

Collabor8 Subsurface

User manual

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1 How to get access

To get access to the solution you will need to be registered as part of the solution and in addition you will need to have what is a Hello Id account.

Each company has what is referred to as a company administrator in the solution, granting them the rights to add users for their own company.

2 How to get support

The solution has a dedicated service desk that can assist you in solving possible problems. The servicedesk can be reached on:

support.subsurface@collabor8.no

Or phone: (+47) 52 04 00 00 (08:00 - 16:00 CET)

3 Log in

- https://subsurface.collabor8.no/
- Username:
- Password:





4 Use of Collabor8 Subsurface

4.1 Home screen

The home screen gives access to different types of functionalities as also found in the menu tree to the left. The home screen also has a fast navigation entry to any predefined searches that the user have and set as favorite defined in the system (shown in the figure below).

subsurface		ĩ	SETTINGS LOG OUT
i Home	Production ^	Drilleg	^
Production Publish data Explore data	Des Des Ave Ave Publis data Explore data Explore data Explore data Emailson data	Fach data Cogn data English data (bett) Sel Ito que	
Explore data (beta)	Administration	Reports	^
Dashboards		-	
Emission data Dritting Publish data	Eventing Settings company users System configuration.	Upsated reports	
Explore data	Ferculius		
Explore data (beta)	Q ASGARD LAST 7 DAYS 😆 Access to predefined searches as defined by		
Slot life cycle	the user		
Dashboards			
Administration ^			
Event log			
Settings company users			
System configuration			

If needed to expand the screen more, the menu can be hidden to allow for a larger view when viewing data.



4.2 Adjusting user preferences





Each user has the possibility to adjust their own settings as needed. This is done through the settings functionality as shown in the picture below.

subsurface		
E Home	Production A	Driling
Production ^		
Explore data	Publish data Explore data Explore data (bela) Dashboards Emission data	Publish data Explore data Explore data (beta) Slot life cycle Dashboards
Explore data (beta)		
Dashboards	Administration	Reports
Emission data	🖻 🕸 🍄	
Drilling ^	Everil log Settingscompany users System configuration	2 Upleaded reports
Publish data	Even ny li veningi conperti vare li varen congunitori	uprivate in injuris
Explore data	Favourites ^	
Explore data (beta)	Q ÁSGARD LAST 7 DAYS	
Slot life cycle		
Dashboards		
Administration		
Event log		
Settings company users		
System configuration		

This will bring up a screen where different types of settings that the user can change if needed.

subsurface		SETTINGS LOGOUT
I Home	Preferences	
Production ^	User Invaultes	User performances Defines what separator to use when downloading data from explore data, use
Publish data Explore data	PRODUCTION FILTERS CRILLING FILTERS	C5V dulmber
Explore data (beta)	ASGARD LAST 7 DAYS EDIT	CSV decimal separator to use when downloading data from explore data
M Dashboards		Decimal separator to use when viewing data in the system
Continue A		1000 seperator O Comma O Dot Space O None Defines 1000 separator to use when
Publish data		Namber example 122.456 750,1235556 Viewing data in the system Extry ransjuton type © classe: O Tree
Explore data		Defines which default view to use for explore data views, either "Classic" -
Explore data (beta)	Production data keye	search based or "Tree" - shows structure as a navigational tree
Sict life cycle	COMBINED PRODUCTION INJECTION CONSUMPTION IMPORT EXPORT >	·
Administration	SHOWALL HIDE ALL	Defines which columns in explore data that should — be visible by default
😇 Eventing	Report period start ® shorr Hide Report period end ® shorr Hide	be visible by default
Settings company users	Production day start	
System configuration	Reporting Facility (8) show O Hide	
Reports ^	Ovening Facility (6) show (7) Hile	

4.3 Explore data

4.3.1 Production

The explore data functionality can be used to view production related data using search. When the explore data functionality is selected the user is presented with the search screen where it is possible to select which data to search for (available fields to search for is based on access for the given user and also defined ownership as registered on the NPD factpages). One or several assets can be selected if needed. Explanation of search screen below. If e.g., a field is selected the system will automatically include associated platforms and wells for that given field.





subsurface Home Save as a predefined search based on search ۲ criteria. If to date is not changed the saved search will be Fav Publish data rolling timewindow so that next day the user goes in it will default to today's data ASGARD LAST 7 DAYS Explore data T Enuues Explore data (beta) Select entitied based Licenses on a treeview Dashboards . Defines which fields Emission data to include in search Fields / Discoveries GULLFAKS 🛞 • GULLFAKS SØR 🚫 If needed can search Publish data for specific data registered on given Platforms Explore data platforms • Explore data (beta) If needed can search for specific data Wells Slot life cycle • registered on given wells or wellbores Dashboards Wellbores ÷ Event log Specifies which timeperiod to search for data. Settings company users Period -> Production day From: To: Created -> Created in timerange Modified -> Modified in timerange System configuration 29.10.2007 29.10.2008 Date type period created modified Uploaded reports





The additional filter function can be used to filter the data even more if needed.



