**Configuring and Passing Parameters**

Parameter Files

**Parameters are used for the following:**

* Place holders for tags or parts of a tag
* Change Communication Path
* Tag Substitution
* Reusable Displays



* Parameter Files will define parameters that will be used.
* Place Holder (#) are assigned tag name or a value within Parameter Files
* Each Place Holder is assigned a unique numeric value from 1 to 500

Parameters can be assigned to various Objects:





Loading a parameter file can be achieved by the following:

* GoTo Display Buttons
* Display List Selector
* Start Up of Application
* Global Connections



**Parameter List**





* The Parameter List is configured the same way in the Startup menu as it’s configured for display navigation objects
* In this example parameter tags are loaded to the main startup screen

* Place holders within the navigation objects will forward the parameters to other screens

**Global Connections**



* Parameters can be used when the **displays** are **controlled remotely**
* Parameter File and Parameter List tag fields are also located in the **Display** tab of **Global Connections**
* The Parameter File tag field in the Global Connections requires a **string data type**
* Operators could manually type
the parameter file name or the
process can be automated
through the PLC



* Parameter List can also be used within Global Connections
	+ Note: The Parameter List is limited to 10 place holders
* The ***Use Parameter List***field must be enabled with a digital tag prior to loading the list

**Global Objects**

|  |  |
| --- | --- |
| To access the ***Global Object Parameter Definitions****,* right click on the object or group of objects on the Global Object Display | Paste the object on the active display (non- Global Object Display), right click again and select *Global Object Parameter Values* |
|  |  |



* The parameter place holder will appear in the *Name* column of the *Global Object Parameter Values* properties
* The *Value* column is where tags or parts of the tag are entered for the place holder
* The image shows #1 used for the tag called “Tank\_Level”. This tag could be a User Define Tag (UDT) or Add On Instruction (AOI) type
* Members of the UDT tag are added to the *Connections* tab of each Global Object member



* When passing parameters through Global Object you must be careful of the syntax
* UDT members assigned to the Global Object member can cause errors if not addressed properly
	+ Example: {#1.tank\_1\_level} is assigned to the Global Object member, and [shortcut]Tank\_Level is assigned to the place holder #1
* The period before tank\_1\_level could have been assigned in the #1 place holder. This will still work, however, other members of the Global Object will fail if the format is not consistent

The same **place holder** can be defined for more than one Global Object and copied to the same display.

|  |  |
| --- | --- |
| The place holder #1 is defined as [shortcut]Tank\_Level | The place holder #1is defined as [shortcut2]Tank\_Level2 |
|  |  |
|  |  |

**Combining Parameter Methods**

Parameter files can be combined with Parameter List, for example:

1. Parameter file can be loaded to a second display with a Go To button
2. The data can then be pass to a third display using a Parameter List



* Text objects with literal String and Numbers can be passed in a parameter
	+ Example: In the text properties select the *Insert Variable* and decide if the value will be String or Numeric
* Based on that decision the Literal String or Literal Number option is available



* Insert in the Parameter place holder (e.g. #1)



When using a parameter file with a Literal Text object spaces between text will result in an error when trying to save.

There are two options to resolve this:

* Insert an Underscore as a separation between words
* Pressing **ALT** and entering **255** inserts a blank ASCII extended character between words to add separation

**Combining Parameter Methods**

Parameter List can also pass parameters to Literal Strings or Numbers.

The example shows two sets of text used for the parameter list

{The Date is March 22},{2018}

#1 and #2 will be the place holders used on the destination screen

#1 is a text object using Literal String

#2 is a text object using Literal Number

**ALT255** was inserted to create the spaces between words.

**Using parameters within arrays**



Parameter place holders can be used to point to a specific word of the array.

In the example #3 is equal to a numerical value of the array.

Tags with the numerical value cannot be used.

{[shortcut]Parameter\_File\_Tags\_A[#3]}