How to...

Change Page Scrolling in a Web Table Item

BUSINESS INFORMATION WAREHOUSE

ASAP "How to…" Paper

Applicable Releases: BW 3.0B, BW 3.1 Content

June 2003

1 Preliminary Information

With BW 3.0B Support Package 13/ BW 3.1C Support Package 7, two new attributes are available that control the number of data rows (BLOCK_STEP_SIZE) and the number of data columns (BLOCK_STEP_SIZE_COLUMNS) that are scrolled forward for each step in the Web Table item.

These parameters should be used in place of this How-To paper once your BW system is on BW 3.0B Support Package 13 or higher (BW 3.1C Support Package 7 or higher). However, if you would like to include multiple scrolling options in your Web Application then you could continue to use this.

Please check the BW Documentation Enhancement **'3.0B SP13 New Attributes for the Web Item Table'** on the SAP Service Marketplace for more information.

2 Background

When the scroll bar is generated by the BW system for a Web Table Item, two-thirds of the BLOCK_SIZE (number of data rows displayed at once), or BLOCK_SIZE_COLUMNS (number of data columns displayed at once) are always scrolled forward when you scroll in the table.

The following two figures illustrate how the system works by default (prior to BW 3.0B SP13/ BW 3.1C SP 7). The Web Table Item has the parameter BLOCK_SIZE (number of data rows displayed at once) set to '20'. **Figure 1** shows the output for the first page.

Sold-to party		Material	Open orders	Open orders qty
1000	Adecom SA	Terminal P600 CN	$ 1,793,558.28	1,688 PC
		Result	**$ 1,793,558.28**	**1,688 PC**
1001	Becker AG	Terminal P600 CN	$ 1,424,850.56	1,009 PC
		Result	**$ 1,424,850.56**	**1,009 PC**
1013	.COM Center AG	Terminal P600 CN	$ 148,538.60	230 PC
		Result	**$ 148,538.60**	**230 PC**
1014	Netzwerk Berlin	Terminal P400 CN	$ 110,712.00	150 PC
		Result	**$ 110,712.00**	**150 PC**
1015	Global Music GmbH	Notebook Speedy I CN	$ 33,213.60	18 PC
		Result	**$ 33,213.60**	**18 PC**
1016	K.A.P.A. GmbH	Notebook Speedy I CN	$ 8,303.40	6 PC
		Notebook Speedy II CN	$ 58,123.80	36 PC
		Terminal P400 CN	$ 33,213.60	48 PC
		Result	**$ 99,640.80**	**90 PC**
1017	Omega Soft - Hardwar	Terminal P400 CN	$ 55,356.00	75 PC
		Result	**$ 55,356.00**	**75 PC**
1018	Electronics AG	Notebook Speedy I CN	$ 16,606.80	12 PC
		Result	**$ 16,606.80**	**12 PC**
1050	Becker Berlin	Notebook Speedy II CN	$ 34,654.60	12 PC
		Monitor flat 17 CN	$ 1,125,383.35	1,020 PC

Row 1 / 196

Figure 1 – Initial Page (Standard Implementation)

When a user decides to jump to the next page by selecting the icon ▼, one-third of the rows from the bottom of the previous page are scrolled forward to the beginning of the next page. The red box (**Figure 2**) shows the rows that were carried over from the previous page (**Figure 1**).

