

System for distribution of software, test sequence and parameters for multiple number of NI TestStand platforms, on multiple locations



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Synderegister i uddrag:

- **Labview**
- **Teststand**
 - **Processmodeller**
 - **Arkitektur**
 - **Ol Framework**
 - **Property export/import**
- **Testsystemer**
 - **Funktionstest af elektronik**
 - **Mekaniske systemer**
 - **Lineariserings systemer**

Dagens agenda:

- **Software distribution i forbindelse med Teststand**
 - **Distribution af systemsoftware, sekvenser, testparametre som testgrænser og lignende.**
 - **Fokus vil være på håndtering af testparametre (grænser)**
 - **Modeller for software distribution**
 - **Integration i process model**
 - **Integration i brugerflader**
 - **Integration i Teststand**
 - **Kodeeksempler !**
 - **Virinco, WATS MES**



Distributions Modeller

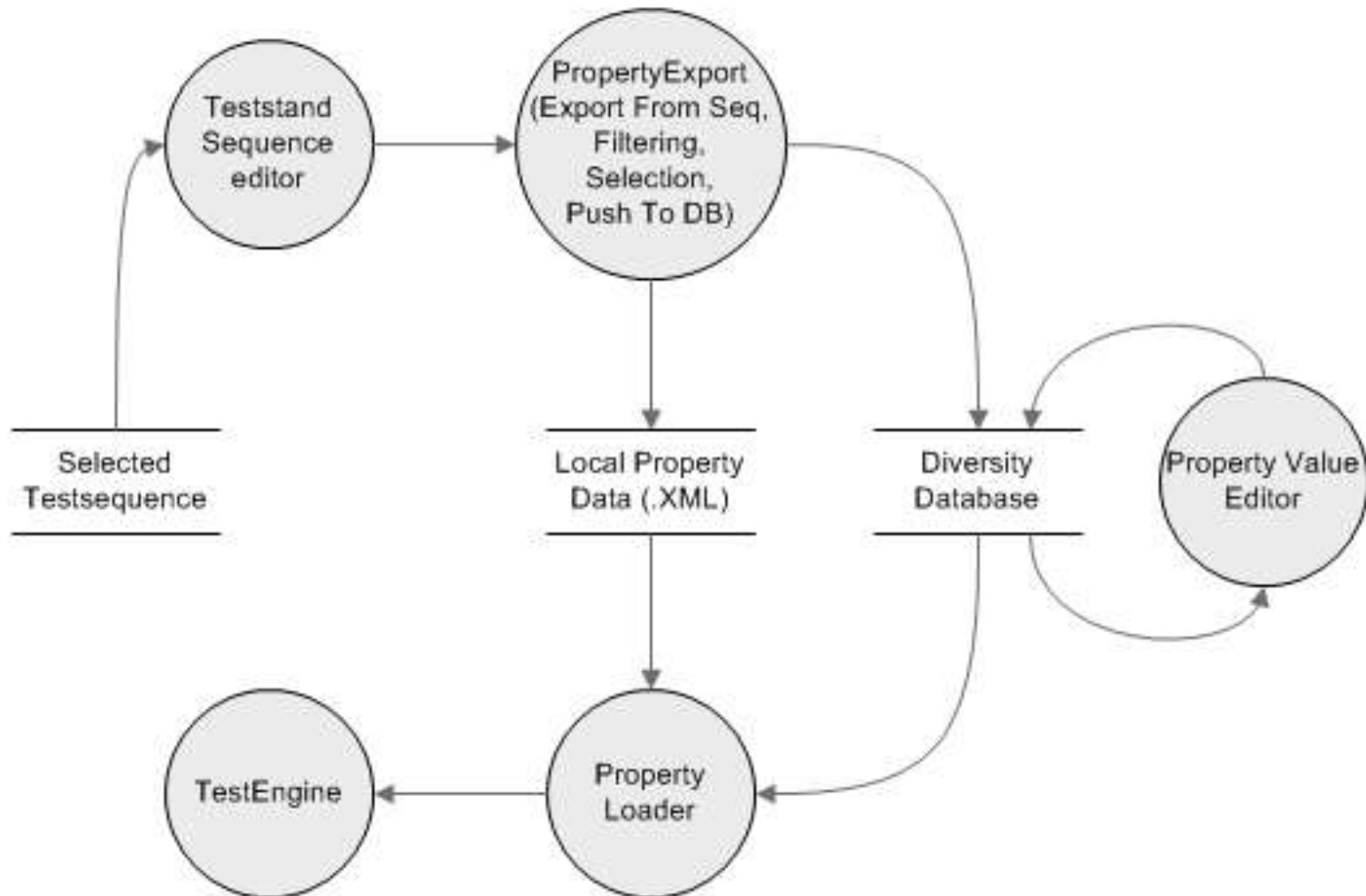
- **Dedikeret database**
 - **Properties og sekvensfiler**
 - **Versionsstyring (som kendt i SVN)**
- **Distributions Pakker**
 - **Software, properties m.m. samles i pakker. Kan håndtere alle typer data**
 - **Pakker og indhold versionsstyres**
 - **WATS MES (Virinco)**
 - **VIPM (Labview) (JKI.net)**

