

CSD 8.2 Release Notes

Dynamic attributes

In the new release of CSD, user have the ability to configure additional properties for a chosen symbol using dynamic attributes. You can for instance choose if a Sliding Sleeve is open or closed, choose nozzle size of a gas lift valve amongst many other symbol specific attributes. Dynamic attributes are customized for each specific symbol, and the CSD administrators can add additional attributes.

The dynamic attributes also makes it possible to change the symbol layout, according to which attribute you choose. In the following example, the symbol of a Safety Valve changes when the Safety Valve attribute is switched from closed to open.

Closed

The screenshot shows a vertical assembly diagram on the left with a blue safety valve symbol. A red arrow points from the 'Safety Valve' dropdown in the Properties panel to the valve symbol. The Properties panel on the right shows the following data:

Manufacturer	Halliburton
Supplier	Halliburton
Dynamic Attributes	
Safety Valve	Closed
Type	1/4" Hydraulic
Style	Solid
Position	
Thickness	1
Color	ff0000
Comments	

Opened

The screenshot shows the same vertical assembly diagram, but the safety valve symbol is now in an open position. A red arrow points from the 'Safety Valve' dropdown in the Properties panel to the valve symbol. The Properties panel on the right shows the following data:

Manufacturer	Halliburton
Supplier	Halliburton
Dynamic Attributes	
Safety Valve	Open
Type	1/4" Hydraulic
Style	Solid
Position	
Thickness	1
Color	ff0000
Comments	

The dynamic attributes can be set up in two different ways. They can be set up to be a default value only, which means that when a part number with this symbol is created, the chosen dynamic attribute, such as open or closed, can at any time be changed by users with write access to match the current situation in their well. This is natural for attributes like open/closed, on/off etc.

When it comes to other attributes like material, sizes and so on, the attributes are not default values only. The value given when creating the part number is fixed and cannot be changed, unless you have administrator access in CSD.

One symbol can have several dynamic attributes, and in the example below a gas lift valve has four dynamic attributes where Orifice type and Orifice Size are default values only and can be edited later on, while Valve nominal OD and Shear out function are not.

The screenshot shows a 'Part' configuration window with the following fields and values:

- Symbol (*): Gas Lift Valve
- Part number (*): 90003-000-00004_2
- Description (*): 1 3/4" Gas lift valve
- Manufacturer (*): Schlumberger
- Supplier (*): Schlumberger
- Matl. spec. (*): 13 Cr L-80
- Threads (*):
- Threads OD Top: - ? - inch
- Threads OD Btm: - ? - inch
- CSD Symbol OD (*): 1.750 inch
- Nom. weight: 0.00 lb/ft
- Total length (*) (**): 1.000 m
- Makeup loss: 0.000 m
- Max. OD: 0.000 inch
- Min. ID: 0.000 inch
- Drift ID (**): 0.000 inch
- Expired Date: 01.04.2015

The 'Misc. Attributes' section (highlighted in red) contains:

Valve nominal OD (*)	1"
Orifice type (**)	Orifice
Shear out function (*)	Yes
Orifice size (**) [m]	0.000 m

Legend:

- (*) Mandatory
- (**) Values are default values only, and can be changed for each element

Parameters that can be edited after the part has been created, are marked with (**).

Item Properties

Item Data | Ins. Equip. | Control Line | R.A. Tag | Clamp | Bandit

MD T...	Symbol	Symbol		
549.810	Gas Lift Valve	Gas Lift Valve	Part Number	90003-000-00004_2
			Serial Number	
			Description	1 3/4" Gas lift valve
			Length	1.000 m
			Depth from Top of Item	0.000 m
			Date Installed	dd.MM.yyyy
			Manufacturer	Schlumberger
			Supplier	Schlumberger
			Matl. spec.	13 Cr L-80
			Threads	
			Threads OD Top	- ? - inch
			Threads OD Btm	- ? - inch
			CSD Symbol OD	1.750 inch
			Nom. weight	0.00 lb/ft
			Length (joint)	1.000 m
			Max. OD	0.000 inch
			Min. ID	0.000 inch
			Drift ID	0.000 inch
			Comments (linebreak: Ctrl+Enter)	

