

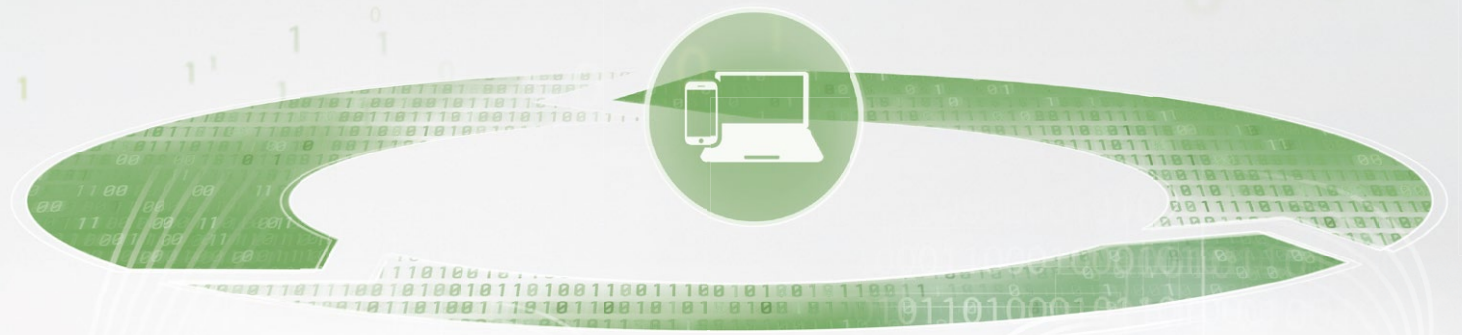


JOHN DEERE

NOTHING RUNS LIKE A DEERE

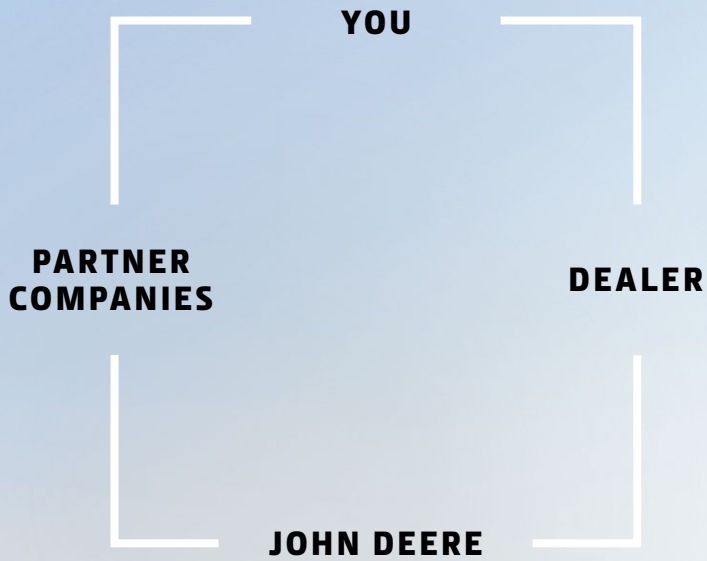
PRECISION TECHNOLOGY FOR TURF EQUIPMENT

YOUR GUIDE TO HIGHER PRODUCTIVITY AND BETTER MANAGEMENT



A NEW ERA OF COLLABORATION

Collaborate better with your partners, using data in different formats and from multiple sources to achieve superior results. Even share diagnostic codes with your John Deere Partner so that he can proactively contact you to provide performance optimisation services.



Open for progress: The world in turf and grounds-care maintenance is changing fast. Environmental considerations and operational efficiency are key aspects. John Deere Precision Technologies help you run a profitable and sustainable business.

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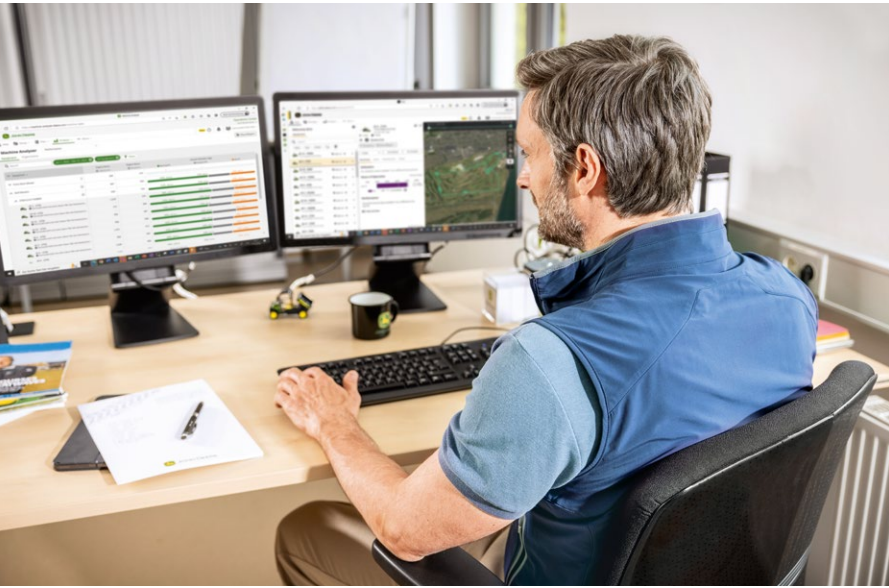
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CONNECT