Dedikeret database

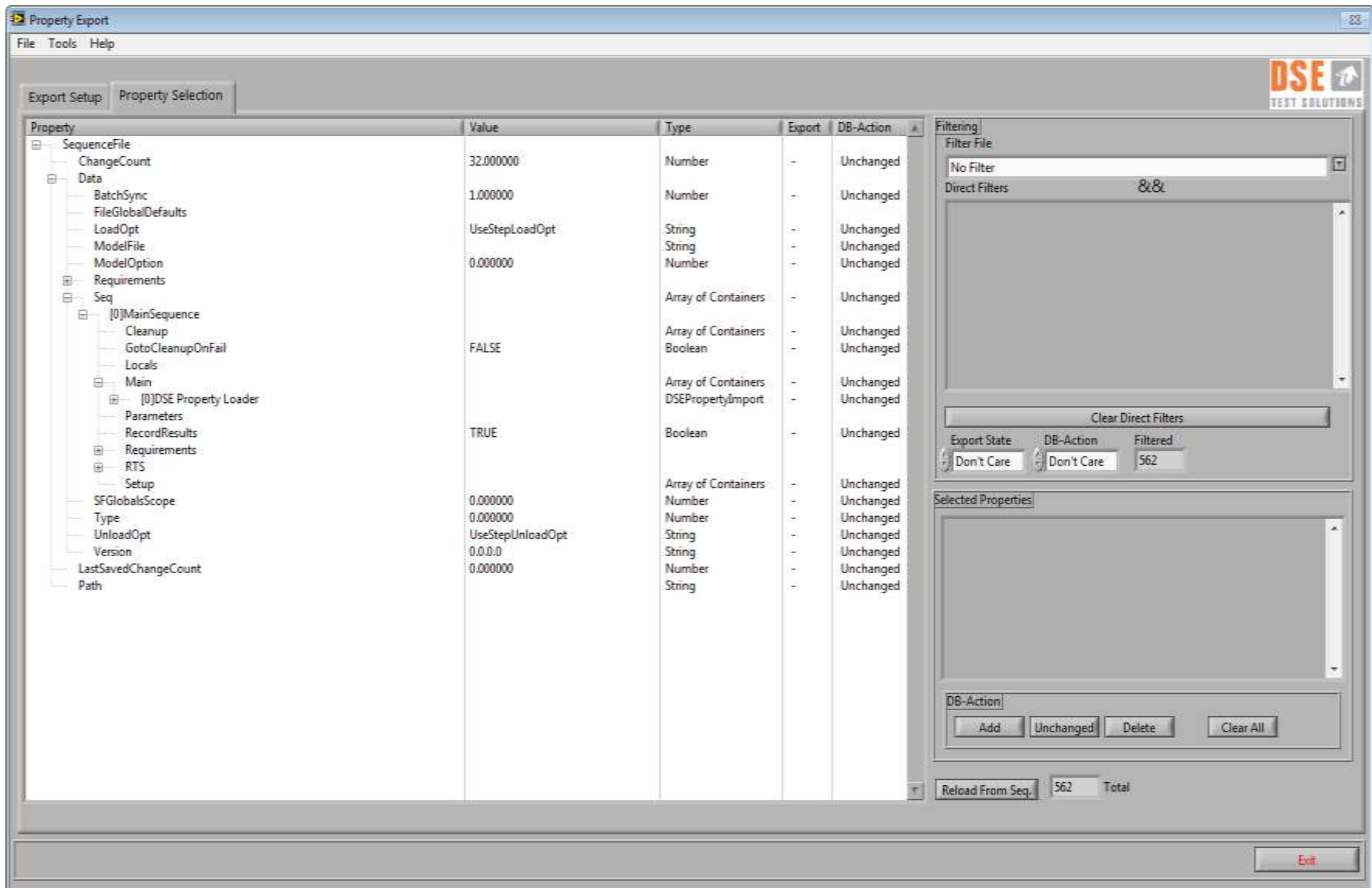
5 dimensioner: Produkt, Variant, Proces, Parameter, Version

		Process: Final Test				
				Product variant:		
				Basevariant	UK	US
		Property	Value	Value	Value	
		Test1.Highlimit	9.5	10.5	8.5	
		Process: ISP Programming			-∞	
Property		Product variant:			Normal	
Process: PreburnIn				S	∞	
	Product variant:			0	∞	
	Basevariant	UK	US	3	Normal	
Property	Value	Value	Value	mal		
Test1.Highlimit	10	11	9	9		
Test1.Lowlimit	9	9	8	7		
Test1.Mode	Normal	Skip	Normal	mal		
Test2.Highlimit	10	11	9			
Test2.Lowlimit	9	9	8			
Test2.Mode	Normal	Normal	Normal			

Dedikeret database



Property export manager



The screenshot shows the 'Property Export' application window. It features a tree view on the left for property selection, a central table for property details, and a right-hand panel for filtering and actions.

