

# Error checking

- Single logic test
  - If( logic test )
    - Exit script( error result)
  - End if
- Single pass loop

# Error checking

- Single pass loop ( part one)

Loop

    Exit loop if (logic test 1)

    Exit loop if (logic test 2)

....

    Exit loop( True)

End loop

# Error checking

- Single pass loop ( part two)

...

End loop

If( ThereWasAnError )

    Exit Script ( ThatError )

End if

```
# EXAMPLE input data
# Before checking for errors - get and set values to local variables that you want to check
Set Variable [$VariableValueToTest_1; Value: "A String Value that must EXIST"]
Set Variable [$VariableValueToTest_2; Value: 42]
Set Variable [$VariableValueToTest_3; Value: False]

# Copy template from next line to End If-line
If [ErrorCheck_SingleLoopBlock // Initiates private variables and returns True to create a "code block"]
    Loop
        # Error message can be inline in the function call
        Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $VariableValueToTest_1 ) ; "No value in mandatory input parameters." )]

        # Error message can be defined in a local variable
        Set Variable [$errorMessage; Value: "No value in parameter VariableValueToTest_2 exist."]
        Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $VariableValueToTest_2 ) ; $errorMessage )]

        # Any name for error message variable can be used
        Set Variable [$errMsg; Value: "The value in parameter VariableValueToTest_2 is negative."]
        Exit Loop If [ErrorCheck_SingleLoopExit ( $VariableValueToTest_2 < 0 ; $errMsg )]

        #
        Set Variable [$errMsg; Value: "The value in parameter VariableValueToTest_3 is FALSE."]
        Exit Loop If [ErrorCheck_SingleLoopExit ( $VariableValueToTest_3 = False ; $errMsg )]

        # Additional error checks, also enviroment values

        # Mandatory step. If not existing this will be an endless loop!!!
        Exit Loop If [True]
    End Loop
    # Mandatory If-statement and Exit Script statement to take care of found error (if any error exist).
    If [ErrorCheck_SingleLoopErrorExist]
        # If an error has been found, the error message is retrieved from the custom function ErrorCheck_SingleLoopErrorMessage
        Set Variable [$errorMessage; Value: ErrorCheck_SingleLoopErrorMessage]

        # If this is a check in a script in a script chain and the error will make the script to exit, the next disabled row can be used.
        // Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $inputParameter )]

    End If
End If
```

```
```
If [ErrorCheck_SingleLoopBlock // Initiates private variables and returns True to create a "code block"]
    Loop
        # Error message can be inline in the function call
        Exit Loop If [ErrorCheck SingleLoopExit ( IsEmpty ( $VariableValueToTest_1 ) ; "No value in mandatory variable" )]
        // Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $input! )
    End If
End If
```



= True

```
...
If [ErrorCheck_SingleLoopBlock // Initiates private variables and returns True to create a "code block"]
    Loop
        # Error message can be inline in the function call
        Exit Loop If [ErrorCheck SingleLoopExit ( IsEmpty ( $VariableValueToTest_1 ) ; "No value in mandatory variable" )]
        // Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $input! )
    End If
End If
```



# = True

```
```
If [ErrorCheck_SingleLoopBlock // Initiates private variables and returns True to create a "code block"]
    Loop
        # Error message can be inline in the function call
        Exit Loop If [ErrorCheck SingleLoopExit ( IsEmpty ( $VariableValueToTest_1 ) ; "No value in mandatory variable" )]
        // Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $input )
    End If
End If```

```

ErrorCheck\_SingleLoopBlock =

Let( [

\$zzz\_errorCheck\_singleLoopErrorExist = False ;  
\$zzz\_errorCheck\_singleLoopErrorMessage = ""

];

True

)

Loop

```
# Error message can be inline in the function call
Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $VariableValueToTest_1 ) ; "No value in mandatory input parameters.")]

# Error message can be defined in a local variable
Set Variable [$errorMessage; Value: "No value in parameter VariableValueToTest_2 exist."]
Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $VariableValueToTest_2 ) ; $errorMessage )]

# Any name for error message variable can be used
Set Variable [$errMsg; Value: "The value in parameter VariableValueToTest_2 is negative."]
Exit Loop If [ErrorCheck_SingleLoopExit ( $VariableValueToTest_2 < 0 ; $errMsg )]

#
# Mandatory step. If not existing this will be an endless loop!!!
Exit Loop If [True]
End Loop
```



Loop

```
# Error message can be inline in the function call
Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $VariableValueToTest_1 ) ; "No value in mandatory input parameters.")]

# Error message can be defined in a local variable
Set Variable [$errorMessage; Value: "No value in parameter VariableValueToTest_2 exist."]
Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $VariableValueToTest_2 ) ; $errorMessage )]

# Any name for error message variable can be used
Set Variable [$errMsg; Value: "The value in parameter VariableValueToTest_2 is negative."]
Exit Loop If [ErrorCheck_SingleLoopExit ( $VariableValueToTest_2 < 0 ; $errMsg )]

#
# Mandatory step. If not existing this will be an endless loop!!!
Exit Loop If [True]
End Loop
```



