

NOVOS

Apps Menu



NOVOS Core Apps

Comes with NOVOS



Planning

Allows driller to upload a Well Program, setting upper and lower limits for drilling process.



Drill

Uses standard autodriller setpoints to drill down. An application can be developed to automatically adjust the drilling setpoints.



Rotation

Manually adjust rotation and automatic oscillation of the top drive based on degrees or wraps. Driller can also configure on-bottom and off-bottom RPM so that NOVOS automatically reduces rotation every time the bit is off bottom. Other apps can also replace this rotation app to automatically control RPM.



Circulation

Manually adjust flow rate. Driller can also configure on-bottom and off-bottom flow so that NOVOS automatically reduces flow every time the bit is off bottom.



Tag Bottom

User can configure how NOVOS lowers the drill bit into the formation. User can configure drawworks velocity, ROP, and any parameters used for finding the bottom of the hole. NOVOS will automatically look for stable weight before ramping off-bottom RPM to on-bottom RPM.



Equipment Control

Manual adjustment of specific rig tools such as links, IBOP, RLA, etc.



Tare Values

Manual adjustment of tare values (zeroing WOB and Delta P).



Rig Config

User can configure how each tool operates. For example, how fast or slow mud pumps ramp, how fast or slow drawworks lowers and hoists, etc.



Surge & Swab

Provides controls to manually adjust surge and swab envelope protections.



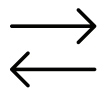
Downlinking

Automates process of downlinking to a directional drilling tool.



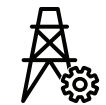
Drill Off

User can manually input WOB and RPM setpoints; user configures what setpoints should be used and when; preconfigured setpoints used once application starts and not modifiable; sends setpoints that had the best ROP back to NOVOS for the driller to use while he has control of the system.



Friction test

NOVOS will automatically run through the process of gathering pickup and slackoff weights as well as off-bottom rotating weight and torque. NOVOS will capture these values at the exact same distance every time and these values can be used for torque and drag purposes.



AutoDrill Gains Control

Allows driller to automatically adjust Amphion's Autodriller gains values without reverting ownership to the control system.



Auto Trip

Automates backreaming, it can be performed at any point in the stand, user can enter parameters like elevator position, block speed and control operations that are in progress. With its Auto Pause Torque and Pressure thresholds the app adds safety margins to avoid overloads.



Communications Apps



Configuration Review

Allows user to accept and apply or reject upcoming depth-based configuration changes sent from the NOVOS Access Portal to NOVOS.



NOVOS Gateway

A NOVOS OPC UA Client that provides external clients access to all the NOVOS Interfaces

Enhanced Apps

Added capabilities available now.



SoftSpeed II

(only present if hardware on rig)

Stick-slip prevention service uses automated vibration dampening to mitigate torsional vibration and reduce stick-slip oscillations during drilling operations.



Advanced Drill

Automatically maintains drilling at the WOB or Delta Pressure (DeltaP) Autodriller limit and perform all the functions of the Drill App



Motor Stall

Replicates the existing advanced drill interface to allow interaction with the existing autodriller and detect motor stall.



Kaizen

Is a drilling optimization app that has continuous learning capabilities enabling it to provide proactive drilling dysfunction mitigation and maximize ROP and MSE optimization.



DrillLink

It allows 3rd parties to control rotation or circulation-based downlinking. It controls either circulation or rotation activity and it allows for service companies to send downlink sequences through their own made front ends.

Commissioned Apps

Ask us to code your great idea.

E&P E&P 001

Automatically adjust autodriller gain settings based on real-time drilling data.

E&P E&P 002

Optimizes drilling parameters to improve drilling performance.

Third Party Apps

Enhancing performance through enabling technology.



NABORS | SmartSlide®

Provides configurable directional steering control system and interactive slide or rotate steering instructions on a stand-by-stand basis.



Pason | EDRConnect

Allows AutoDriller and Top Drive data to be shared with Pason Electronic Drilling Recorder (EDR).



Pason | Pason App

Enables the Pason DAS and Pason Sliding Autodriller products in NOVOS system.



Frontier International | FrontierMPD

Controls Managed Pressure Drilling equipment.



Frontier International | Frontier-FIT

Allows automated Formation Integrity Test for conventional drilling applications.



SEKAL | Drilltronics

Automates drilling process control, enabling drillers to optimize and enhance the safety of their drilling operations.



SLB | DrillOps

Maximize your drilling performance and unlock higher levels of autonomy using AI-driven technology in SLB's DrillOps™ automation solution.



Baker Hughes | i-Trak™ Drilling Automation Services

Automates drilling functions using cutting-edge physics-based, and data-driven models to drive repeatable, efficient, and accurate well construction.



DWA-EdgeConnector
Halliburton

Halliburton | Halliburton Connector

Interfaces with DecisionSpace® 365 Well Construction suite, and Logix® Automation and Remote Operations service environment, enabling data, notifications and command exchanges with NOVOS.

E&P E&P 003

Allows operator to perform rotation, rocking and unwind functions.

E&P E&P 004

Enhanced Autodriller, allowing the driller to select either WOB or differential pressure as the control parameters.

E&P E&P 005

Provides electrical generator and engine data to the driller.

E&P E&P 006

Performs all functions of the standard Autodriller in addition to WOB setpoint adjustment.

E&P E&P 007

Helps in reducing vibrations occurring in the drill string, thus improving drilling performance.

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