Export Setup / Property Selection

Property	Value	Type	Export	DB-Action
SequenceFile				
ChangeCount	32.000000	Number	-	Unchanged
Data				
BatchSync	1.000000	Number	-	Unchanged
FileGlobalDefaults				
LoadOpt	UseStepLoadOpt	String	-	Unchanged
ModelFile		String	-	Unchanged
ModelOption	0.000000	Number	-	Unchanged
Requirements				
Seq		Array of Containers	-	Unchanged
[0]MainSequence				
Cleanup		Array of Containers	-	Unchanged
GotoCleanupOnFail	FALSE	Boolean	-	Unchanged
Locals				
Main		Array of Containers	-	Unchanged
[0]DSE Property Loader		DSEPropertyImport	-	Unchanged
Parameters				
RecordResults	TRUE	Boolean	-	Unchanged
Requirements				
RTS				
Setup		Array of Containers	-	Unchanged
SFGlobalsScope	0.000000	Number	-	Unchanged
Type	0.000000	Number	-	Unchanged
UnloadOpt	UseStepUnloadOpt	String	-	Unchanged
Version	0.0.0.0	String	-	Unchanged
LastSavedChangeCount	0.000000	Number	-	Unchanged
Path		String	-	Unchanged

Filtering

Filter File: No Filter

Direct Filters: &&&

Clear Direct Filters

Export State	DB-Action	Filtered
Don't Care	Don't Care	562

Selected Properties

DB-Action: Add Unchanged Delete Clear All

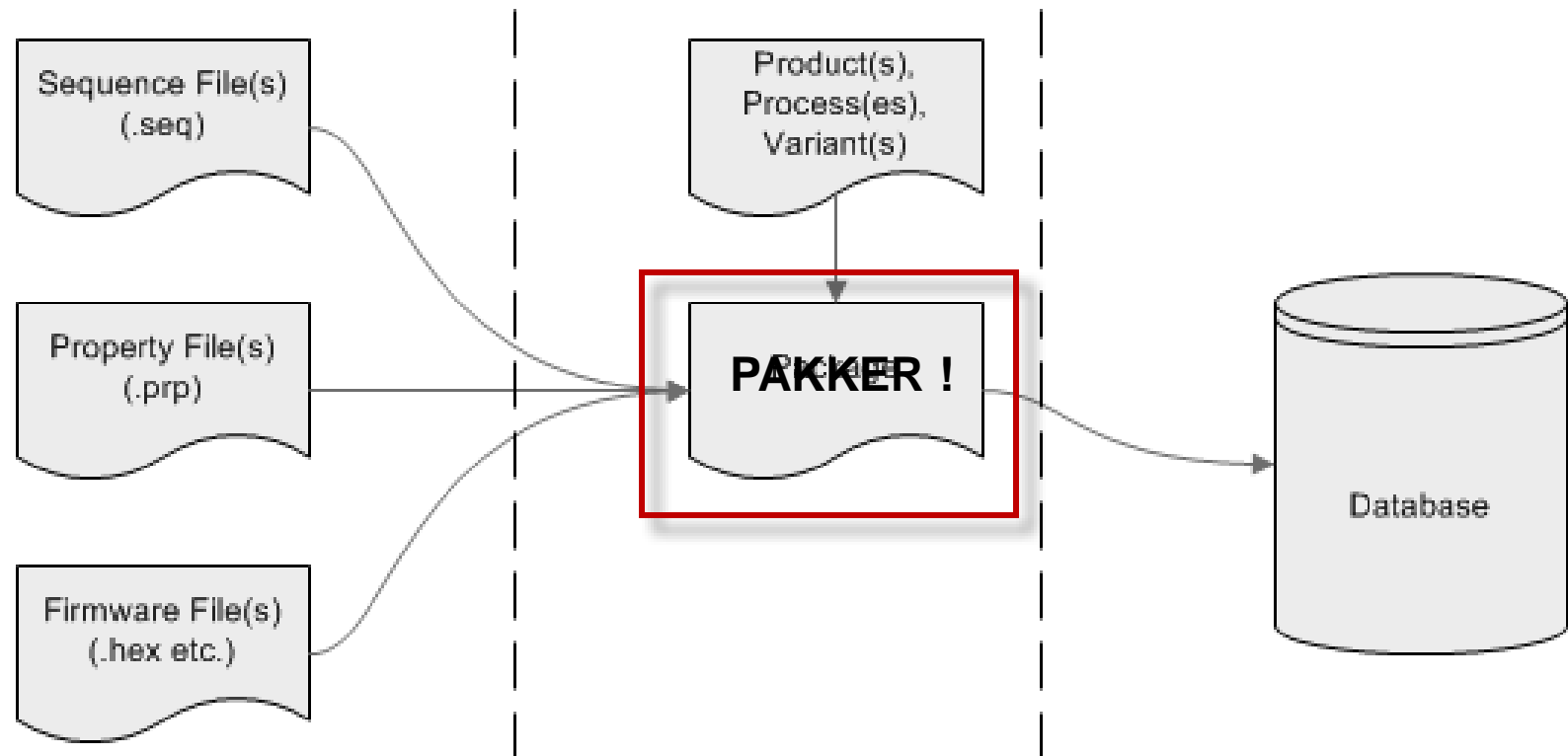
Reload From Seq: 562 Total

Exit



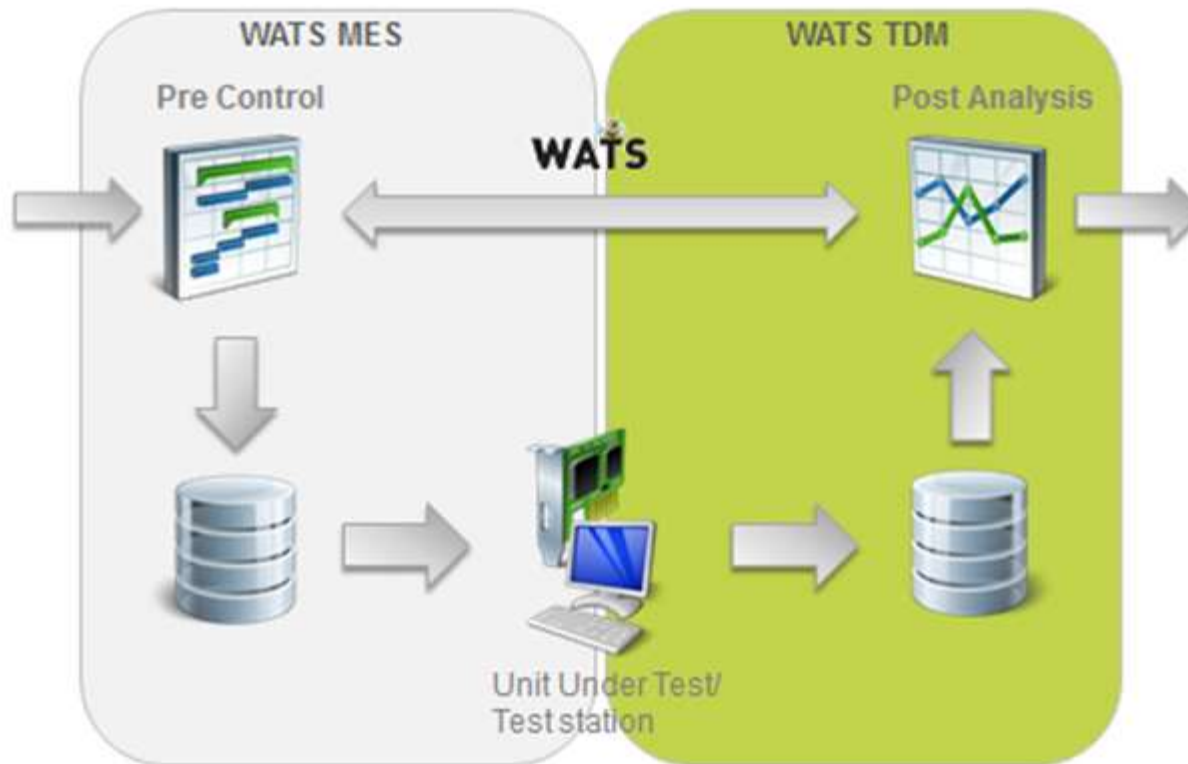
Package Based Approach

Product Related Packages

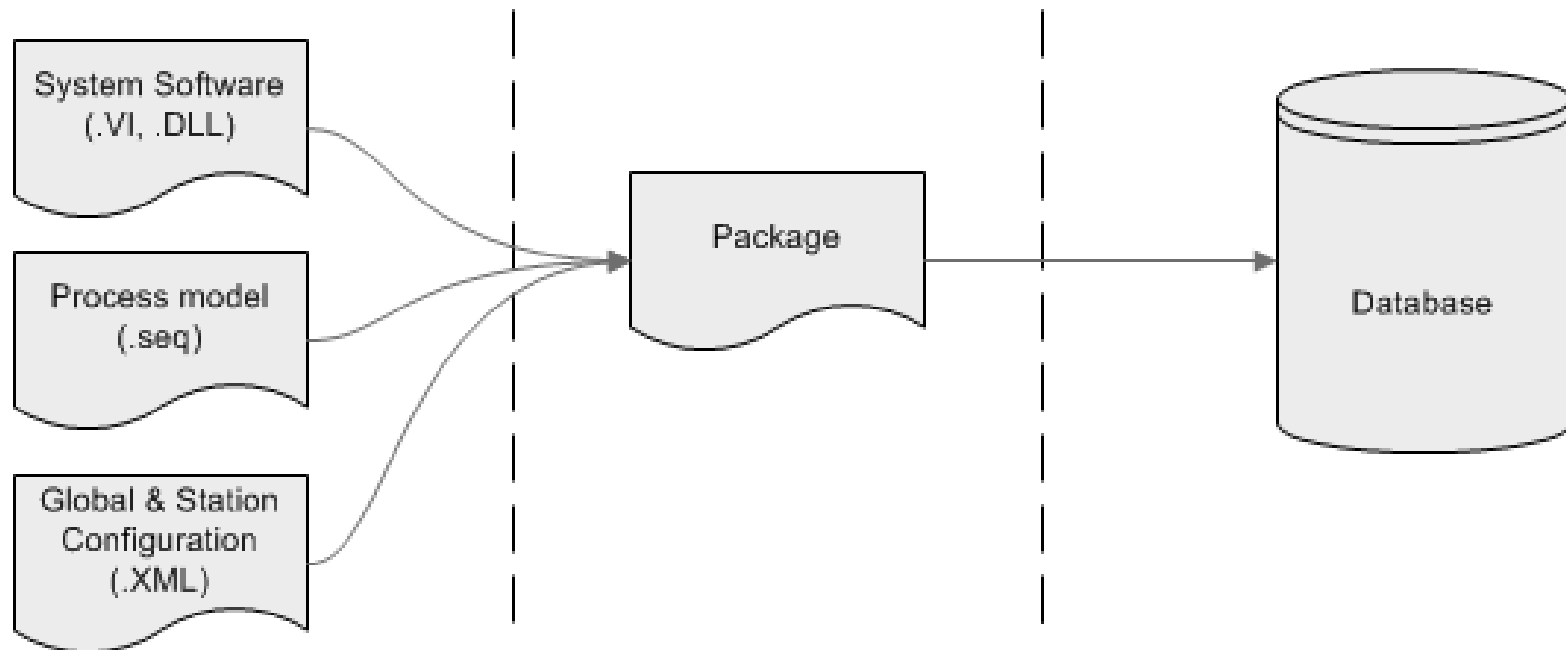


WATS 4 – MES (Man. Exe. System)

- WATS Software Distribution
- WATS Product Manager
- WATS Workflow Manager
- WATS Manual Inspection

