**HISTORICAL EVENT FILTER WITH DATE AND TIME FILTER APPLIED**

Graphical user interface, application

Description automatically generated

A picture containing calendar

Description automatically generated Text, table

Description automatically generated

Local Tag created to store Date & Time picker.

L\_SOE\_FilterToDate [Data Type = STRING]

L\_SOE\_FilterToTime [Data Type = STRING]

L\_SOE\_FilterFromDate [Data Type = STRING]

L\_SOE\_FilterFromTime [Data Type = STRING]

Now button will set “To Time” to “Now” (both date and time).

The custom script below will append date & time filter to current filter applied.

This is done by adding a tie in to SA Include-> AlarmPage.ci-> FUNCTION \_AlarmPage\_UpdateFilter().

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

FUNCTION \_AlarmPage\_UpdateFilter**()**

INT nAlarmListAn **=** DspGetAnFromName**(**"AlarmList"**)**;

INT nError;

INT hFilter;

// Reset the alarm list scroll position to 0

\_ArrayView\_SetYOffset**(**nAlarmListAn**,** 0**)**;

// Explicitly include system events if it is SoE and filter is specified

STRING sFilterGroup **=** AlarmPage\_GetFilterGroup**(**"FltrGrp"**)**;

INT bForceSystemEvents **=** FALSE;

INT nType **=** PageGetInt**(**"\_\_Type"**)**;

IF **(**nType **=** 15 OR nType **=** 16**)** THEN

bForceSystemEvents **=** FilterGroup\_GetItemCount**(**sFilterGroup**)** **>** 0;

END

hFilter **=** AlarmFilterEditOpen**(**nAlarmListAn**)**;

IF hFilter **<>** BAD\_HANDLE THEN

// Inject opening query clause for explicitly including system events

IF **(**bForceSystemEvents**)** THEN

nError **=** AlarmFilterEditSet**(**hFilter**,** "("**)**;

ELSE

nError **=** AlarmFilterEditSet**(**hFilter**,** ""**)**;

END

IF nError **=** 0 THEN

// Process all filters

AlarmFilter\_AppendFilterGroup**(**hFilter**,** sFilterGroup**)**;

// Inject closing query clause for explicitly including system events

IF **(**bForceSystemEvents**)** THEN

//AlarmFilterEditAppend(hFilter, ") OR StateNumeric=0");//default

AlarmFilterEditAppend**(**hFilter**,** ")"**)**;

END

nError **=** AlarmFilterEditCommit**(**hFilter**)**;

END

AlarmFilterEditClose**(**hFilter**)**;

END

\_AlarmPage\_UpdateFilterText**(**\_AlarmPage\_GetCurrentFilter**())**;

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//\*\*\*\*\*\*\*VICOSOL TIE-IN TO BE ABLE TO SORT EVENT LIST ON DATE&TIME\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//

VIC\_AlarmPage\_UpdateSOE**()**;

//

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

END

//-----------------------------------------------------------------------------------------------

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Custom script to append date and time filters

/////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

// VICOSOL AS

//FUNCTION NAME: VIC\_SOEFilterInit()

//REVISION: 01

//DESCRIPTION: Historical Event List: This function is used to set initial values when Historical Event screen is opened.

//DATE OF REVISION: 2021-10-06

//REVISED BY: Rune Johannessen

//REVISION DESCRIPTION: INITIAL GENERATION

//

//ADDITONAL DESCRIPTION: This function is called from Historical Event screen on page entry.

// Page Properties - Events - On Page Entry

//

// Upon initialization End date and time is set to current time and Start date and time is set to current time.

//

//

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//

// SPECIAL NOTE:

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/////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

FUNCTION VIC\_SOEFilterInit**()**

INT TimeSpan;

STRING FromDate;

STRING FromTime;

STRING ToDate;

STRING ToTime;

//Initial timespan is set here. Enter time span i seconds from end date and time.