Misc. Attributes

Valve nominal OD	1"
Orifice type	Orifice
Shear out function	Yes
Orifice size [m]	0.000 m

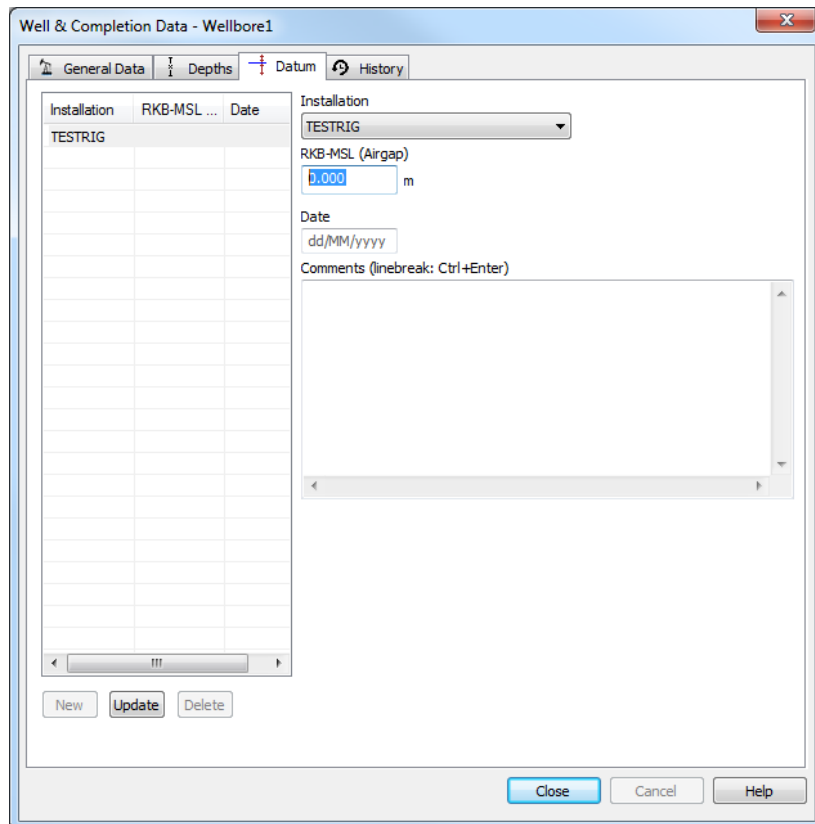
New Update Delete View Part... Close Cancel Help

When the part is used in a completion, the fixed parameters are greyed out while the others are open for editing. They can either be chosen from dropdown list, or entered manually.

This is a very flexible functionality, and can be customised by the Completion Services personnel. Get in touch with us at info@csd.as to discuss how we can implement the new functionality so you can enter schematics and well data that are even more detailed.

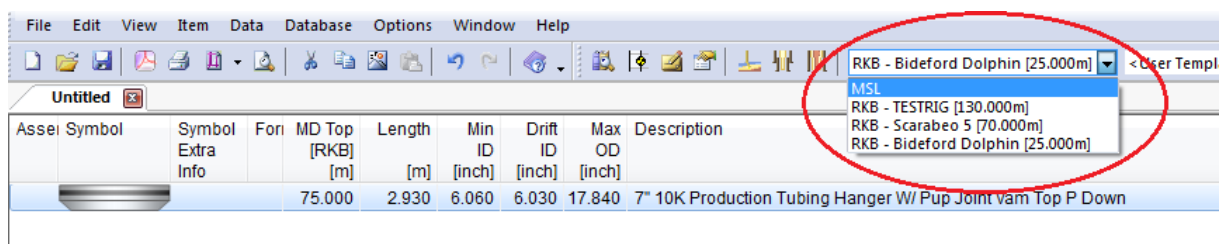
Datum

The upgraded version of CSD has a new tab called Datum under Well & Completion Data. Here users can register rigs and installations with their belonging datum/airgap.



With this new feature, users have the ability to switch back and forth between different rigs, to display all well and completion depths from the desired reference point. This is handy if several rigs are involved in a well. You can also choose MSL as a reference point.

You can switch datum both from the Well & Completion Data dialog and from the new dropdown list in the Main Window toolbar.



