parameters Info

b) **strActionXML:** An Xml stream defining 'Close Document' action.

  e.g.
<XML>
<Action>
<Type>CloseDocument</Type>
<WorkingSetName>XXX</WorkingSetName>
<ECMDocumentId>XXX</ECMDocumentId>
</Action>
</XML>

- Sub **CloseAllDocuments** (string strActionXML)
     Member of **PlugVBComLib**.**IMSVBCom**

Parameters Info

c) **strActionXML:** An Xml stream defining 'Close All Documents' action.

  e.g.
<XML>
<Action>
<Type>CloseAllDocuments</Type>
<WorkingSetName>XXX</WorkingSetName>
</Action>
</XML>

- Sub **CloseAllWorkingSet** (string strActionXML)
     Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  d) **strActionXML:** An Xml stream defining 'Close All Documents in all open working set windows' action.

  e.g.
  <XML>
  <Action>
  <Type>CloseAllWorkingSet</Type>
  </Action>
  </XML>

- Sub **CloseApplication** (string strActionXML)
     Member of **PlugVBComLib**.**IMSVBCom**

  Parameters Info

  e) **strActionXML:** An Xml stream defining 'Close application' action.

  e.g.
  <XML>
  <Action>
  <Type>CloseApplication</Type>
  </Action>
  </XML>

2. XML Scripts

2.1 Loading Documents

The XML script for loading can be described to load single or multiple documents from a single action script.

<xml>
<Documents>
<Document>
//XML Tags represent the document
</Document>
</Documents>
</xml>

<u>Below tags need to be specified:</u>

1) WorkingSetName [Required]

    A unique name to the working set.
    e.g. "<WorkingSetName>WS_1</WorkingSetName>"

2) DocumentName [Required]

    Name to be displayed in MST Viewer.

3) DocumentRetrieveURL [Required]

    A http url to the document.
    e.g. "http://server84/ICMResEnu?...."

4) ECMDocumentId [Required]

    Unique identifier to the document.
    e.g. "45" or "34A" or "{00000010-0000-0010-8000-00AA006D2EA4}"

5) RenderingMode [Required]

    Specify if you need Fast First Page display. It can have 2 values:

    o   During download: Document is downloaded in asynchronous mode. Such that as soon as the first page is downloaded it is displayed.

Or

- o After Download: Complete document is down first then then it is rendered.
  e.g. "<RenderingMode>DuringDownload</RenderingMode>"

6) DocumentTimeOut [Optional]

Provide the download timeout value in seconds.

If no response is received from the server during download during the specified duration then the downloading is automatically aborted.

The default timeout value is 10 seconds.
e.g. "<DocumentTimeOut>DuringDownload</DocumenttimeOut>"

7) ReadOnly [Optional]

Provides read only access to document. The user will be unable to draw new annotations.
The default read only value is "false".

8) SET_FOCUS_FL [Optional]

Can be set to "true" or "false".

If set to "true" then the document will catch the focus. If set to "false" then the document will not shift into focus, the previous document in focus will remain in focus.

The default Set Focus Flag is "false".
e.g. "<SET_FOCUS_FL>true</SET_FOCUS_FL>"

2.2 Next Page

The XML action scripts for navigating to next page of the current document (if one exists).

If next page does not exist then no action is performed.

<xml>
<Action>
<Type>NextPage</Type>
</Action>
</xml>

Below tags need to be specified:
1) Type: Should be set to "NextPage".

2.3 Previous Page

The XML action scripts for navigating to previous page of the current document (if one exists).

If previous page does not exist then no action is performed.

<xml>
<Action>
<Type>PreviousPage</Type>
</Action>
</xml>

Below tags need to be specified:
1) Type: Should be set to "PreviousPage".

2.4 Go To Page w.r.t. Document

Go To a specified page of a document in a working set.

<XML>
<Action>
<Type>GoToPage_Document</Type>
<WorkingSetName>XXX</WorkingSetName>
<ECMDocumentId>XXX</ECMDocumentId>
<Document_PageNo>XXX</Document_PageNo>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "GoToPage_Doc".
2) WorkingSetName: Name of the working set being referred to.
3) ECMDocumentId: Unique ID of the document present in the specified working set.
4) Document_PageNo: Page number w.r.t. document.