//Example:

//Setting Timespan to 86400 (24hr) will set the start date to "yesterday" with same time as current.

//

TimeSpan **=** 86400;

//

//Upon initialization End date and time is set to current time

ToDate **=** Date**()**;

ToTime **=**Time**()**;

//Upon initialization Start date and time is set to current time - TimeSpan

FromDate **=** TimeToStr**(**DateSub**(**StrToDate**(**ToDate**),**TimeSpan**),**2**)**;

FromTime **=** Time**()**;

//Function output values

L\_SOE\_FilterToDate **=** ToDate;

L\_SOE\_FilterToTime **=** ToTime;

L\_SOE\_FilterFromDate **=** FromDate;

L\_SOE\_FilterFromTime **=** FromTime;

END

//-----------------------------------------------------------------------------------------------

/////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

// VICOSOL AS

//FUNCTION NAME: VIC\_SOETime\_Now()

//REVISION: 01

//DESCRIPTION: Historical Event List: This function will set "To Time" to Now.

//DATE OF REVISION: 2021-10-06

//REVISED BY: Rune Johannessen

//REVISION DESCRIPTION: INITIAL GENERATION

//

//ADDITONAL DESCRIPTION: This function is called from button on SOE page

//

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// SPECIAL NOTE:

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/////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

FUNCTION VIC\_SOETime\_Now**()**

STRING ToDate;

STRING ToTime;

ToDate **=** Date**()**;

ToTime **=**Time**()**;

//Function output values

L\_SOE\_FilterToDate **=** ToDate;

L\_SOE\_FilterToTime **=** ToTime;

END

//-----------------------------------------------------------------------------------------------

/////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

// VICOSOL AS

//FUNCTION NAME: VIC\_AlarmPage\_UpdateSOE()

//REVISION: 01

//DESCRIPTION: Historical Event List: This function will take current SOE filter and append Date&Time filter.

//DATE OF REVISION: 2021-10-06

//REVISED BY: Rune Johannessen

//REVISION DESCRIPTION: INITIAL GENERATION

//

//ADDITONAL DESCRIPTION: This function is called from SA Include-> AlarmPage.ci-> FUNCTION \_AlarmPage\_UpdateFilter()

//

//

//

//

//

//

//

//

// SPECIAL NOTE:

// The tie-in to SA Include must be manually updated if new version AVEVA Plant Scada is installed.

// \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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/////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

FUNCTION VIC\_AlarmPage\_UpdateSOE**()**

INT nSOEAn **=** DspGetAnFromName**(**"AlarmList"**)**;

IF **(**nSOEAn **<** 1**)** THEN

RETURN;

END

INT hFilter;

INT nError **=** 0;

INT FromTime;

INT ToTime;

FromTime **=** DateAdd**(**StrToDate**(**L\_SOE\_FilterFromDate**),**StrToTime**(**L\_SOE\_FilterFromTime**))**; //Converts Start Date and Time to Integer value

ToTime **=** DateAdd**(**StrToDate**(**L\_SOE\_FilterToDate**),**StrToTime**(**L\_SOE\_FilterToTime**))**; //Converts End Date and Time to Integer value

hFilter **=** AlarmFilterEditOpen**(**nSOEAn**)**;

IF hFilter **<>** BAD\_HANDLE THEN

IF nError **=** 0 THEN

AlarmFilterEditAppend**(**hFilter**,**";"**)**;

AlarmFilterEditAppend**(**hFilter**,** "TAG=\*" **+** ";TIME>" **+** IntToStr**(**FromTime**)** **+**";TIME<" **+** IntToStr**(**ToTime**))**; // The ";" between <filter\_expr> is interpreted as AND

nError **=** AlarmFilterEditCommit**(**hFilter**)**;

END

AlarmFilterEditClose**(**hFilter**)**;

END

END

//-----------------------------------------------------------------------------------------------