The tree view functionality can be used to browse and search for data on specific entities as shown in the figure below.







When viewing data in the tabular view in explore data it is possible for the user to adjust the view in different ways and at the same time download data if needed (shown in picture below).

subsurface		Combinatio (production consumptio	injecti	data I	Data tagge production	d as beeing related	Data ta	agged as beeing on related (e.g. ater)	consume r	diesel ++ Da	ite tagged a port related	is beeing		beeing Data tagged a inventory, e.g.	installati comment is beeing	ged as beeing on related, e.g S	Data t	agged as st related	sa beeing	ata tagged as b ile related	Dat	ta tagged as s lift related	beeing		Select co to view	
Home	×			COME	INED	PRODU	CTION	INJECTION	CON	SUMPTION	IMP	ORT	EXPOR	रा ।	INVENTORY	INSTALLATI	ONDATA	WEL	TESTS	SALE		GASLI	FT	1		
roduction ^	Favouriten																							(0)	
Publish data	ASGARD LAST 7 DAYS			Report v period	Report period end	Production day start	Production day and	Reporting Facility	Owning Facility	Facility	Facility	Reporting		Flow name		Flow type	Product	Qualifier	Sub type	Volume		My	Interest Sy			Quality
Explore data	ASGAND DAST 7 DAYS		**	start							type	period										volume	(%)	ame ve	eraion	
Explore data (beta)	1 Endles 👕	₹'^		30.10.2022	31.10.2022	30.10.2022	31.10.2022				platform	day											D	PR 2	ter	mporar;
	Licenses			30.10.2022	31.10.2822	30.10.2022	31.10.2022				platform	day											D	PR 2	ter	mporan
 Dashboards 		· · ·		30.10.2022	31.10.2022	30.10.2022	31.10.2022				wellbore	day											D	PR 2	ter	mporary
 Emission data 	Fields / Discoveries			30.10.2022	31.10.2022	30.10.2022	31.10.2022				wellbore	day											D	PR 2	ter	mporar

In the explore production data view there are some columns that are important to be aware of and their meaning (shown in the figure below).



4.3.2 Drilling

The explore drilling data works in the same fashion as for the production part.

4.3.3 Slot lifecycle data

The slot lifecycle functionality is tailored at viewing project and section-based information with respect to drilling.







4.4 Dashboard

4.4.1 Production

In the solution there are some common defined dashboards that can be used to show data in a more graphical way.

To access the production dashboards use the "Dashboard menu entry".







Daily operation dashboard

	wing information as beeing be production	Download graph as an Download image as csv	graph data Expand gra one bug w	indow	
DAILY ONGOING OPERATIONS	DAILY WELLS MONTHLY OVERVIEW			If selected field has Export, graph will show this information /	
Field production			Field export		ik 🙆 (
(=)0tiwr (sm3)		Gas (sm3)	T Other (sm3)		Gas (sm3) - 350010
Filter graph, specific data to show		-450000	255	/	-270010
3000	the new window	-300000	170		- 180000
1500		- 150000	85		-90000
0 25.10.2021	27.10.2021 28.10.2021 28.10.2021 30.10.2021 31.10	2021 01.11.2021 02.11.2021	25.10.2021	27.10 ['] .2021 28.10 ['] .2021 29.10 ['] .2021 30.10 ['] .2021	31.10.2021 01.11.2021 02.11.2021
Field injection	injection graph will show this information	ik 🙆 D	Field consume	If selected field has consumption e.g. fuel / flare graph will show this information	ili 🛆 (
			Ŧ		Gas (sm3) - 120010
з-					- 60000
2-					- 60000
1-					-30000
25 10 2021	27.16.2021 28.16.2021 29.16.2021 30.16.2021	If selected field has comments ³ 'registered, these will be shown here	25.10.2021 25	? tú 2021 28. tú 2821 28. tú 2821 30. tú 2021 3	1.10 [°] 2821 01.11 [°] 2821 02.11 [°] 2021
Comments					ili 🔿 (

When the user expands a given graph as described in the figure below, this will bring up a bigger window of the graph allowing for some additional filtering.