2.5 Go To Page w.r.t. Working Set

GoTo a specified page of a document in a working set.

<XML>
<Action>
<Type>GoToPage_WorkingSet</Type>
<WorkingSetName>XXX</WorkingSetName>
<WorkingSet_PageNo>XXX</WorkingSet_PageNo>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "GoToPage_WorkingSet".
2) WorkingSetName: Name of the working set being referred to.
3) WorkingSet_PageNo: Page number w.r.t. workingset.

2.6 Next Document

Move to next document in a working set.

<XML>
<Action>
<Type>NextDocument</Type>
</Action>
</XML>

Below tags need to be specified:
    1) Type: Should be set to "NextDocument".

2.7 Previous Document

Move to next document in a working set.

<XML>
<Action>
<Type>PreviousDocument</Type>
</Action>
</XML>

Below tags need to be specified:
    1) Type: Should be set to "PrevDocument".

2.8 Go To Document

Move to a desired document ID in a working set.

<XML>
<Action>
<Type>GoTo_Document</Type>
<WorkingSetName>XXX</WorkingSetName>
<ECMDocumentId>XXX</ECMDocumentId>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "GoTo_Document".
2) WorkingSetName: Name of the working set being referred to.
3) ECMDocumentId: Unique ID of the document present in the specified working set.

2.9 Document Comparison (Horizontal Split) w.r.t Document ID

Performs Horizontal split w.r.t. Document ID

<XML>
<Action>
<Type>Split_Horizontal_Document</Type>
<WorkingSetName>XXX</WorkingSetName>
<Split_Screen_Top>
        <ECMDocumentId>XXX</ECMDocumentId>
        <Document_PageNo>XXX</Document_PageNo>
</Split_Screen_Top>
<Split_Screen_Bottom>
        <ECMDocumentId>XXX</ECMDocumentId>
        <Document_PageNo>XXX</Document_PageNo>
</Split_Screen_Bottom>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "Split_Horizontal_Doc".
2) WorkingSetName: Name of the working set being referred to.
3) ECMDocumentId: Unique ID of the document present in the specified working set.
4) Document_PageNo: Page number w.r.t. document.

2.10 Document Comparison (Horizontal Split) w.r.t Working Set

Performs Horizontal split w.r.t. Document ID

<xml>
<Action>
<Type>Split_Horizontal_WorkingSet</Type>
<WorkingSetName>XXX</WorkingSetName>
<Split_Screen_Top>
*   <WorkingSet_PageNo>XXX</WorkingSet_PageNo>*
</Split_Screen_Top>
<Split_Screen_Bottom>
*   <WorkingSet_PageNo>XXX</WorkingSet_PageNo>*
</Split_Screen_Bottom>
</Action>
</xml>

Below tags need to be specified:
1) Type: Should be set to "Split_Horizontal_WS".
2) WorkingSetName: Name of the working set being referred to.
3) WorkingSet_PageNo: Page number w.r.t. workingset.

2.11 Document Comparison (Vertical Split) w.r.t Document ID

Performs Vertical split w.r.t. Document ID
<XML>
<Action>
<Type>Split_Vertical_Document</Type>
<WorkingSetName>XXX</WorkingSetName>
<Split_Screen_Left>
*   <ECMDocumentId>XXX</ECMDocumentId>*
*   <Document_PageNo>XXX</Document_PageNo>*
</Split_Screen_Left>
<Split_Screen_Right>
*   <ECMDocumentId>XXX</ECMDocumentId>*
*   <Document_PageNo>XXX</Document_PageNo>*
</Split_Screen_Right>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "Split_Vertical_Document".
2) WorkingSetName: Name of the working set being referred to.
3) ECMDocumentId: Unique ID of the document present in the specified working set.
4) Document_PageNo: Page number w.r.t. Document.

2.12 Document Comparison (Vertical Split) w.r.t Working Set

Performs Vertical split w.r.t. Working set.