CONNECTED TURF EQUIPMENT



Live machine data such as the usage breakdown into idle, transport and working hours indicate the machine's performance and are the basis for machine optimization. In addition to that, you can monitor live machine positions for the entire fleet from anywhere at any time – you'll know where your crew is working and how the work is progressing. Are you looking to reduce your maintenance costs and downtimes significantly? Real-time machine data makes it easy for you to stick to maintenance schedules and proactively plan all maintenance required to have your machines ready when needed.

JDLink™ R & M MODEM

All golf equipment comes standard with the R-Modem for uploading machine data and agronomic data, e.g. as collected during spraying with our ProGator™ 2030A HD200 CE GPS Precision Sprayer. The TerrainCut™ 1500 and 1600 Series have our new M-Modem, which is also available as a field installation kit for our commercial Zero Turn Mowers. The M-Modem with its internal antenna makes it easy to install on non-JDLink™-ready machines and even non-John Deere equipment to connect your entire fleet*.

THE JOHN DEERE JDLink™ TELEMATICS SYSTEM

Connectivity is the key to real-time machine information. JDLink™ is the John Deere connectivity solution that allows the automatic flow of machine data between connected equipment and the John Deere Operations Center™, our web-based management platform. Depending on the machine configuration and subscription type, it also allows agronomy data sharing.

+ YOUR BENEFITS

- Visualizing and comparing machine performance data across your John Deere fleet.



* Retrievable machine data can vary depending on machine type and machine age.

CONNECTED FEATURES ON OUR MACHINES

What kind of data can be exchanged depends on the machine. Here's an overview for our golf and commercial mowing equipment.



GOLF EQUIPMENT

MODEL	MACHINE LOCATION / LOCATION HISTORY	ENGINE HOURS	GEOFENCING/ CURFEWS	MACHINE ANALYZER™	FUEL LEVEL	MAINTENANCE PLANNER	DIAGNOSTIC TROUBLE CODES (DTC'S)	SERVICE ADVISOR™ REMOTE
2400 PrecisionCut™	■	■	■	–	–	■	–	–
2550 Precision & E-Cut™	■	■	■	–	–	■	–	–
2700 E-Cut™	■	■	■	■	■	■	■	■
2750 Precision & E-Cut™	■	■	■	■	■	■	■	■
2653B PrecisionCut™	■	■	■	–	–	■	–	–
7200A PrecisionCut™	■	■	■	■	■	■	■	■
6080A / 6500A / 6700A PrecisionCut™	■	■	■	■	■	■	■	■
6080A / 6500A E-Cut™	■	■	■	■	■	■	■	■
7500A/8000A E-Cut™	■	■	■	■	■	■	■	■
7500A / 7700A / 8700A PrecisionCut™	■	■	■	■	■	■	■	■
6700A / 7700A E-Cut™	■	■	■	■	■	■	■	■
8900A PrecisionCut™	■	■	■	■	■	■	■	■
7400A TerrainCut™	■	■	■	■	■	■	■	■
8800A TerrainCut™	■	■	■	■	■	■	■	■
9009A TerrainCut™	■	■	■	■	■	■	■	■
ProGator™ 2030A & ProGator™ 2030A HD200 CE GPS Precision Sprayer	■	■	■	–	–	■	–	–
185 & 225 Electric Walk Behind Reel Mower	■	■	■	■	–	■	■	■

■ Standard – Not available

COMMERCIAL MOWING EQUIPMENT

MODEL	MACHINE LOCATION / LOCATION HISTORY	ENGINE HOURS	GEOFENCING/ CURFEWS	MACHINE ANALYZER™	FUEL LEVEL	MAINTENANCE PLANNER	DIAGNOSTIC TROUBLE CODES (DTC'S)	SERVICE ADVISOR™ REMOTE
Z740R	■	■	■	–	–	■	–	–
Z950R	■	■	■	–	–	■	–	–
Z994R	■	■	■	–	–	■	–	–
1550 TerrainCut™ Front Mower	■	■	■	–	–	■	–	–
1570/1580/1585 TerrainCut™ Front Mower	■	■	■	■	–	■	■	■
1600 Turbo TerrainCut™ Wide-Area Mower	■	■	■	■	–	■	■	■

■ Standard – Not available

GUIDE

THE PATH TO HIGHER PRODUCTIVITY AND PERFORMANCE

Our guidance system continuously and consistently reduces gaps and overlaps. That minimises input costs such as fertiliser, chemicals, and seeds and lowers fuel consumption. The benefits are many: lower costs, higher performance, less operator stress and better environmental performance.