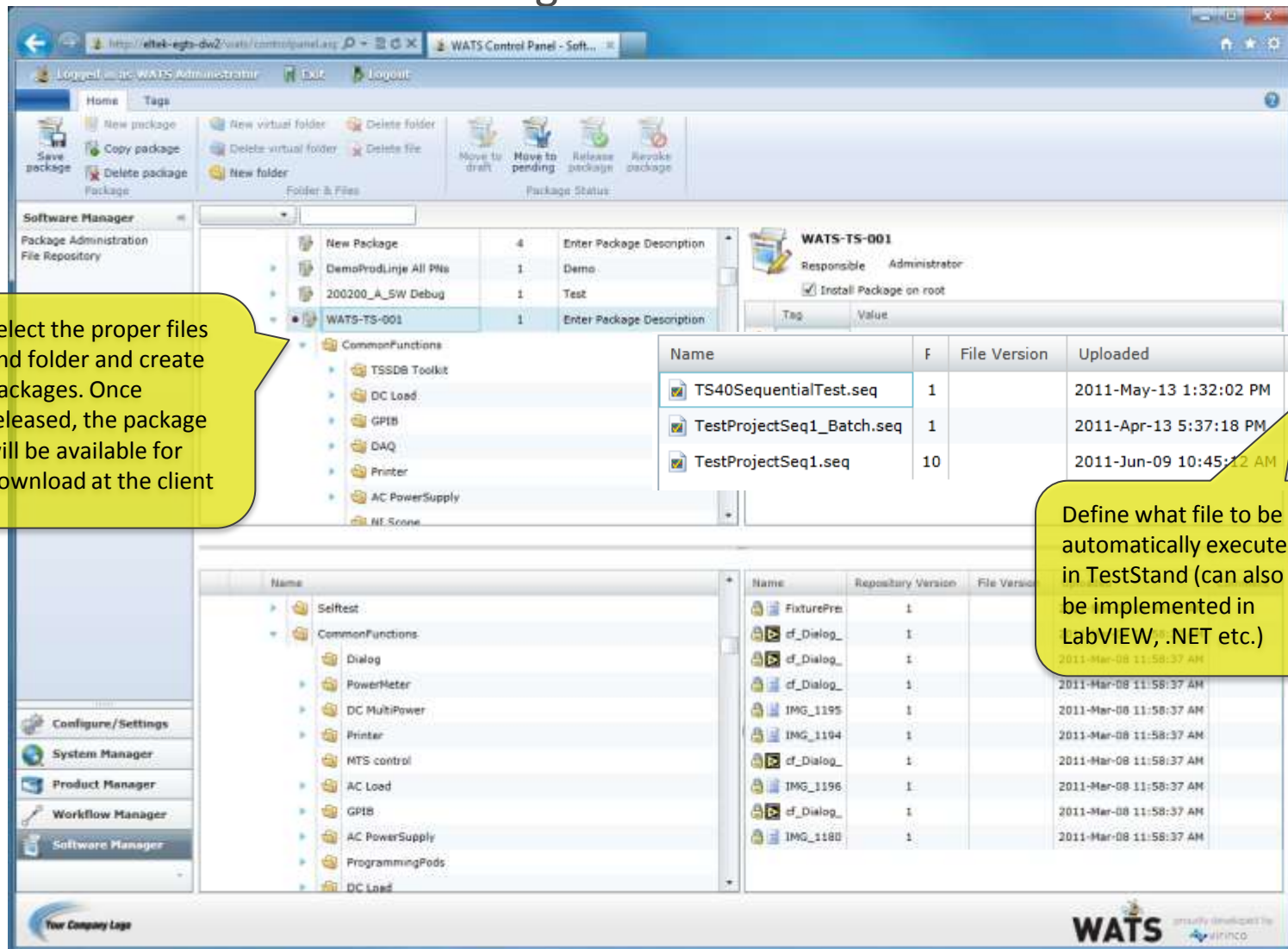


System Related Packages



Software Manager

Package administration



WATS Control Panel - Software Manager

Logged in as: WATS Administrator | Exit | Logout

Home | Tags

Actions: New package, New virtual folder, Delete folder, Save package, Copy package, Delete virtual folder, Delete file, New folder, Move to draft, Move to pending, Release package, Revoke package