<XML>
<Action>
<Type>Split_Vertical_WorkingSet</Type>
<WorkingSetName>XXX</WorkingSetName>
<Split_Screen_Left>
*   <WorkingSet_PageNo>XXX</WorkingSet_PageNo>*
</Split_Screen_Left>
<Split_Screen_Right>
*   <WorkingSet_PageNo>XXX</WorkingSet_PageNo>*
</Split_Screen_Right>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "Split_Vertical_WorkingSet".
2) WorkingSetName: Name of the working set being referred to.
3) WorkingSet_PageNo: Page number w.r.t. working set.

2.13 End Horizontal Split

Remove Horizontal split.

<XML>
<Action>
<Type>Remove_Split_Horizontal</Type>
<WorkingSetName>XXX</WorkingSetName>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "Remove_Split_Horizontal".
2) WorkingSetName: Name of the working set being referred to.

2.14 End Vertical Split

Remove Vertical split.

<XML>
<Action>
<Type>Remove_Split_Vertical</Type>
<WorkingSetName>XXX</WorkingSetName>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "Remove_Split_Vertical".
2) WorkingSetName: Name of the working set being referred to.

2.15 End Horizontal or Vertical Split

Removes Horizontal or Vertical split.

<XML>
<Action>
<Type>Remove_Split </Type>
<WorkingSetName>XXX</WorkingSetName>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "Remove_Split".
2) WorkingSetName: Name of the working set being referred to.

2.16 Set Focus (Horizontal Split)

Set focus to one of the horizontal split view.

<XML>
<Action>
<Type>Split_Horizontal_SetFocus</Type>
<WorkingSetName>XXX</WorkingSetName>
<Focus>Top</Focus>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "Split_Horizontal_SetFocus".
2) WorkingSetName: Name of the working set being referred to.
3) Focus: Can be set to "Top" or "Bottom".

2.17 Set Focus (Vertical Split)

Set focus to one of the vertical split view.

<XML>
<Action>
<Type>Split_Vertical_SetFocus</Type>
<WorkingSetName>XXX</WorkingSetName>
<Focus>Left</Focus>
</Action>
</XML>

Below tags need to be specified:
1) Type: Should be set to "Split_Vertical_SetFocus".
2) WorkingSetName: Name of the working set being referred to.
3) Focus: Can be set to "Left" or "Right"

2.18 Vertical Page Scroll

Set focus to one of the vertical split view.

<XML>
<Action>
<Type>Scroll_Vertical_PageDown</Type>
</Action>
</XML>

Below tags need to be specified:
   1) Type: Can be "Scroll_Vertical_PageDown" or "Scroll_Vertical_PageUp".

2.19 Horizontal Page Scroll

Set focus to one of the vertical split view.

<XML>
<Action>
<Type>Scroll_Horizontal_PageLeft</Type>
</Action>
</XML>

Below tags need to be specified:
   1) Type: Can be "Scroll_Horizontal_PageLeft" or "Scroll_Horizontal_PageRight".

2.20 Close Single Document

Set focus to one of the vertical split view.

<xml>
<Action>
<Type>CloseDocument</Type>
<WorkingSetName>XXX</WorkingSetName>
<ECMDocumentId>XXX</ECMDocumentId>
</Action>

Below tags need to be specified:
1) Type: Should be "CloseDocument".
2) WorkingSetName: Name of the working set being referred to.
3) ECMDocumentId: Unique ID of the document present in the specified working set.

2.21 Close All Documents

Set focus to one of the vertical split view.

<xml>
<Action>
<Type>CloseAllDocuments</Type>
<WorkingSetName>XXX</WorkingSetName>
</Action>
</xml>

Below tags need to be specified:
1) Type: Should be "CloseAllDocuments".

2.22 Close Application

Set focus to one of the vertical split view.

<xml>
<Action>
<Type>CloseApplication</Type>
</Action>
</xml>

Below tags need to be specified:
1) Type: Should be "CloseApplication".

2.23 Close All Working Sets

Set focus to one of the vertical split view.

<xml>
<Action>
<Type>CloseAllWorkingSet</Type>
</Action>
</xml>

Below tags need to be specified:
1) Type: Should be "CloseAllWorkingSet".