



**THE CODE:**

The next bit of code sets up the entry screen and allows the user to enter the necessary parameters for their selection.

```
<%@taglib uri="http://www.sas.com/taglib/sasads"
prefix="sasads"%>

<jsp:useBean id="table" class="com.sas.servlet.beans.html.Table"
scope="session"/>
<%
//Initialize table for result report
table.setModelInterface(null);
%>

<%
response.setHeader("Cache-Control","no-cache");//HTTP 1.1
response.setHeader("Pragma","no-cache");//HTTP 1.0
response.setDateHeader("Expires", 0); //prevents caching at the
proxy server
%>

// get session vars based on user system access

<%
String htmlRoot = (String)session.getValue("htmlRoot");

if (htmlRoot == null) { htmlRoot = "http://reports.labone.com"; }

String mode = (String)session.getValue("mode");
if (mode == null) { mode = "prod"; }

String jspRoot = (String)session.getValue("jspRoot");
String fileRoot= (String)session.getValue("fileRoot");
String funcode = (String)session.getValue("funcode");
String status = (String)session.getValue("status");

// set up selection buttons based on user system access

String[] text = (String[])session.getValue("text");
String[] link = (String[])session.getValue("link");

if (status == null) { response.sendRedirect(htmlRoot); return; }
if (status == "FAILED") { response.sendRedirect(htmlRoot);
return; }
if (status == "EXPIRED") { response.sendRedirect(htmlRoot);
return; }

// replace ### with the code for your application, each
//application is assigned a code and users are given
//access to that application based on need

if (funcode.indexOf("SF1") == -1) {
response.sendRedirect(htmlRoot); return; }
%>

<html>
<head>

//sets up header for initial application screen

<title>Query Client Data Database</title>
<LINK REL=STYLESHEET TYPE="text/css"
href="<%=jspRoot%>/<%=mode%>/css/blue_red.css">

<!-- this script is required for the button menu navigation -->
<script language="JavaScript"
src="<%=mode%>/scripts/newsMenu.js"></script>
<SCRIPT LANGUAGE="JavaScript">
<!-- Hide it
//put any other scripts here
```

//--&gt;

**//This function checks the variables entered by the user  
//to make sure they are correct if not suitable error //messages  
are generated**

```
function validation()
{
var strError = "";

with (document.clientdataform)

{
if (AgentCode.value.length == 0 && ClientTrace.value.length == 0
&& GapTrace.value.length == 0 && Control.value.length == 0 &&
LastName.value.length == 0 && SSN.value.length == 0)

{strError = strError + "Agent Code is not provided.\n";}

if (ClientTrace.value.length > 0 && !TraceRadio[0].checked)

{strError = strError + "Client trace number is provided. But client
trace radio button is not selected.\n";}

if (GapTrace.value.length > 0 && !TraceRadio[1].checked)

{strError = strError + "Gap trace number is provided. But gap trace
radio button is not selected.\n";}

if (Control.value.length > 0 && !TraceRadio[2].checked)

{strError = strError + "Control number is provided. But control
number radio button is not selected.\n";}

if (LastName.value.length > 0 && !PersonRadio[0].checked)

{strError = strError + "Last name is provided. But last name radio
button is not selected.\n";}

if (SSN.value.length > 0 && !PersonRadio[1].checked)

{strError = strError + "SSN is provided. But SSN radio button is not
selected.\n";}

if ((SSN.value.length > 0) && (SSN.value.length != 9 ||
SSN.isNaN))

{strError = strError + "Wrong Social Security Number. SSN has to
be 9 digit numbers.\n";}
}

if (strError == "")

{return true;}
else {alert(strError);
return false;}
}

</script>

</head>

//sets up entry screen

<body marginheight="0" marginwidth="0" leftmargin="0"
topmargin="0">
<%@include file="../include/body_header"%>
<!------->
<center>
<form name="clientdataform" action="getClientdataResult.jsp"
method="post" onSubmit="return validation()">
```

```

<table border="0" cellpadding="0" cellspacing="1"
bgcolor="#004080" width=60%>
<tr><td></td></tr>
<tr><td>
bgcolor="#FFFFFF" align="center">
<table width="88%">
<tr><td colspan="3" class="footer">To narrow down your search,
make your selections below.</td></tr>
<tr><td colspan="3">&nbsp;</td></tr>
<tr><td> Company
Information:&nbsp;</td><td colspan="2">Agent Code:&nbsp;<input
type="text" name="AgentCode" size="10"></td></tr>
<tr><td colspan="3">&nbsp;</td></tr>
<tr><td> Job Status:&nbsp;</td>
<td colspan="2"><input type="radio" name="StatusRadio"
value="1,2,3,5,9" checked>&nbsp;<td colspan="2"></td></tr>
<tr><td>&nbsp;</td><td colspan="2"><input type="radio"
name="StatusRadio" value="3">&nbsp;<td colspan="2"></td></tr>
<tr><td>&nbsp;</td><td colspan="2"><input type="radio"
name="StatusRadio" value="1,2,5">&nbsp;<td colspan="2"></td></tr>
<tr><td colspan="3">&nbsp;</td></tr>
<tr><td> Trace
Number:&nbsp;</td><td><input type="radio" name="TraceRadio"
checked>&nbsp;<td colspan="2">Client Trace #:</td><td><input type="text"
name="ClientTrace" size="10"></td></tr>
<tr><td>&nbsp;</td><td><input type="radio"
name="TraceRadio">&nbsp;<td colspan="2">Gap Trace #:</td><td><input
type="text" name="GapTrace" size="10"></td></tr>
<tr><td>&nbsp;</td><td><input type="radio"
name="TraceRadio">&nbsp;<td colspan="2">Control #:</td><td><input type="text"
name="Control" size="10"></td></tr>
<tr><td colspan="3">&nbsp;</td></tr>
<tr><td> Personal
Information:&nbsp;</td><td>Company ID:</td><td>
<input type="text" name="CompanyID" size="10" value="" />
</td></tr>
<tr><td colspan="3">&nbsp;</td></tr>
</table>