Software Manager

Package Administration | File Repository

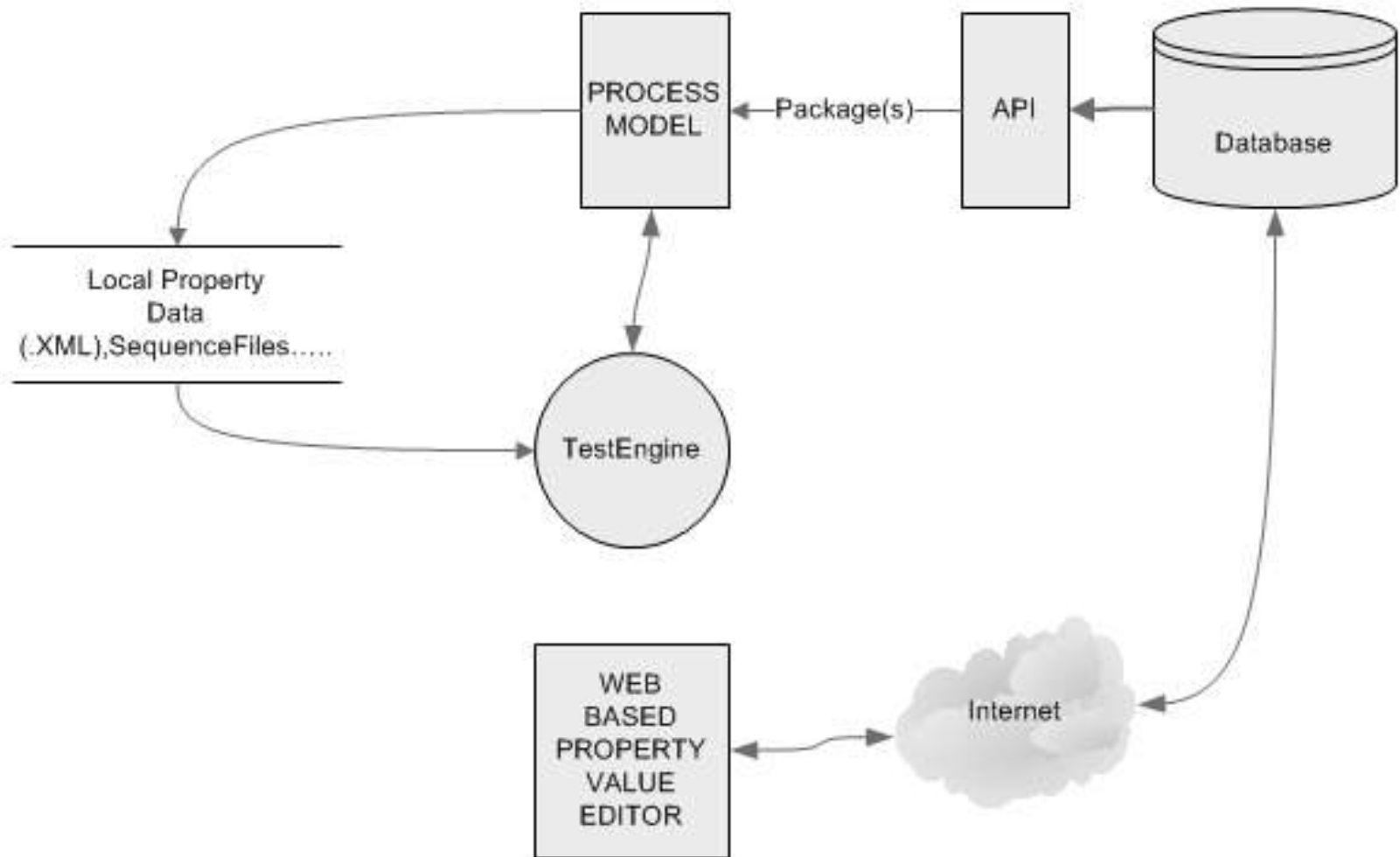
Name	F	File Version	Uploaded	Attributes
TS40SequentialTest.seq	1		2011-May-13 1:32:02 PM	TopLevelSequen
TestProjectSeq1_Batch.seq	1		2011-Apr-13 5:37:18 PM	None
TestProjectSeq1.seq	10		2011-Jun-09 10:45:12 AM	None

Define what file to be automatically executed in TestStand (can also be implemented in LabVIEW, .NET etc.)