Sold-to party	Material	Open orders	Open orders qty
1016 K.A.P.A. GmbH	**Result**	**$ 99,640.80**	**90 PC**
1017 Omega Soft - Hardwar	Terminal P400 CN	$ 55,356.00	75 PC
	Result	**$ 55,356.00**	**75 PC**
1018 Electronics AG	Notebook Speedy I CN	$ 16,606.80	12 PC
	Result	**$ 16,606.80**	**12 PC**
1050 Becker Berlin	Notebook Speedy II CN	$ 34,654.60	12 PC
	Monitor flat 17 CN	$ 1,125,383.35	1,020 PC
	CN Service Plus	$ 35,667.58	6 DAY
	Result	**$ 1,195,705.53**	**1,038.000 MIX**
1111 P.S.G. GmbH	Terminal P600 CN	$ 251,869.80	390 PC
	Result	**$ 251,869.80**	**390 PC**
1170 Buy & Fly GmbH	Monitor flat 17 CN	$ 332,136.00	720 PC
	CN Service Plus	$ 20,758.50	9 PC
	Result	**$ 352,894.50**	**729 PC**
1191 ALDO Supermarkt	Notebook Speedy I CN	$ 199,281.60	108 PC
	Notebook Speedy II CN	$ 14,530.95	9 PC
	Monitor flat 21 CN	$ 221,424.00	300 PC
	CN Service Plus	$ 55,356.00	24 PC
	Result	**$ 490,592.55**	**441 PC**
1193 Forst AG	Monitor flat 17 CN	$ 221,424.00	480 PC

⏫ 🔼 Row 14 / 196 🔽 ⏬

Figure 2 – Next Page (Standard Implementation)

So on the second page there are seven rows that scrolled forward from the first page, and thirteen new rows that are now being displayed.

3 Business Scenario

You would like to change the page scrolling for a web table item in a BW Web Application. A parameter for a separate specification of the rows to be scrolled forward in the next page is not available.

However, you can create you own scroll function using JavaScript.

To scroll by a page, for example, you can use the following command:

    <SAP_BW_URL ITEM="TABLE_1" DATA_ROW_FROM="xx">

"xx" would be determined as follows: DATA_ROW_FROM + BLOCK_SIZE

4 The Result

In this "How To..." paper we will define a BEx Web Application that changes the standard page scrolling, so that the next page will begin with a new row and will not scroll forward any rows from the previous page.

Sold-to party		Material	Open orders	Open orders qty
1000	Adecom SA	Terminal P600 CN	$ 1,793,558.28	1,688 PC
		Result	**$ 1,793,558.28**	**1,688 PC**
1001	Becker AG	Terminal P600 CN	$ 1,424,850.56	1,009 PC
		Result	**$ 1,424,850.56**	**1,009 PC**
1013	.COM Center AG	Terminal P600 CN	$ 148,538.60	230 PC
		Result	**$ 148,538.60**	**230 PC**
1014	Netzwerk Berlin	Terminal P400 CN	$ 110,712.00	150 PC
		Result	**$ 110,712.00**	**150 PC**
1015	Global Music GmbH	Notebook Speedy I CN	$ 33,213.60	18 PC
		Result	**$ 33,213.60**	**18 PC**
1016	K.A.P.A. GmbH	Notebook Speedy I CN	$ 8,303.40	6 PC
		Notebook Speedy II CN	$ 58,123.80	36 PC
		Terminal P400 CN	$ 33,213.60	48 PC
		Result	**$ 99,640.80**	**90 PC**
1017	Omega Soft - Hardwar	Terminal P400 CN	$ 55,356.00	75 PC
		Result	**$ 55,356.00**	**75 PC**
1018	Electronics AG	Notebook Speedy I CN	$ 16,606.80	12 PC
		Result	**$ 16,606.80**	**12 PC**
1050	Becker Berlin	Notebook Speedy II CN	$ 34,654.60	12 PC
		Monitor flat 17 CN	$ 1,125,383.35	1,020 PC

⏫🔼 Row [1] 🔽⏬

Figure 3 – Initial Page (Business Scenario)

Now, when a user decides to jump to the next page by selecting the icon 🔽, the rows from the bottom of the previous page are no longer scrolled forward to the beginning of the next page.