```

#### // Create the Data SetInfo Interface to set up drop down //menu for compid information

```

com.sas.sasserver.datasetinfo.DataSetInfoInterface
getData = (com.sas.sasserver.datasetinfo.DataSetInfoInterface)
com.sas.servlet.util.Util.newInstance(rocf, con,
com.sas.sasserver.datasetinfo.DataSetInfoInterface.class);

// Set dataset name
getData.setDataSet("rubik.clientdata");
// Get dataset field value
String compidOption[] =
getData.getVariableUniqueValues(getData.getVariableIndex("COMP
ID"));
// Close dataset
getData.setDataSet("");

String strMain = "";
strMain = strMain + "<select name=CompId>";

```

```

for (int i=0; i<compidOption.length; i++)
{strMain = strMain + "<option value=" + compidOption[i] + ">" +
compidOption[i] + "\n";}

strMain = strMain + "</select>";
out.print(strMain);
%>
</td></tr>

```

#### //Set up personal information entry.

```

<tr><td>&nbsp;</td><td><input type="radio" name="PersonRadio"
checked>&nbsp;<td colspan="2">Last Name:</td><td><input type="text"
name="LastName" size="10"></td></tr>
<tr><td>&nbsp;</td><td><input type="radio"
name="PersonRadio">&nbsp;<td colspan="2">SSN #:</td><td><input type="text"
name="SSN" size="10"></td></tr>
<tr><td colspan="3">&nbsp;</td></tr>
<tr><td colspan="3" align="right"><input type="submit"
name="submit" value="Get Data"></td></tr>
<tr><td colspan="3">&nbsp;</td></tr>
</table>
</td></tr>

```

#### //This next bit of code takes the information entered and //goes to the dataset to pull in the requested info.

#### CLIENT DATA RESULTS:

#### //Sets up the style for the result display

```

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<html>
<head>
<link rel="stylesheet" type="text/css" href="../assets/sasads.css">
<STYLE>
TD {font-family : Arial;
font-size : 8pt; }
</STYLE>
<title>Query Client Data Database</title>
<LINK REL=STYLESHEET TYPE="text/css"
HREF="<%=jspRoot%>/<%=mode%>/css/blue_red.css">
<style> A: hover {color:#C00000;}</style>
<!-- this script is required for the button menu navigation -->
<script language="JavaScript"
src="<%=mode%>/scripts/newsMenu.js"></script>
<SCRIPT LANGUAGE="JavaScript">
<!-- Hide it //put any other scripts here
-->
</script>
</head>
<body marginheight="0" marginwidth="0" leftmargin="0"
topmargin="0">
<%@include file="../include/body_header"%>
<!------->
<center>