Daily wells dashboard

The daily wells dashboard gives an overview of well related data.

DAILY ONGOING OPE	ERATIONS DAILY WELLS MONTHLY OVERVIEW				
Wells online		6 0	Well production	ik 🙆 🖸	Well injection
 24∼		_		Gas (sm3)	
18	Shows registered uptime		Shows registered well	-	3-
12	for wells for the selected field		production broken down into oil, gas, water, condensate	-	Shows registered well 2- Injection
6-				-	1
01.11.2021	0411/2021 0611/2021 08.11/2021 10.11/2021 12.11/2021 14.11/2021 1611/2021	19.11.2021	0. 01.11.2021 06.11.2021 10.11.2021	19.11.2021	01.11/2021 06.11/2021 10.11/2021
Well measurement					
Ŧ			Shows detailed well		
Production day start	Production day end Reporting Facility Facility Owning Facility Data	eriod Reporting	period Flow type Product Qualifier Gas Oil - net	Water Operation time	Choke size Whp Sub type System name System version C
02.11.2021	03.11.2021				
02.11.2021	03.11.2021				

Monthly overview dashboard

The monthly overview dashboard shows information related to official production data as reported to the NPD on a monthly basis.

DAILY ONGOING OPERATIONS DAILY WELLS MONTHLY OVERVIEW				
Field production allocated	ili 🙆 🖸	Field Injection	-i6 6 D	Field consume
T Other (sm3)	Gas (sm3)	÷	Gas (sm3)	<u></u> Gene (eu.):
	I			
Field production allocated information		Field injection related information		Field consume related information
0	11.2021	08.2021 10.2021	11.2021	V9.2021 10.2021
Saleable volumes	ili 🙆 🖸	Inventory volumes	ili 🙆 🖸	
- Other (sml)		Other (sm3)		
Saleable volumes		Inventory volumes		





4.4.2 Drilling

The drilling dashboards can be viewed using the dashboard element as part of the menu structure.



Ongoing operations dashboard



When expanding the activity breakdown frame, a more detailed view of the activities for the selected period and wellbores can be viewed







Time/Depth/Period dashboard

The time/depth/period dashboard gives a detailed overview of one specific wellbore and registered data.



Lithology dashboard

The lithology dashboard shows lithology and stratigraphic registered information on one specific wellbore.





ONGOING OPERATIONS	TIME/DEPTH/PERIOD STATUS	IGY REGISTERED DATA	RIG UTILIZATION		
ense	Field	Wellbore*		÷	
	·				EXECUTE QUERY
ratigraphic and lithology by o	epth			- 13	TVD MD
			OTT O) MD	
0m -				-0m	9
261m-				-261m	
523m-				-523m	
784m-				-784m	
1045m-	Stratigraphy, lithology,			- 1045m	Time depth plot
1307m -	mud weight, Azimuth, Inclination, interruptions			1307m 3	
1568m-	and drilling fluid used vs registered depth			1568m	
1829m-				1829m	
2090m -				-2090m	26 im- 704m -
2352m-				-2352m	1307m - 1829m -
Stratigraphic	Lithology Mud weight Azi	muth Inclination Interuptions	Drilling fluid		2352m- 31.01/2016 00.10/2016 16.10/2016 27.06/2019 17.11/2021 21.11/2021 24.01/2022 26.01/2022 01.02/2022 05.02/2022 09.02/2022 13.02/2022
atigraphic					Lillinology
Wellbore Stratigraphic	MD Top MD Top planned TVD Top	TVD Top planned Repo	rt Crealed I	Addited	Report Wellbore Top MD Bottom MD Thickness Top TVD Bottom TVD Lithology Show

Registered data dashboard

The registered data dashboard shows information to one given wellbore with respect to what information is actually registered in the system.

