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



 

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

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