Example:

Datum 130 m

File Edit View Item Data Database Options Window Help

RKB - TESTRIG [130.000m] <User Templ

Asset	Symbol	MD Top [RKB] [m]	Length [m]	Min ID [inch]	Drift ID [inch]	Max OD [inch]	Description	Comments
		130.000	0.970					
		130.910	3.040					
		133.950	465.000					
		598.950	3.020					
		601.970	1.120					
		603.090	2.840					
		605.930	0.650					
		606.580	2.590					
		609.170	36.450					

Well & Completion Attributes - Wellbore1

Size	MD Top	MD Bottom
32.000	274.600	589.000
26.000	275.000	575.000
20.000	274.900	1461.800
13.375	274.200	2981.700
9.625	2918.100	6581.500
7.000	4754.000	6500.000

Datum 70 m

File Edit View Item Data Database Options Window Help

RKB - Scarabeo 5 [70.000m] <User Templ

Asset	Symbol	MD Top [RKB] [m]	Length [m]	Min ID [inch]	Drift ID [inch]	Max OD [inch]	Description	Comments
		70.000	0.970					
		70.910	3.040					
		73.950	465.000					
		538.950	3.020					
		541.970	1.120					
		543.090	2.840					
		545.930	0.650					
		546.580	2.590					

Well & Completion Attributes - Wellbore1

Size	MD Top	MD Bottom
32.000	214.600	529.000
26.000	215.000	515.000
20.000	214.900	1401.800
13.375	214.200	2921.700
9.625	2858.100	6521.500
7.000	4694.000	6440.000

ESP functionality

The best way of registering ESP equipment with bypass tubing in CSD, is to build the bypass tubing and the ESP section separately. The bypass tubing is then built in the main string mode, and the ESP section in the secondary string mode.

By default, the two strings are shown on top of each other, but this can now be adjusted. Highlight the parts you want to adjust, hold down the Shift-key and press either the left or right arrow-key on your keyboard. This will move the selected parts to the left or to the right.

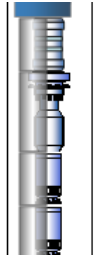
In the example below, it makes sense to move the bypass tubing to the left, and then enter Secondary String Mode, highlight the elements and move the ESP equipment to the right.

Default presentation



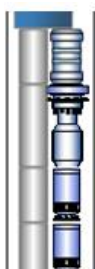
1823.584	1826.301	2.717	3.260	4.653	5.540	4 1/2" 20# Vam Top HC Bypass tubing
<u>1823.584</u>	<u>1826.301</u>	<u>2.717</u>	<u>6.023</u>	<u>5.981</u>	<u>8.810</u>	<u>QC79-2: 7"Swivel/VTHC/25Cr</u>
1826.301	1827.270	0.969	3.260	4.653	5.540	4 1/2" 20# Vam Top HC Bypass tubing
<u>1826.301</u>	<u>1826.501</u>	<u>0.200</u>		<u>0.010</u>	<u>6.750</u>	<u>Discharge head 675 Series</u>
<u>1826.501</u>	<u>1827.270</u>	<u>0.769</u>				<u>Discharge Gauge unit 675 Carrier</u>
1827.270	1831.729	4.459	3.260	4.653	5.540	4 1/2" 20# Vam Top HC Bypass tubing
<u>1827.270</u>	<u>1831.729</u>	<u>4.459</u>		<u>2.000</u>	<u>6.750</u>	<u>48 Stage HC35000 MT Pump</u>
1831.729	1836.188	4.459	3.260	4.653	5.540	4 1/2" 20# Vam Top HC Bypass tubing
<u>1831.729</u>	<u>1836.188</u>	<u>4.459</u>		<u>2.000</u>	<u>6.750</u>	<u>48 Stage HC35000 MT Pump</u>

Shift + ← on the selected bypass tubing in main string mode:



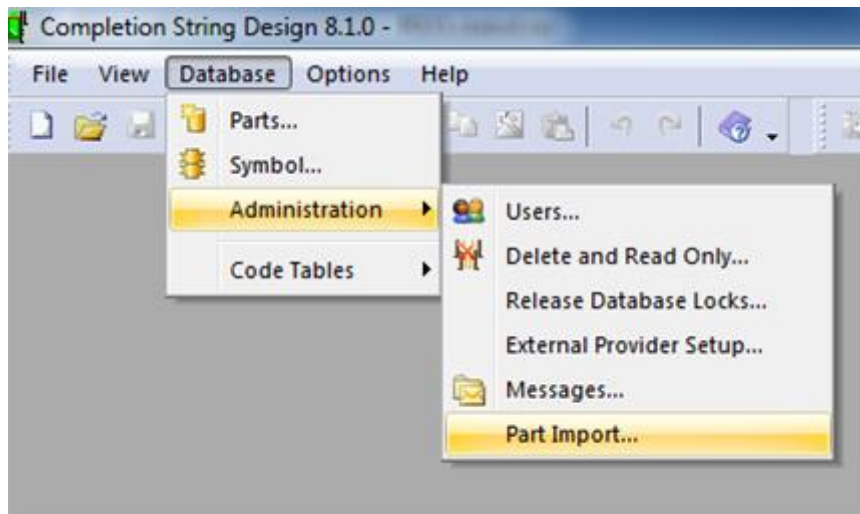
1822.808	1823.584	0.716	3.958	3.833	12.000	1.3 3/8" Support Block (ASSY)
1823.584	1826.301	2.717	3.260	4.653	5.540	4 1/2" 20# Vam Top HC Bypass tubing
<u>1823.584</u>	<u>1826.301</u>	<u>2.717</u>	<u>6.023</u>	<u>5.981</u>	<u>8.810</u>	<u>QC79-2: 7"Swivel/VTHC/25Cr</u>
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<u>1826.501</u>	<u>1827.270</u>	<u>0.769</u>				<u>Discharge Gauge unit 675 Carrier</u>
1827.270	1831.729	4.459	3.260	4.653	5.540	4 1/2" 20# Vam Top HC Bypass tubing
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1831.729	1836.188	4.459	3.260	4.653	5.540	4 1/2" 20# Vam Top HC Bypass tubing
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Shift + → on the selected ESP Equipment in secondary string mode:

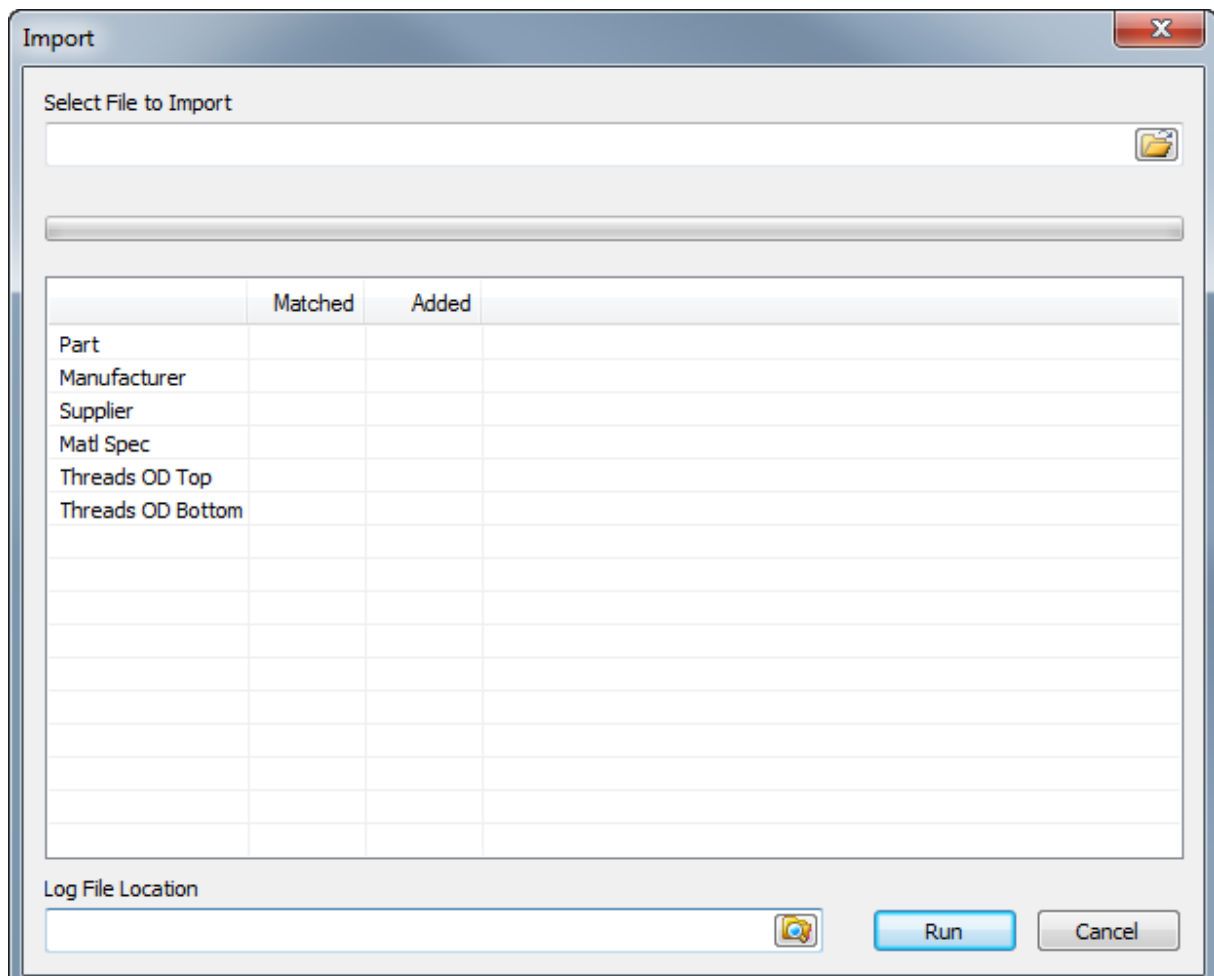


1822.808	1823.584	0.716	3.958	3.833	12.000	1.3 3/8" Support Block (ASSY)
1823.584	1826.301	2.717	3.260	4.653	5.540	4 1/2" 20# Vam Top HC Bypass tubing
<u>1823.584</u>	<u>1826.301</u>	<u>2.717</u>	<u>6.023</u>	<u>5.981</u>	<u>8.810</u>	<u>QC79-2: 7"Swivel/VTHC/25Cr</u>
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1827.270	1831.729	4.459	3.260	4.653	5.540	4 1/2" 20# Vam Top HC Bypass tubing
<u>1827.270</u>	<u>1831.729</u>	<u>4.459</u>		<u>2.000</u>	<u>6.750</u>	<u>48 Stage HC35000 MT Pump</u>
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Import of parts to CSD Part database



One of the main concerns that new CSD customers have is related to populating the CSD part database. It is very easy to manually create new parts in the CSD Part database, but now we have made it even easier with the introduction of part import from Excel. If you have many parts that needs to be imported into CSD, you can simply ask the vendor to specify this in an Excel format, and then you will be able to import this with a click of a button. Please get in touch with support@csd.as if you would like to get the Excel format that needed to import parts into CSD, or if you have any questions.



Completed backlog items:

ID	Title	State	Description
24	Make sure the text "Existing" always refer to the codetable text	Done	
25	Separate data box for control lines	Done	
26	Show control lines and ratags for inner string components	Done	
27	Add support for specifying language id in registry and command line	Done	
39	Delete Wellbore	Done	Delete wellbore should follow the write access user level.
5	Support for high DPI screens; Windows8	Done	
43	When initiating dialog boxes / property pages, the columns will not scale appropriately	Done	
28	Move texts to resource file	Done	
30	Font icon point to same dialog	Done	The font icon in the CSD menu toolbar, should point to the dialog found in Option, Setup, Fonts. This also goes for the Font menu item in Options, Font... Note: In the Options menu; the Header Font... and Data Box Font... menu item could be removed(?).
35	Perforation - Show Open / Closed	Done	Perforation should not disappear from Schematic & Sketch if it's marked Closed.
31	Delete & Read Only dialog change	Done	20140926 obe: read only works as expected in this dialog, and no changes will be required. The Delete & Read Only dialog should be named "Delete Completion". The Read Only tick box should be removed. The close button (X) don't work in the dialog.
36	When running 64 bit version, CListCtrl crashes	Done	
38	Default wellbore name - should read Wellbore1 instead of Main Wellbore	Done	The default wellbore name (on File, New & Save As...) should read Wellbore1 instead of Main Wellbore.
44	Open hole wells will not display e.g. cement all the way out to the wellhole	Done	
45	Mineral zones should not follow the diameter of the well hole	Done	
46	In tally mode, when having generic items connected to an inventory, it should not be possible to edit e.g. description	Done	
48	Support for multiple languages	Done	
49	Textures does not show in well path view	Done	
53	Change header in Option - Setup	Done	Change the tab header Part List Columns to Part Explorer Columns