ONGOING OPERATION	S TIME/DEPTH/PERIOD STATUS	LITHOLOGY	REGISTERED DATA	RIG UTILIZATION								
License	Field		Wellbore *									
	Ŧ		*		* EXECUTE	QUERY						
Registered data												- 16
Registered reports on Time period: 30.1.2018 - 13.2	2022		istered for a y in this case on									
weilTest		Weinbore										
wellboreInfo			•	•							-	-
weather	/											
survey		\smile										
stratigraphic												
statusinfo 🗧		-	•	•							•	-
porePressure												
perforation												
logEntry												
lithology												
incident												
gasReading												
formationTest												
equipmentFailure												
drillingFluid												
drillingActivity		-		•							•	
core												
cementStage												
casingLinerTubing												
bilRecords	3.2018 3.2018 5.2018 5.2018 6.2018 8.2018 8.2018 8.2018 8.2018	018 018 018	010 010 010	019 019 019	1.2019 2.2019 1.2020 1.2020 2.2020	3.2020 4.2020 5.2020 6.2020 6.2020 8.2020	9.2020 9.2020 1.2020 2.2020 1.2021 1.2021	021 021 021	6.2021 7.2021 8.2021	9.2021	0.2021	2.2022
2.20	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	02 12 22 22 22 12 22 12 22	22 321 521 521 521	.62 821 821 921 020	1.2 1.2 1.2 2.2 2 2.2 0	32 42 521 521 621 621 72(72(82)	9.20 9.20 1.20 1.20 1.20 1.20	2.2021 3.2021 4.2021 5.2021	6.202 7.202 8.202	9.2021	1.21	1.21





Slot lifecycle dashboard

The slot lifecycle dashboard gives information related to selected well operations and projects that has been run over time on a given field.



Select a project to view more details related to that specific project







4.5 Publish data

From Home you find shortcut to publish Production and Drilling reports

Home	Production	^ Drilling
Production ^		
Publish data		
Explore data	Publish data Explore data Explore data (beta) Dashboards Emission data	Publish data Explore data Explore data (beta) Stot life cycle Dashboards

Depending your access there are possible to upload different types of Production reports:



And different types of Drilling data reports:

subsurface	
: Home	Publish drilling data
Production ^	
👔 Publish data	Report type
Explore data	Daily drilling report
Explore data (beta)	Drilling slot life cycle report
N Dashboards	
Emission data	
Drilling ^	
£ Publish data	
Explore data	
Explore data (beta)	
Slot life cycle	
No. Dashboards	





4.5.1 Select files to upload

Select report type and click to browse or drag and drop report to publish

×	Publish production data								
		RENOVE ALL FALED FLES REMOVE ALL FLES	PUBLISH ALL VALIDATED						
	Report type								
	Daily production report 2.0 *								
L .	Please select, or drag and drop one or multiple XML files								
		BROWSE							

4.5.2 Check validation report / publish validated files

After report is uploaded it will be validated.

If validation fails you can click and see valdation report.

Publish drilling data						
		REMOVE ALL FALED FLES	REMOVE ALL FILES	PUBLISH ALL VALIDATED		
Sample data-Guilfaks1990-ERROR.xlsx	Drilling slot life cycle report	VALDATION FALED			Ð	~
Report type Duiling slot life cycle report. *						

If validation is OK click publish all validated







4.6 Event log

In the event log you can track your uploaded reports.

Subsurface	COMMON INMONYAS 💄 BOUNCT TEST UBER LOB OUT	Filter area
🔲 Hane	Event log	
Production ^	Date created from to Reporting period from to	
 Publish data Explore data 	2(20.02.07.00.00 2(20.02.07.11.00	
Drifting A		Select event t
Publish data	9, 6 ■ ∓	
Explore data		Filter and sea
Administration A	Publik dala Eser Eserempery Parad Friedra Cil Stata Fierens - Della Congenta Eserempery Parad Eseremperatura e anno eseremperatura e eseremperat eseremperatura e eseremperatura	the table resu
🐑 Event log		
	🗲 dhadhaala ee chanan Eigeneen Barneen Federikaan 10000016 10000016 128 Desakt ED DPR Teat Xini Dorma 🛆 Amis 1000016 1000016 1000016	Select column
	🗲 orozost by stand chima oldsi. Comor laceola orozoti bencost se denteto olisti laceola laceola laceola antico olisti laceola antico contra laceola one distanti	to show
	> QUYZQU RENDEAN SherrieneGanogReg to LQUNOELDADYAS 0FUZZIV PITURIV LZE DEWLLD DERU_VOLDEJLENCE_SUCCESS/VALOE/SERVED.NN Dpar 🛆 One LZNAL.	Download ta
	🗲 GROTIZZE REALTY AN EXPERIENCEMENT (REALING REALING CALIFORNIAL CALIFORNIAL CONTRACT	result
) GUTIDZU MINIO MI Streamburnoghongiko EDURIOR BIERRY/IS 0/102/17 0/102/17 L28 DISEEE DPRO/PUEISH_BERVICE_SUCCESS_PUEISH_TSK/RD.Imi Dpx09	
		Page navigat
	Room propage 5 + Page 1 of 7 that records 32 threading excents 1 to 5 IC < > >1 Jump to page 1	
Collabor8	For tachnical support phone +0150 40 00 or week isopant@vecr/tachnine	