```

**//Pulls in parameters requested**

```
<jsp:useBean id="table" class="com.sas.servlet.beans.html.Table"
scope="session"/>
```

```
<%
  com.sas.rmi.Rocf rocf = new com.sas.rmi.Rocf();
  com.sas.sasserver.dataset.DataSetInterface dataset_clientdata =
(com.sas.sasserver.dataset.DataSetInterface)
table.getModelInterface();
```

```
  if (dataset_clientdata == null)
```

```
{
```

```
//get user input
```

```
String agent_code = request.getParameter("AgentCode");
String gap_status = request.getParameter("StatusRadio");
String client_trace_num = request.getParameter("ClientTrace");
String gap_trace_num = request.getParameter("GapTrace");
String control_num = request.getParameter("Control");
String app_ssn = request.getParameter("SSN");
String last_name = request.getParameter("LastName");
String comp_id = request.getParameter("Compld");
```

```
//set where
```

```
String where_clause = "";
if (client_trace_num.length() == 0 && gap_trace_num.length() == 0
&& control_num.length() == 0 && app_ssn.length() == 0 &&
last_name.length() == 0 )
```

```
{
  where_clause = "AGENT_CODE="+agent_code+" and
GAP_STATUS in (" +gap_status+)";
}
```

```
else if (client_trace_num.length() != 0)
```

```
{
  where_clause = "GAP_STATUS in (" +gap_status+) and
CLIENT_TRACER_NUM="+client_trace_num+"";
}
```

```
else if (gap_trace_num.length() != 0)
```

```
{
  where_clause = "GAP_STATUS in (" +gap_status+) and
GAP_TRACER_NUM="+gap_trace_num+"";
}
```

```
else if (control_num.length() != 0)
```

```
{
  where_clause = "GAP_STATUS in (" +gap_status+) and
CONTROLNUM="+control_num+"";
}
```

```
else if (comp_id.length() != 0 && last_name.length() != 0 )
```

```
{
  where_clause = "GAP_STATUS in (" +gap_status+) and
COMPID="+comp_id+" and LAST_NAME =
"+last_name.toUpperCase()+"";
}
```

```
else if (comp_id.length() != 0 && app_ssn.length() != 0 )
```

```
{
  where_clause = "GAP_STATUS in (" +gap_status+) and
COMPID="+comp_id+" and APP_SSN = "+app_ssn+"";
}
```

**//Get data from base table**

```
String dsname="rubik.clientdata";
String Return_Column[] = {"AGENT_CODE",
"CLIENT_TRACER_NUM", "CONTROLNUM",
"GAP_TRACER_NUM", "COMPID", "GAP_STATUS",
"FIRST_NAME", "LAST_NAME", "BIRTHDAY", "STATE",
"CALLSTE", "CALLEND", "SCHDATE", "ORDERDATE",
"BLD_DRAWN_DATE", "COMPLETIONDATE", "INS_AMOUNT",
"APP BILLING STATUS", "ACS"};
```

```
dataset_clientdata=(com.sas.sasserver.dataset.DataSetInterface)
rocf.newInstance(com.sas.sasserver.dataset.DataSetInterface.class
, con);
```

```
dataset_clientdata.setDataSet(dsname);
```

```
dataset_clientdata.setDisplayedColumns(Return_Column);
dataset_clientdata.setWhere(where_clause);
```

```
session.putValue("dataset", dataset_clientdata);
```

```
// Set the model
```

```
table.setModelInterface(dataset_clientdata);
```

```
// Set attributes
```

```
table.setBorderWidth(0);
table.setCellSpacing(2);
table.setCellPadding(1);
table.setUseColumnHeadings(true);
```

```
table.setNavigationBarOrientation(com.sas.geometry.SideOrientatio
n.BOTTOM);
```

```
// Set the maximum number of rows and columns to display.
```

```
table.setMaxRows(15);
table.setMaxColumns(21);
```

```
//set heading
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Agent Code</font></td>", 1);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Client Trace Num</font></td>",
2);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Control Num</font></td>", 3);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Gap Trace Num</font></td>",
4);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Company ID</font></td>", 5);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Gap Status</font></td>", 6);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>First Name</font></td>", 7);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Last Name</font></td>", 8);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Birthday</font></td>", 9);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>State</font></td>", 10);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Call Start</font></td>", 11);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Call End</font></td>", 12);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Preschedule Date</font></td>",
13);
```

```
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Order Date</font></td>", 14);
```

```

table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Collection Date</font></td>",
15);
table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Gap Complete
Date</font></td>", 16);

table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>Insurance Amount</font></td>",
17);

table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>App Billing Status</font></td>",
18);

table.setColumnHeadingColumnFormat("<td bgcolor='808080'
align='center'><font color=FFFFFF>AO/COP/SP</font></td>", 19);

// Set the row formats.

table.setRowFormat("<tr> +
    <td>#1#</td> +
    <td>#2#</td> +
    <td>#3#</td> +
    <td>#4#</td> +
    <td>#5#</td> +
    <td>#6#</td> +
    <td>#7#</td> +
    <td>#8#</td> +
    <td>#9#</td> +
    <td>#10#</td> +
    <td>#11#</td> +
    <td>#12#</td> +
    <td>#13#</td> +
    <td>#14#</td> +
    <td>#15#</td> +
    <td>#16#</td> +
    <td>#17#</td> +
    <td>#18#</td> +
    <td>#19#</td> +
    </tr>", 1, 2);

table.setRowFormat("<tr bgcolor='F0F0F0'> +
    <td>#1#</td> +
    <td>#2#</td> +
    <td>#3#</td> +
    <td>#4#</td> +
    <td>#5#</td> +
    <td>#6#</td> +
    <td>#7#</td> +
    <td>#8#</td> +
    <td>#9#</td> +
    <td>#10#</td> +
    <td>#11#</td> +
    <td>#12#</td> +
    <td>#13#</td> +
    <td>#14#</td> +
    <td>#15#</td> +
    <td>#16#</td> +
    <td>#17#</td> +
    <td>#18#</td> +
    <td>#19#</td> +
    </tr>", 2, 2);

//Get the navigation bar object
com.sas.servlet.beans.html.NavigationBar nb =
(com.sas.servlet.beans.html.NavigationBar)table.getNavigationBar();

nb.setHorizontalAlignment(com.sas.geometry.HorizontalOrientation.
LEFT);

nb.setFormAction("getClientdataResult.jsp");

nb.setGotoRowVisible(true);
nb.setGotoColumnVisible(true);
nb.setDoubleLeftArrowImage("../assets/double_left_03b.gif");
nb.setDisabledDoubleLeftArrowImage("../assets/double_left_03
g.gif");
nb.setLeftArrowImage("../assets/left_03b.gif");
nb.setDisabledLeftArrowImage("../assets/left_03g.gif");
nb.setRightArrowImage("../assets/right_03b.gif");
nb.setDisabledRightArrowImage("../assets/right_03g.gif");
nb.setDoubleRightArrowImage("../assets/double_right_03b.gif");
nb.setDisabledDoubleRightArrowImage("../assets/double_right_03g.
gif");

}
// Write the table
if (dataset_clientdata.countRows(9999) > 0)
{

out.print("<table border=0 cellpadding=0 cellspacing=0
width=600><tr><td valign=bottom><br><img src='feet2.gif'></td><td
valign=middle><a href='getClientdata.jsp'>Go Back</a></td><td
valign=top><img src='feet1.gif'><br></td><td align=right
width=450><table border=1 cellpadding=0 cellspacing=0><tr><td
class=menuBg><a href='ClientdataExport.jsp' class=menu>Export
to Excel&nbsp;<img src='../assets/export.gif'
border=0></a></td></tr></table></td></tr></table>");

table.executeCommand(request);
table.write(out);

}

else {

String strMain = "<table border=0 cellpadding=1 cellspacing=1
align=left><tr><td valign=bottom><br><img src='feet2.gif'></td><td
valign=middle><a href='getClientdata.jsp'>Go Back</a></td><td
valign=top><img src='feet1.gif'><br></td></tr></table>";
strMain = strMain + "<center><table cellpadding=5 cellspacing=5
border=0 width=500>";
strMain = strMain + "<tr><td colspan=2>&nbsp;</td></tr>";
strMain = strMain + "<tr><td><img src=oops1.gif'></td><td
valign=top><font color=#FF0000 size='+2' face=arial>No record in
your selection.</font></td></tr>";
strMain = strMain + "</table></center>";
out.print(strMain);

}
%>

</body>
</html>

