<<Interface>> wbMain Global Variables Arguments + TransactionItem: QueueItem + TransactionData: DataTable + TransactionNumber: Int32 = 1+ RetryNumber: Int32 Config: Dictionary<string, object> + in\_wbType: String = "MainTask" - SystemError: Exception + in\_wbLevel: Int32 = 0 BusinessRuleException: BusinessRuleException + in\_wbParent: String = string.Empty - wbMain\_Type: String = in\_wbType - wbMain\_Level: Int32 = in\_wbLevel wbMain\_Parent: String = in\_wbParent - wbMain\_Audit: Dictionarry<string, object> = New Dictionary(Of String, Object) from { {"Successful", 0}, {"Failed", 0} } - wbMain\_StartTime: DateTime = now() SystemError BusinessRuleException <<State Machine - Initialization State>> Legend wblnitialisation input argument Success output argument + wbInit\_Type: String = in\_wbType+", "+"Initialization State" + wbInit\_Level: Int32 = wbMain\_Level+1 io argument <<State Machine - Get Transaction Data State>> wbGetTransactionData - wblnit\_Parent: String = wbMain\_Type - wblnit\_Audit: Dictionarry<string, object> = New Dictionary(Of String, Object) from { Local variables: "Successful", 0}, {"Failed", 0} } + wbGetTransactionData\_Type: String = in\_wbType+", "+"Get Transaction Data State" - wblnit\_StartTime: DateTime = now() + wbGetTransactionData\_Level: Int32 = wbMain\_Level+1 Try executing Components: + wbGetTransactionData\_Audit: Dictionarry<string, object> = New Dictionary(Of String, Object) from { {"Successful", 0}, {"Failed", 0} } 皂 System - reserved + wbGetTransactionData\_StartTime: DateTime = now() + ShouldStop: Boolean + InitAllSettings (in\_ConfigFile:"Data\Config.xlsx", in\_ConfigSheets:{"Settings", 'Constants"}, out\_Config:Config) Try executing Components: + CloseAllApplications (in\_wbType:in\_wbType+", "+"Close All 皂 Applications", in\_wbParent:wblnit\_Type, in\_wbLevel:wblnit\_Level+1, System - reserved Audit:wblnit\_Audit) ⊦ KillAllProcesses () + OrchestratorStop () 皂 Process **Process** + InitAllApplications (in\_Config:Config, in\_wbType: in\_wbType+", + GetTransactionData (in\_TransactionNumber:TransactionNumber, in\_Config:Config, "+"InitAllApplications", in\_wbParent:wbInit\_Type, in\_wbLevel:wbInit\_Level+1, ut\_TransactionItem:TransactionItem, io\_TransactionData:TransactionData) io\_Audit:wblnit\_Audit) 皂 Log success Log success + wbLogging(in\_wbType:wbInit\_Type, in\_wbLevel:wbInit\_Level, in\_wbParent:wbInit\_Parent, in\_LogLevel:1, in\_LogMessage:"Work Block "+ wbInit\_Type.toString + " successful", in\_wbStart:wbInit\_StartTime, + wbLogging(in\_wbType:wbGetTransactionData\_Type, n\_wbLevel:wbGetTransactionData\_Level, in\_wbParent:wbGetTransactionData\_Parent, n\_LogLevel:1, in\_LogMessage:"Work Block "+ wbGetTransactionData\_Type.toString + in\_ChildAudit:wblnit\_Audit, io\_ParentAudit:wbMain\_Audit, in\_SuppressLogging:true, successful", in\_wbStart:wbGetTransactionData\_StartTime, n\_wbStatusSuccessful:if(SystemError is Nothing AND BusinessRuleException is Nothing, n\_ChildAudit:wbGetTransactionData\_Audit, io\_ParentAudit:wbMain\_Audit, true, false)) SuppressLogging:true, in\_wbStatusSuccessful:if(SystemError is Nothing AND BusinessRuleException is Nothing, true, false)) Catch all exceptions, log them, treat or rethrow Catch all exceptions, log them, treat or rethrow 包 System.Exception: Log failure 卽 System.Exception: Log failure + wbLogging(in\_wbType:wblnit\_Type, in\_wbLevel:wblnit\_Level, rent:wblnit\_Parent, in\_LogLevel:4, in\_LogMessage:"Work Block "+ + wbLogging(in\_wbType:wbGetTransactionData\_Type,
in\_wbLevel:wbGetTransactionData\_Level, in\_wbParent:wbGetTransactionData\_Parent,