Loop

```
# Error message can be inline in the function
Exit Loop If [ErrorCheck_SingleLoopExit ( IsError )]

# Error message can be defined in a local variable
Set Variable [$errorMessage; Value: "No value found"]
Exit Loop If [ErrorCheck_SingleLoopExit ( IsError )]

# Any name for error message variable can be used
Set Variable [$errMsg; Value: "The value is incorrect"]
Exit Loop If [ErrorCheck_SingleLoopExit ( $Value )]

# Mandatory step. If not existing this will trigger an error
Exit Loop If [True]
End Loop
```

### ErrorCheck\_SingleLoopExit

Function Parameters:

\* condition\_to\_test\_B  
\* message\_if\_error

ErrorCheck\_SingleLoopExit ( condition\_to\_test\_B; message\_if\_error ) =

/\* Error check function to be used in single loop exit statement \*/

```
If(
    condition_to_test_B;

    Let([
        $zzz_errorCheck_singleLoopErrorExist = condition_to_test_B;
        $zzz_errorCheck_singleLoopErrorMessage= message_if_error
    ];

        condition_to_test_B

    )

    ; False
)
```



```
----  
# Mandatory If-statement and Exit Script statement to take care of found error (if any error exist).  
If [ErrorCheck_SingleLoopErrorExist]  
    # If an error has been found, the error message is retrieved from the custom function ErrorCheck_SingleLoopErrorMessage  
    Set Variable [$errorMessage; Value: ErrorCheck_SingleLoopErrorMessage]  
  
    # If this is a check in a script in a script chain and the error will make the script to exit, the next disabled row can be used.  
    // Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $inputParameter )]  
  
End If  
End If
```

```
----  
# Mandatory If-statement and Exit Script statement to take care of found error (if any error exist).  
If [ErrorCheck_SingleLoopErrorExist]  
    # If an error has been found, the error message is retrieved from the custom function ErrorCheck_SingleLoopErrorMessage  
    Set Variable [$errorMessage; Value: ErrorCheck_SingleLoopErrorMessage]  
  
    # If this is a check in a script in a script chain and the error will make the script to exit, the next disabled row can be used.  
    // Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $inputParameter )]  
  
End If  
End If
```

```
----  
# Mandatory If-statement and Exit Script statement to take care of found error (if any error exist).  
If [ErrorCheck_SingleLoopErrorExist]  
    # If an error has been found, the error message is retrieved from the custom function ErrorCheck_SingleLoopErrorMessage  
    Set Variable [$errorMessage; Value: ErrorCheck_SingleLoopErrorMessage]  
  
    # If this is a check in a script in a script chain and the error will make the script to exit, the next disabled row can be used.  
    // Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $inputParameter )]  
  
End If  
End If
```

```
---- ----  
# Mandatory If-statement and Exit Script statement to take care of found errors  
If [ErrorCheck_SingleLoopErrorExist]  
    # If an error has been found, the error message is retrieved from the variable  
    Set Variable [$errorMessage; Value: ErrorCheck_SingleLoopErrorMessage]  
  
    # If this is a check in a script in a script chain and the error will be handled by the next script  
    // Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage )]  
  
End If  
End If
```

### ErrorCheck\_SingleLoopErrorExist

Function Parameters:

ErrorCheck\_SingleLoopErrorExist ( ) =

\$zzz\_errorCheck\_singleLoopErrorExist

### ErrorCheck\_SingleLoopErrorMessage

Function Parameters:

ErrorCheck\_SingleLoopErrorMessage ( ) =

\$zzz\_errorCheck\_singleLoopErrorMessage

```
36 # ----- Code start -----
37 # 1. Check of in-parameters, environment etc. to make sure that the script can work. If not, return an error
38 Set Variable [$inputParameter; Value: Get ( ScriptParameter )]
39
40 Go to Layout ["DAT_Patients" (Patients); Animation:None]
41 Show All Records
42
43 If [IsEmpty ( Clinic::Clinic ) // Här måste det finnas ett värde om vi har en länk till Clinic]
44     Set Variable [$errorMessage; Value: "No link to clinic settings or no clinic code."]
45     Exit Script [Text Result:ScriptResponse_Error ( $errorMessage ; 0 ; $inputParameter )]
46 End If
47
48 Set Variable [$maxAge; Value: Clinic::Check_InfectionTest_AgeLimitForTest_Years]
49 Set Variable [$maxMonthsForLatestTest; Value: Clinic::Check_InfectionTest_ValidLimit_Months]
50
51 # Error check in single loop structure
52 Loop
53     Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $maxAge ) ; "No max age of patient age exist for blood infection tes...")]
54     Exit Loop If [ErrorCheck_SingleLoopExit ( $maxAge < 0 or $maxAge > 100 ; "Invalid value of max age of patient for blood i...)]
55
56     Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $maxMonthsForLatestTest ) ; "No limit in months for blood infection te...")]
57     Exit Loop If [ErrorCheck_SingleLoopExit ( $maxMonthsForLatestTest < 0 or $maxMonthsForLatestTest > 480 ; "Invalid value in...")]
58
59     Exit Loop If [True]
60 End Loop
61 If [ErrorCheck_SingleLoopErrorExist]
62     Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $inputParameter )]
63 End If
64
```