Sold-to party		Material	Open orders	Open orders qty
1050	Becker Berlin	CN Service Plus	$ 35,667.58	6 DAY
		Result	**$ 1,195,705.53**	**1,038.000 MIX**
1111	P.S.G. GmbH	Terminal P600 CN	$ 251,869.80	390 PC
		Result	**$ 251,869.80**	**390 PC**
1170	Buy & Fly GmbH	Monitor flat 17 CN	$ 332,136.00	720 PC
		CN Service Plus	$ 20,758.50	9 PC
		Result	**$ 352,894.50**	**729 PC**
1191	ALDO Supermarkt	Notebook Speedy I CN	$ 199,281.60	108 PC
		Notebook Speedy II CN	$ 14,530.95	9 PC
		Monitor flat 21 CN	$ 221,424.00	300 PC
		CN Service Plus	$ 55,356.00	24 PC
		Result	**$ 490,592.55**	**441 PC**
1193	Forst AG	Monitor flat 17 CN	$ 221,424.00	480 PC
		CN Service Plus	$ 13,839.00	6 PC
		Result	**$ 235,263.00**	**486 PC**
1194	Save Software	Terminal P600 CN	$ 167,913.20	260 PC
		Result	**$ 167,913.20**	**260 PC**
1195	Intrasoft AG	Notebook Speedy I CN	$ 1,743,714.00	945 PC
		Notebook Speedy II CN	$ 581,238.00	360 PC
		Terminal P400 CN	$ 298,922.40	396 PC

Row 21

Figure 4 – Next Page (Business Scenario)
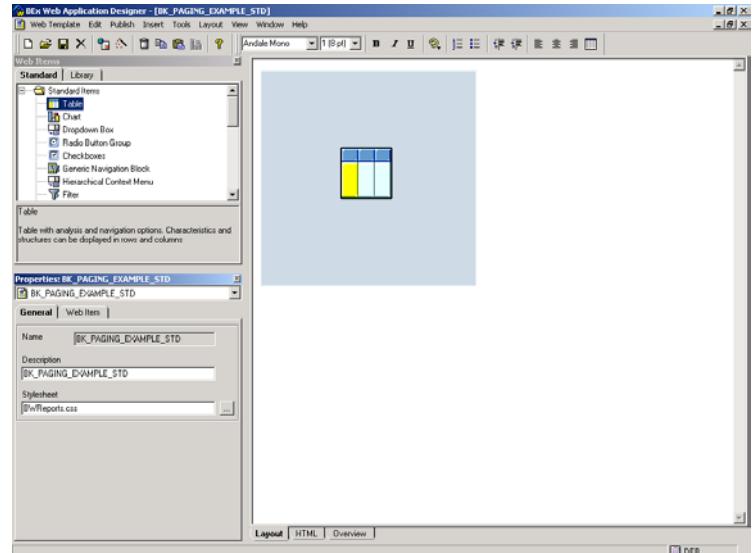
5 Preliminary Remarks

The solution in this "How To..." paper needs to be implemented for each template. Since HTML and Javascript are not specific to SAP, we wanted to take this approach. Additionally, the web table interface could be used to enhance this functionality by adding the total number of rows, or move some of the processing server-side.
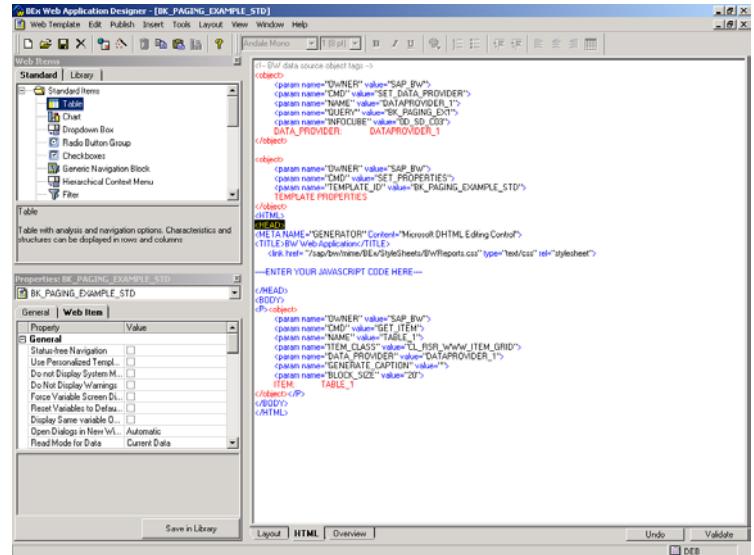
6 The Step By Step Solution

