# **DYO Setup**

Click menu Setup | System | ESPL & DYO to display the following form where various DYO parameters are configured.

Set-Up for Ensign version 03-10-22							
System	Security Scheduler Images ESPL & DYO Maintenance Buttons	?					
	ESPL Project Autorun  Enable Autorun. Execute this ESPL project when Ensign starts.  Prompt to Save an edited ESPL Script on program exit.  Path and Filename  C:\Ensign10\ESPL\Project1.ssproj  O Regioner ESPL variable value						
	Use SendMessageTimeout     Send to TextFile Path and Filename	Begin Private Index End Private Index Edit Delay to Recalc ication Title					

# Show # with Variable name

Check this option to show the index from the Variables array along with the variable name you have assigned. This will change the DYO script display, as in this example where variable 61 is named 'High'. A variable is named by typing text in the Variable edit box after the variable has been selected.

Category	Variable	K	Selection #1 & #3		Op. [#]	Selection #2 & #4		Offset	Show	Marker	Color
Chart Value 🔻	61 High		= #2 Minute High	•	-	60	•	0 🊔	~	F	
∃" ⊒• 🖏		¥-	(	•	-		-	0	)	1	
A Chart Value [61 High] := 60 Minute High											
B Chart Val	ue [60 Lo	ow] := 60 M	inute Low								

### Use SendMessage Timeout

The following 2 DYO statements can send messages to another application. The application that is to receive the messages is named in the 'Send to Application Title' field. A message sent to another application does not return until the message is processed. Or a return will happen after a 500 millisecond timeout when this box is checked.

```
if # then Send( Message )
if ## then Send( [#], #2 )
```

### Send to Application Title

The Action | Send statements send a string via a Windows message to another application. Enter the title of the application in the 'Send to Application Title' field. The following Delphi code shows how to receive and decode the Windows message.

```
FUNCTION TForm1.OnAppHook(var MyMessage: TMessage): boolean;
var s: string;
begin
    Result := false;
    case MyMessage.Msg of
    WM_COPYDATA: begin
        s := lpcstr(pCDS(MyMessage.lParam)^.lpData); //string
        Result := true;
        end;
end;
```

### Send to TextFile Path and Filename

Normally, the name of a text file to write to would be established from a variable's name using this statement.

if ## then Output Filename = Variable #2 Name

When a filename has not been established by the DYO statement, the filename is obtained from this entry.

If a path is not provided, the root path of 'C:\Ensign10\' will be added as a prefix.

These statements write to the text file. The file will be created if it does not exist. Text is then appended to the bottom of the file.

#### if # then AppendFile( Message )

Message is a text string from the label on the DYO row. If the label is blank, then Message is the text from the Message Text edit box. The message text is appended to the TextFile.

#### if ## then AppendFile( #2 )

The #2 value is a Variable index, and the text will be that variable's name. The variable name can be a lengthy text string.

If the variable name is blank, or the #2 value is less than 0 or greater than 999, then the text used will

be the row's label. If the row's label string is blank, then the text will be the DYO form's Message Text.

The text may contain <u>reference tags</u> such as [\$S] and [\$C], which will be resolved before the text appended.

Example: Variable 350 has the lengthy name of: 'Alert: Study Crossing Detected'

Entering 350 in Selection #2 will write this text to the TextFile when the ## expression evaluates to True.

### Read from TextFile Path and Filename

#### if #2 then V := ReadFile( #3, #4 )

The flag in #2 conditionally reads a value from a TextFile that is comma delimited. The field in the file will be in the #3 column on the #4 row. The columns and rows begin with a reference from 1.

The TextFile for the ReadFile statement is established by the 'Read from TextFile Path and Filename' entry. The root path of 'C:\Ensign10\' is automatically added to the path entries as a prefix.

# **Open DYO using this Variables File**

The variables file contains the customized names for the variables. The file name used is set on the DYO property form, and is typically set by the entry saved for the default DYO.

Design Your Own Study				
Study Name Trade Buy Or Sell Now	Study Location	Marker Location	Label Location	Grid Tab
Study Scale			Variables File Ensign	Message Location
Message Text		Font True	False Panel	

When an entry is present in the 'Open DYO using this Variables File' field, the DYO form will be updated to use the new entry. It is recommended that a different Variables File be used for each DYO project. This feature to overwrite the DYO's Variables File entry is a convenient way to change to a new Variables File name.

In this example, the Variables File would be changed to 'Howard4' upon opening a DYO property form.

Howard4	

# Begin Private Index, End Private Index

1000 Variables are available to hold values or Boolean flags. Variables with a public scope can be written and read by studies on other charts. Variables can have a private scope, meaning they can only be written and read by the current chart. The index range to make variables private is set by these entries. In this example, the variables whose indexes are in the range from 200 to 399 will be private.



# **Edit Delay to Recalc**

When changes are made on a DYO property form, recalculation using the changed DYO will be delayed until the number of seconds entered in this property has lapsed.

Enter a value of 0 to disable recalculation while the DYO property form is open.

Recalculation will occur when the DYO property form is closed.