```

**CLIENT DATA EXPORT**

//This code creates the excel spreadsheet output

```
<%@ page contentType="application/vnd.ms-excel" %>
<% String strMain = "Agent Code\tClient Trace Num\tControl
Num\tGap Trace Num\tCompany ID\tGap Status\tFirst Name\tLast
Name\tBirthday\tState\tCall Start\tCall End\tPreschedule
Date\tOrder Date\tCollection Date\tGap Complete Date\tInsurance
Amount\tApp Billing Status\tAO/COP/SP\n";
```

**//get data**

```
com.sas.sasserver.dataset.DataSetInterface dataset_clientdata =
(com.sas.sasserver.dataset.DataSetInterface)
session.getValue("dataset");
int column_count = dataset_clientdata.countColumns(99999);
int row_count = dataset_clientdata.countRows(99999);
java.lang.Object return_data[][] =
dataset_clientdata.getCells(1,1,row_count,column_count);
for (int i=0; i<row_count; i++) {
for (int j=0; j<column_count; j++) {
```

```
strMain = strMain + return_data[i][j].toString().trim() + "\t";
}
strMain = strMain + "\n";
}
out.print(strMain);
```

```
%>
```

**CONCLUSION:**

Lab One, Inc. is currently working on putting many of our current hardcopy reports to web output. There are many technologies available to make this possible. In this application we used Java Server Pages and SAS JavaBeans.

One of the benefits of using Java Server Pages is that it utilizes the java programming language and follows the write once, run anywhere rules. There will be no modification required if the Java Server Pages are run on different application servers. Another benefit to JSP is that they have access to the resources and computing processes on the server site and are platform independent.

**CONTACT INFORMATION**

Your comments and questions are valued and encouraged. Contact the author at:

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