6.1 Create a BW Web Application in order to implement the page scrolling functionality

1. Create a BW Web Application using the BEx Web Application Designer. For example, drag & drop a Table web item into the layout tab of the template. Assign (Data Bind) a Query or Query View to your item. Save the template to your Favorites or to a Role.

2. Select the HTML tab.

3. Edit the HTML to add the Javascript code. Find the HTML tags <HEAD> and </HEAD>. Enter the code here (Part 1). See the Appendix for the code.

```
<HTML>
<HEAD>
<META NAME="GENERATOR" Content="Microsoft DHTML Editing
Control">
<TITLE>BW Web Application</TITLE>
    <link href= "/sap/bw/mime/BEx/StyleSheets/BWReports.css"
type="text/css" rel="stylesheet">

-----ENTER YOUR JAVASCRIPT CODE HERE (PART 1)----

</HEAD>
<BODY>
<P><object>
    <param name="OWNER" value="SAP_BW">
    <param name="CMD" value="GET_ITEM">
    <param name="NAME" value="TABLE_1">
    <param name="ITEM_CLASS"
value="CL_RSR_WWW_ITEM_GRID">
    <param name="DATA_PROVIDER" value="DATAPROVIDER_1">
    <param name="GENERATE_CAPTION" value="">
    <param name="BLOCK_SIZE" value="20">
    ITEM:        TABLE_1
</object></P>
</BODY>
</HTML>
```