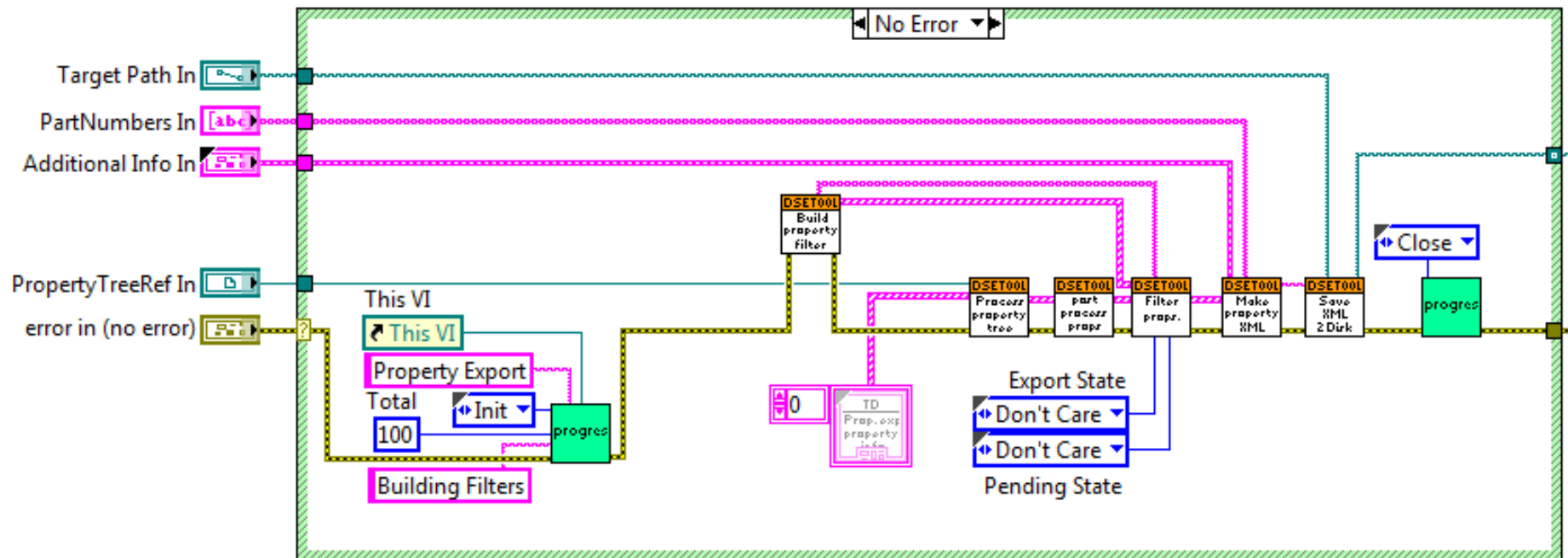
Select the proper files and folder and create packages. Once released, the package will be available for download at the client

Define what file to be automatically executed in TestStand (can also be implemented in LabVIEW, .NET etc.)