56	Message box in Part->Data; replace the red X icon with an exclamation mark icon	Done	Part, Data: The message informing that this part could not be edited looks like a error message. Would be good to replace the red X icon with an exclamation mark icon.
57	Change header "CSD Scale OD" to "CSD Symbol OD" & "ScaleOD" to "SymbolOD"	Done	In Part->Data, Item Properties->Item Data: Change the heading "CSD Scale OD" to "CSD Symbol OD". In Properties dialog: Change "ScaleOD" to "SymbolOD"
59	Properties dialog - When highlighting a WELL in Explorer; show wellbore name(s)	Done	When highlighting a WELL in Explorer; show wellbore name(s) for the latest Existing mode in the Properties dialog: Field, Well, Wellbore(s), Revision...
80	Part / Element - Improvement of dynamic attributes functionality	Done	
106	Copy / Paste into casing, well hole etc	Done	
87	Part - Search: Include Supplier search field.	Done	Request from Statoil
83	Schematic / Sketch - Secondary String Mode - does not show control line	Done	CSD Schematic does not show control lines entered in the Secondary String Mode. (They are visible in Secondary String Mode).
78	Element - Save TVD values in table Element	Done	Save TVD values in table Element.
73	Documents dialog - Description header should contain (linebreak: Ctrl+Enter)	Done	Documents dialog - Description header should contain (linebreak: Ctrl+Enter).
72	PDF Print - Default file name suggestions - convert invalid characters	Done	One cannot save the built in PDF report from CSD with it's default filename. The default suggestion should be converted to a format that could be saved. I.e. slash should change to underscore etc.
70	A user should be able to delete Additional Wellbore	Done	A user should be able to delete an additional wellbore if the same user has created it. Seems like it's conencted to CodeTableEditLevel. Should have it's one key.
33	Datum	Done	Change reference setup in CSD. Relate to MSL. Add rig with corresponding Airgap. Dropdown with rigs. To be specified.
34	ESP wells / Dual	Done	Improve the creation of ESP wells; offset on Secondary String. Dual string improvement. To be specified.
67	PDF Print - Casing Attribute "green" table should include casing column	Done	PDF Print - Casing Attribute "green" table should include casing column, shoving casing size. Pr. today it's not clear what casing the casing attribute is related to.
84	Mineral Zone dialog; when changing data and pressing ok directly, CSD crashes	Done	

85	Part Import tries to import more than one row at a time	Done	
86	Person-New is not logged	Done	
138	Part - Model Name	Done	Add a text field in Part, Data tab called Model Name. Default value only.
135	Well & Completion Attributes - X-mas tree tab	Done	In Well & Completion Attributes: The X-mas tree tab should change name to Well Head. Also in the gridlist at the left, the label should change from WellHead to Well Head.
134	File-New and datum setting	Done	When choosing File, New and then add installation, that installation should be set as default in Installation drop-down / Schematic datum dropdown.
133	CSD 8.2 save over CSD 8.1 version	Done	User must not be allowed to save a revision in CSD 8.2 over a revision created in CSD8.1 or less. This is because of the mismatch in datum references in the old and new wellbores.
118	Milimeter and number of decimals	Done	One should be allowed to use 1 decimal on mm units. Today minimum of decimals are 3.
79	Schematic / Sketch - Offset on main string and inner string (ESP)	Done	One should be able to set the offset of both the main string and the innerstring, to be able to show ESP wells (amongst other) as a single string, instead of Dual.
95	Part Registration: Drift ID should not be mandatory	Done	
96	Import with constraint checking / codetable value creation	Done	
115	ExternalProvider: support for CEMENT	Done	
132	Wellpath: Recalc of wellpath not working after change of datum	Done	