4. Edit the HTML to add the Javascript code. Find the HTML tags <BODY> and </BODY>. Enter the code here (Part 2). See the Appendix for the code.
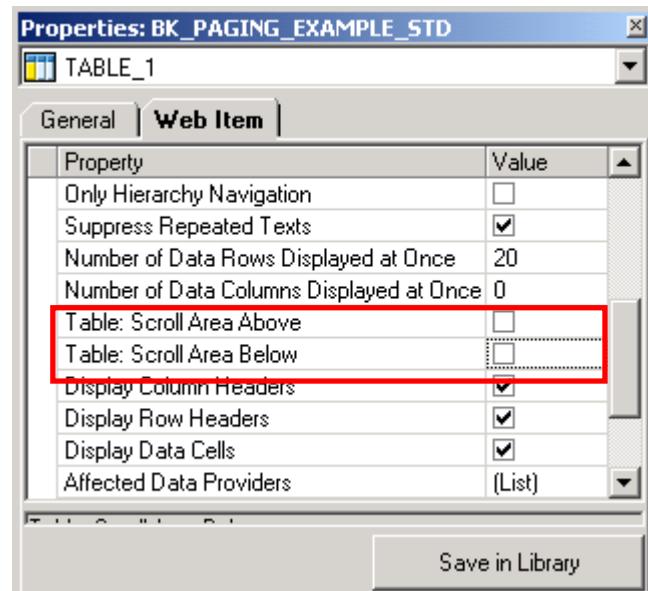
```
<HTML>
<HEAD>
<META NAME="GENERATOR" Content="Microsoft DHTML Editing
Control">
<TITLE>BW Web Application</TITLE>
    <link href= "/sap/bw/mime/BEx/StyleSheets/BWReports.css"
type="text/css" rel="stylesheet">

-----ENTER YOUR JAVASCRIPT CODE HERE (PART 1)----

</HEAD>
<BODY>
<P><object>
    <param name="OWNER" value="SAP_BW">
    <param name="CMD" value="GET_ITEM">
    <param name="NAME" value="TABLE_1">
    <param name="ITEM_CLASS"
value="CL_RSR_WWW_ITEM_GRID">
    <param name="DATA_PROVIDER" value="DATAPROVIDER_1">
    <param name="GENERATE_CAPTION" value="">
    <param name="BLOCK_SIZE" value="20">
    ITEM:        TABLE_1
</object></P>

-----ENTER YOUR CODE HERE (PART 2)----

</BODY>
</HTML>
```
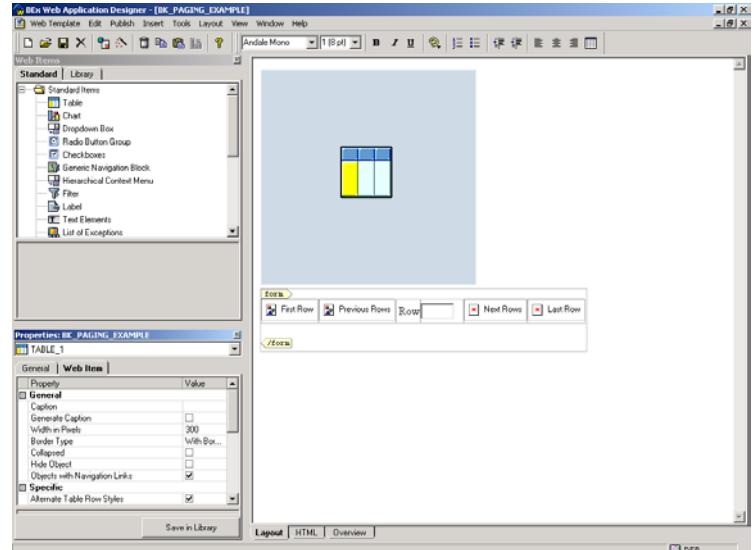
5. Remove the standard Scroll Area for the table. Deselect the two parameters for the Scroll Area.

Note: You can have the standard Scroll Areas active as well, so this is more for usability.

6. Switch to the Layout tab. The new Scroll Area should be displayed under your table item. Save the changes to your template.

7 Appendix

7.1 Javascript code for the <HEAD> tag

```
<script>
<!--
/* Get Actual Row (Parameter DATA_ROW_FROM) from Web Item TABLE_1
   For Documentation of SAPBWGetItemProp see Online-Help */
    function getActualRow() {
            var prop = SAPBWGetItemProp("TABLE_1");
        var actualRow=1;
         if (prop != null){
            for(var i=1;i<prop.length;i++){
                 if (prop[i][0] == "DATA_ROW_FROM") actualRow = (prop[i][1]);
                                          }
                         }
                 return actualRow;
            }
/* Get Block Size (Parameter BLOCK_SIZE) from Web Item TABLE_1
   For Documentation of SAPBWGetItemProp see Online-Help */
         function getBlockSize() {
            prop = SAPBWGetItemProp("TABLE_1");
            var blocksize=1;
        if (prop != null){
            for( var i=1;i<prop.length;i++){
                if (prop[i][0] == "BLOCK_SIZE") blocksize = (prop[i][1]);
                                         }
                         }
                 return blocksize;
         }

/* Set the paging images (active/inactive) for the Paging area
   and set Actual row in input field for Paging Area*/
         function setimages() {
            if (getActualRow()==1)
       {
                            document.getElementById("FirstRow").setAttribute("src",
"/sap/bw/Mime/BEx/Icons/page_first_row_inact.gif");
                            document.getElementById("PreviousPage").setAttribute("src",
"/sap/bw/Mime/BEx/Icons/page_up_inact.gif ");
                         }
                         else
                         {
                          document.getElementById("FirstRow").setAttribute("src",
"/sap/bw/Mime/BEx/Icons/page_first_row.gif");
             document.getElementById("PreviousPage").setAttribute("src",
"/sap/bw/Mime/BEx/Icons/page_up.gif ");
                         }
                 document.paging.datarow.value=getActualRow();

         }

/* Function to jump to First Row */
         function gotoFirstRow() {
            if (getActualRow()!=1)
                 SAPBWOpenURL(SAP_BW_URL_Get()+"&ITEM=TABLE_1&DATA_ROW_FROM=1");
         }

/* Function to show Previous Page */
         function gotoPreviousPage() {
            if (getActualRow()!=1) {
```

```
                var gotoPage=eval(getActualRow()) - eval(getBlockSize());
                if (gotoPage<0) gotoPage=1;

SAPBWOpenURL(SAP_BW_URL_Get()+"&ITEM=TABLE_1&DATA_ROW_FROM="+gotoPage);
            }
        }
/* Function to show Next Page */
        function gotoNextPage() {
                var gotoPage=eval(getActualRow()) + eval(getBlockSize());

SAPBWOpenURL(SAP_BW_URL_Get()+"&ITEM=TABLE_1&DATA_ROW_FROM="+gotoPage);
        }
/* Function to jump to last Row
   Last Row can not be evaluated; therefore last Row is set to 999 */
        function gotoLastRow() {
                SAPBWOpenURL(SAP_BW_URL_Get()+"&ITEM=TABLE_1&DATA_ROW_FROM=999");
        }

        -->
</script>
```