# Error checking – Single loop

Custom Functions:

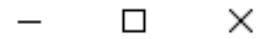
```
ErrorCheck_SingleLoopExit(  
    condition_to_test_B;  
    message_if_error )
```

```
ErrorCheck_SingleLoopErrorExist
```

```
ErrorCheck_SingleLoopErrorMessage
```

```
36 # ----- Code start -----
37 # 1. Check of in-parameters, environment etc. to make sure that the script can work. If not, return an error
38 Set Variable [$inputParameter; Value: Get ( ScriptParameter )]
39
40 Go to Layout ["DAT_Patients" (Patients); Animation:None]
41 Show All Records
42
43 If [IsEmpty ( Clinic::Clinic ) // Här måste det finnas ett värde om vi har en länk till Clinic]
44     Set Variable [$errorMessage; Value: "No link to clinic settings or no clinic code."]
45     Exit Script [Text Result:ScriptResponse_Error ( $errorMessage ; 0 ; $inputParameter )]
46 End If
47
48 Set Variable [$maxAge; Value: Clinic::Check_InfectionTest_AgeLimitForTest_Years]
49 Set Variable [$maxMonthsForLatestTest; Value: Clinic::Check_InfectionTest_ValidLimit_Months]
50
51 # Error check in single loop structure
52 Loop
53     Exit Loop If [ErrorCheck_SingleLoopExit] IsEmpty ( $maxAge ) ; "No max age of patient age exist for blood infection tes...
54     Exit Loop If [ErrorCheck_SingleLoopExit] $maxAge < 0 or $maxAge > 100 ; "Invalid value of max age of patient for blood i...
55
56     Exit Loop If [ErrorCheck_SingleLoopExit] IsEmpty ( $maxMonthsForLatestTest ) ; "No limit in months for blood infection te...
57     Exit Loop If [ErrorCheck_SingleLoopExit] $maxMonthsForLatestTest < 0 or $maxMonthsForLatestTest > 480 ; "Invalid value in...
58
59     Exit Loop If [True]
60 End Loop
61 If [ErrorCheck_SingleLoopErrorExist]
62     Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $inputParameter )]
63 End If
64
```

## Edit Script "CheckInfectionTests\_DateLimits\_v2" (dev\_LinneFiler (TURTLE))



```
36 # ----- Code start -----
37 # 1. Check of in-parameters, enviroment etc. to make sure that the script can work. If not, return an error
38 Set Variable [$inputParameter; Value: Get ( ScriptParameter )]
39
40 Go to Layout ["DAT_Patients" (Patients); Animation:None]
41 Show All Records
42
43 If [IsEmpty ( Clinic::Clinic ) // Här måste det finnas ett värde om vi har en länk till Clinic]
44   Set Variable [$errorMessage; Value: "No link to clinic settings or no clinic code."]
45   Exit Script [Text Result:ScriptResponse_Error ( $errorMessage ; 0 ; $inputParameter )]
46 End If
47
48 Set Variable [$maxAge; Value: Clinic::Check_InfectionTest_AgeLimitForTest_Years]
49 Set Variable [$maxMontsForLatestTest; Value: Clinic::Check_InfectionTest_ValidLimit_Months]
50
51 Loop
52   Set Variable [$errorMessage; Value: "No max age of patient age exist for blood infection test is set."]
53   Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $maxAge ) ; $errorMessage )]
54
55   Set Variable [$errorMessage; Value: "Invalid value of max age of patient for blood infection test."]
56   Exit Loop If [ErrorCheck_SingleLoopExit ( $maxAge < 0 or $maxAge > 100 ; $errorMessage )]
57
58   Set Variable [$errorMessage; Value: "No limit in months for blood infection test is set."]
59   Exit Loop If [ErrorCheck_SingleLoopExit ( IsEmpty ( $maxMontsForLatestTest ) ; $errorMessage )]
60
61   Set Variable [$errorMessage;
62     Value: "Invalid value in months for blood infection test is set. Valid range is 0 - 480 months."]
63   Exit Loop If [ErrorCheck_SingleLoopExit ( $maxMontsForLatestTest < 0 or $maxMontsForLatestTest > 480 ; $errorMessage )]
64
65   Exit Loop If [True]
66 End Loop
67 If [ErrorCheck_SingleLoopErrorExist]
68   Exit Script [Text Result:ScriptResponse_Error ( ErrorCheck_SingleLoopErrorMessage ; 0 ; $inputParameter )]
69 End If
```