in\_LogLevel:4, in\_LogMessage:"Work Block "+ wbGetTransactionData\_Type.toString + ' wblnit\_Type.toString + " failed with exception "+exception.Message+" at Source "+exception.Source, in\_wbStart:wbInit\_StartTime, in\_ChildAudit:wbInit\_Audit, io\_ParentAudit:wbMain\_Audit, in\_SuppressLogging:false, failed with exception "+exception.Message+" at Source "+exception.Source, in\_wbStart:wbGetTransactionData\_StartTime, in\_ChildAudit:wbGetTransactionData\_Audit, io\_ParentAudit:wbMain\_Audit, in\_SuppressLogging:false, in\_wbStatusSuccessful:if(SystemError is Nothing AND BusinessRuleException is Nothing, true, false)) \_wbStatusSuccessful:if(SystemError is Nothing AND BusinessRuleException is Nothing, true, false)) Success No Data to Process <<State Machine - Process Transaction State>> wbProcess Local variables: + wbProcessTransaction\_Type: String + wbProcessTransaction\_Level: Int32 + wbProcessTransaction\_Parent: String BusinessRuleE + wbProcessTransaction\_Audit: Dictionarry<string, object> <<State Machine - End Process State>> + wbProcessTransaction\_StartTime: DateTime wbMain Try executing Components: Local variables: System - reserved Try executing Components: 包 System - reserved 包 Process 包 + Process (in\_TransactionItem:TransactionItem, in\_Config:Config, **Process** \_TransactionNumber:TransactionNumber, in\_RetryNumber:RetryNumber, n\_wbType:in\_wbType+", "+"Process Transaction", + CloseAllApplications(in\_wbType:in\_wbType+", "+"Close All n\_wbLevel:wbProcessTransaction\_Level+1, in\_wbParent:wbProcessTransaction\_Type, Applications", in\_wbParent:wbMain\_Type, in\_wbLevel:wbMain\_Level+1, Audit:wbProcessTransaction Audit) io Audit:wbMain\_Audit) 皂 卽 Log success Log success + **wbLogging**(in\_wbType:wbMain\_Type, in\_wbLevel:wbMain\_Level, + wbLogging(in\_wbType:wbProcessTransaction\_Type, n\_wbParent:wbMain\_Parent, in\_LogLevel:1, in\_LogMessage:"Work Block "+ n\_wbLevel:wbProcessTransaction\_Level, in\_wbParent:wbProcessTransaction\_Parent, wbMain\_Type.toString + " successful", in\_wbStart:wbMain\_StartTime, n\_LogLevel:1, in\_LogMessage:"Work Block "+ wbProcessTransaction\_Type.toString + in\_ChildAudit:wbMain\_Audit, io\_ParentAudit:Nothing, in\_SuppressLogging:false, successful", in\_wbStart:wbProcessTransaction\_StartTime, in\_ChildAudit:wbProcessTransaction\_Audit, io\_ParentAudit:wbMain\_Audit, in\_SuppressLogging:true, in\_wbStatusSuccessful:if(SystemError is Nothing AND in\_wbStatusSuccessful:if(SystemError is Nothing AND BusinessRuleException is Nothing, true, false)) BusinessRuleException is Nothing, true, false)) Catch all exceptions, log them, treat or rethrow Catch all exceptions, log them, treat or rethrow 韵 System.Exception: Log failure 割 System.Exception: Log failure + wbLogging(in\_wbType:wbMain\_Type, in\_wbLevel:wbMain\_Level, rent:wbMain\_Parent, in\_LogLevel:4, in\_LogMessage:"Work Block "+ + wbLogging(in\_wbType:wbGetTransactionData\_Type, wbMain\_Type.toString + " failed with exception "+exception.Message+" at Source n\_wbLevel:wbGetTransactionData\_Level, in\_wbParent:wbGetTransactionData\_Parent, '+exception.Source, in\_wbStart:wbMain\_StartTime, in\_ChildAudit:wbMain\_Audit, \_LogLevel:3, in\_LogMessage:"Transaction Number " + TransactionNumber.ToString + o\_ParentAudit:Nothing, in\_SuppressLogging:false, in\_wbStatusSuccessful:if(SystemError + "Work Block "+ wbProcessTransaction\_Type.toString + " failed with exception is Nothing AND BusinessRuleException is Nothing, true, false)) '+exception.Message+" at Source "+exception.Source, n\_wbStart:wbGetTransactionData\_StartTime, in\_ChildAudit:wbGetTransactionData\_Audit, o\_ParentAudit:wbMain\_Audit, in\_SuppressLogging:false, n\_wbStatusSuccessful:if(SystemError is Nothing AND BusinessRuleException is Nothing, true, false)) BusinessRuleException: Log failure + wbLogging(in\_wbType:wbGetTransactionData\_Type, n\_wbLevel:wbGetTransactionData\_Level, in\_wbParent:wbGetTransactionData\_Parent, \_LogLevel:3, in\_LogMessage:"Transaction Number " + TransactionNumber.ToString + ' + "Work Block "+ wbProcessTransaction\_Type.toString + " failed with exception '+exception.Message+" at Source "+exception.Source + ". BRE",  ${\sf n\_wbStart:wbGetTransactionData\_StartTime, in\_ChildAudit:wbGetTransactionData\_Audit,}$ o\_ParentAudit:wbMain\_Audit, in\_SuppressLogging:false, n\_wbStatusSuccessful:if(SystemError is Nothing AND BusinessRuleException is Nothing, true, false)) Finally NextTransaction + **NextTransaction**(in\_Config:Config, in\_SystemError:SystemError,  $\verb|_BusinessRuleException: BusinessRuleException, io\_RetryNumber: RetryNumber, \\$ o\_TransactionNumber:TransactionNumber, in\_TransactionItem:TransactionItem, n\_wbType:in\_wbType+", "+"Next Transaction", in\_wbLevel:wbMain\_Level+1, n\_wbParent:wbMain\_Type, io\_Audit:wbMain\_Audit)