7.2   Paging area code for Table_1 in the <BODY> tag

```
<!-- Start of individual paging area for item TABLE_1 -->
  <table border="0" cellpadding="1" cellspacing="0">
  <tr>
  <td nowrap class="SAPBEXScrollVert">
  <FORM name="paging"   action="<SAP_BW_URL>&amp;ITEM=TABLE_1"
    method=post>
  <table cellpadding="0" cellspacing="0" border="0">
  <tr>
  <td nowrap class="SAPBEXTxtStd">
<!-- call function gotoFirstRow to jump to first Row of Table -->
  <span onClick="javascript:gotoFirstRow()">
  <IMG id="FirstRow" title="First Row" alt="First Row" border="0">
  </span>
  </td>
  <td nowrap class="SAPBEXTxtStd">
<!-- call function gotoPreviousPage to show Previous Page of Table -->
  <span onClick="javascript:gotoPreviousPage()">
  <IMG id="PreviousPage" title="Previous Rows" alt="Previous Rows" border="0">
  </span>
  </td>
  <TD class="SAPBEXTxtStd" noWrap>
    Row
  </TD>
  <TD noWrap>
<!-- Directly input of specific row -->
  <INPUT name="datarow" id="DATA_ROW_FROM" size="2" class="SAPBEXTxtFldright"
onChange="document.paging.submit()">   
  </TD>
  <td nowrap class="SAPBEXTxtStd">
<!-- call function gotoNextPage to show Next Page of Table -->
  <span onClick="javascript:gotoNextPage()">
  <IMG title="Next Rows" alt="Next Rows" src="/sap/bw/Mime/BEx/Icons/page_down.gif" border=0>
  </span>
  </td>
  <td nowrap class="SAPBEXTxtStd">
<!-- call function gotoLastRow to show Last Page of Table -->
  <span onClick="javascript:gotoLastRow()">
  <IMG title="Last Row" alt="Last Row" src="/sap/bw/Mime/BEx/Icons/page_last_row.gif" border=0>
  </span>
  </td>
  </tr>
  </table>
<script type="text/javascript">
    <!--
    /* Call function setimages to Set the active/inactive Images */
    setimages();
    -->
```

```
</script>
</FORM>
</td>
</tr>
</table>
<!-- End of individual paging area for item TABLE_1 -->
```

<!-- End of individual paging area for item TABLE_1 -->