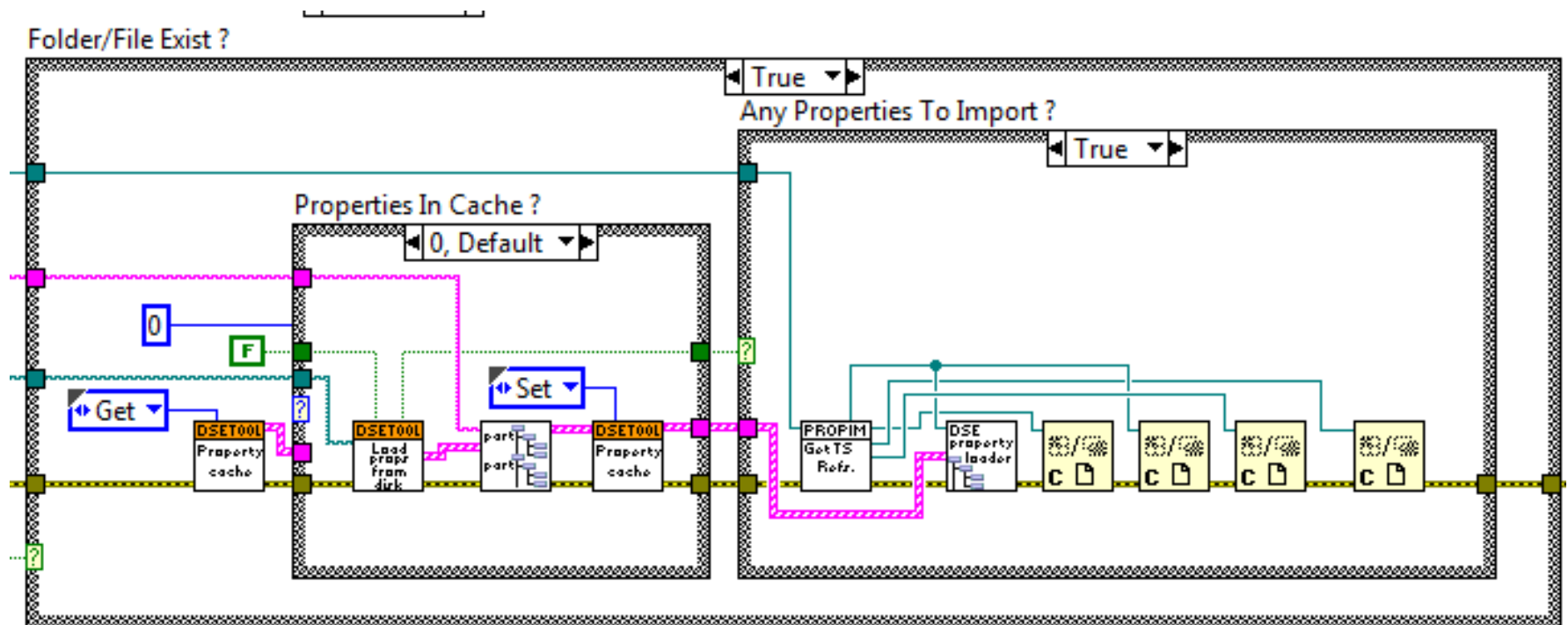
Accessing Packages



Property Export



Property Import


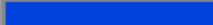
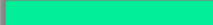

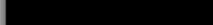




Integrations eksempel



Global Configuration Editor - Main.vi

Global Configuration

Process Colors




Code	Process Name	UI Back Ground Color
20	Acoustical test	
15	Control of register setting	
500	Laser marking	
5	Quality test	
100	Repair	
1000	Styling process	
10	SW Debug	

Select Process By Name & Select the desired color

Process Name	ProcessLetter	Code	Color	
Acoustical test	A	20		 SET

Station Mode Colors

These Colors will override the UI Background color given by the current process if station is set to Draft, Pending or Revoked.


	Draft
	Pending
	Revoked


Execution Level


Level	Name
1	Revoked
Level	Name
2	Pending
Level	Name
3	MHH
Level	Name
4	Marck Test
Level	Name
5	Do something


Edit Execution Level

Level	Name
Level 1	

 SET

 Apply

 Revert

 Cancel

WATS

Operator

Password

Item Number

Order/Job No.

Batch No.

Process

Execution Level

OK (F2)

Stop (F10)

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Integration med Process Model

DSE_WATS_MESModel.seq	
Steps: PreTestSequenceFile_DSE	
Step	Description
⊕ Setup (0)	
⊖ Main (30)	
f(x) Clear UUT	Parameters.UUT.SerialNumber = "", Parameters.UUT.UUTPartNumber = "..."
?> If	Parameters.WATSOptions.MES.Production.IsSerialNumberUnique
Identify product by Unit SN	
Translate string	Action, Virinco.WATS.Teststand.MES.Base: TranslateString(...)
Identify Product by Unit SN	Action, Virinco.WATS.Teststand.MES.Production: IdentifyUUT(...)
Else	
Identify product by PN (REV)	
Identify Product by PN, Rev	Action, Virinco.WATS.Teststand.MES.Product: IdentifyProduct(...)
Get User List	Action, DSE TOOLS - Get Simple User List.vi
Get Execution Level	Action, Global Configuration Editor - Load Configuration Data.vi
DSE Select Operation	Action, [REDACTED] Select Operation - Handle Operation Select.vi
DSE Get Process Description	Action, [REDACTED] System Configuration - Get Process Description.vi
Clear PASSFAIL Color	Action, MessageHandler - TSPutEvent.vi
?> If	Parameters.Continue == True
Get User Data From Name	Call DSE Get User From LoginName in <Current File>
?> If	Locals.FoundUser
f(x) Set ItemNumber	Parameters.[REDACTED]Options.ItemNumber = Parameters.UUT.UUTPartNumber
f(x) Set Process Name & Code	StationGlobals.[REDACTED]StationOptions.ProcessName = Locals.ProcessNam...
Get StationType & ColorCode	Action, Global System Configuration - Get Color & Code @ process name.vi
Send Background Color Ev...	Action, MessageHandler - TSPutEvent.vi
LogoutCurrent User	Action, Set IEngine.CurrentUser
LoginCurrent User	Action, Set IEngine.CurrentUser
Pass Back New User	Parameters.[REDACTED]Options.UserName = Locals.Operator
Init Property Import Cache	Action, Property Tools - Property Import Cache.vi

Integration med Process Model