RECEIVER, DISPLAY, AUTOTRAC™

Would you like to significantly improve machine productivity and in field performance while reducing cost of operation and increasing operator comfort? Our receivers and displays in combination with AutoTrac™ guidance are your ticket to precision turf maintenance.

John Deere receivers, displays and AutoTrac™ provide the hardware infrastructure to take full advantage of the critical accuracy and system reliability modern turf maintenance can bring to your operation.

OUR WINNING COMBINATION OF GUIDANCE HARDWARE CAN BE EASILY TRANSFERRED FROM ONE MACHINE TO ANOTHER TOMAKE THE MOST OF YOUR INVESTMENT.



STARFIRE™ 6000 AND 7000 RECEIVERS

+



GEN4 OR G5™ DISPLAY

+



AUTOTRAC™ UNIVERSAL 300 STEERING KIT



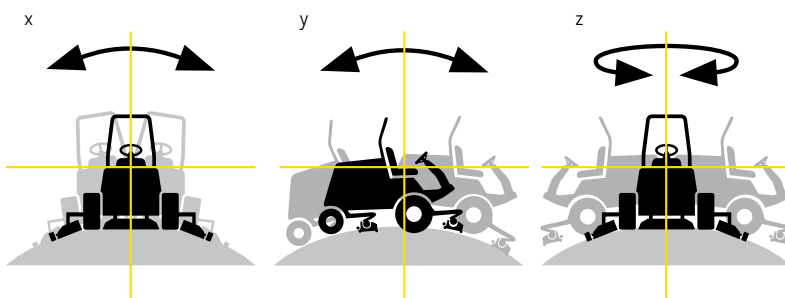
STARFIRE™ RECEIVER

Access to John Deere guidance systems starts with our StarFire™ receivers. They track up to four correction signal satellites in parallel for exceptional coverage and automatically always switches to the best available geostationary satellite signal to deliver reliably accurate guidance.

Our ProGator™ 2030A HD200 GPS Precision Sprayers come standard with the StarFire™ 6000, and for retrofit machines we offer a StarFire™ 7000.

An SFI correction signal comes standard and free of charge with your receiver and provides an accuracy of plus/minus 15 cm, which is already better than what you can get with a foam marker or similar. Optionally, there are signals with higher accuracy available. The SF3 signal increases accuracy to plus/minus 3 cm and gives you 9-month in-season repeatability, allowing you to use the same guidance lines for multiple passes. Our best solution for Golf and Sports Turf applications is the Real Time Kinematic (RTK) signal: With superior 2.5 cm accuracy and long-term repeatability, you only need to record field boundaries once — no need to come back and record boundaries every year.

You'll save time every day with always-available full RTK accuracy from the very start. StarFire™ customers receive up to 14 days of RTK extension free of charge. Even if you lose the cellular network, you can continue to work with complete accuracy. RTK is available through either the modem or the John Deere Mobile RTK 4G LTE mode (requires a SIM card or a Mobile RTK Access licence).



Reliable everywhere – The Terrain Compensation Module (TCM) detects and assesses roll (x), pitch (y) and yaw (z) to ensure true machine ground positioning across every field.

UNIVERSAL DISPLAYS

The name already says it: our Universal Displays can be used on different machines to facilitate year-round use. Documentation, variable-rate application and wireless data transfer capability are all standard.



4240 UNIVERSAL DISPLAY

The 4240 display has a 21.3 cm touchscreen and is water and dust-resistant (IP65).



4640 UNIVERSAL DISPLAY

Get the same functionality as the 4240 but with a larger 25.4 cm touch screen and in-field data sharing readiness.



G5™ UNIVERSAL

The G5™ Universal is water and dust-resistant (IP65) and brings you full HD resolution, additional memory, increased processing power and is among the most advanced displays available.



G5^{PLUS} UNIVERSAL

With the same functionalities as the G5™ Universal, the G5^{PLUS} Universal has a massive 12.8" screen that offers about 33% more visual space.

AUTOTRAC™ UNIVERSAL 300 (ATU300)

Our proven automated steering solution can be fitted to many machines. Thanks to its effortless installation, you can transfer the ATU300 from one machine to another in less than 30 minutes.



The ATU300 is a robust and reliable solution. Exceptional pass-to-pass accuracy reduces gaps and overlaps, which translates into lower input cost, higher productivity, and less operator stress and fatigue as they can focus on quality results instead of precisely navigating the course. Overcoming the challenges of rolling terrain and uniformly green grass, our guidance solution “paints” guidance lines on the turf with flawless accuracy. Once you have experienced the benefits of AutoTrac™, you will never want to go back to manual steering! All your AutoTrac™ parameters data like machine and implement offsets, boundaries, and guidance lines are set-up in the Gen 4 display and safely stored, backed up and maintained in the John Deere Operations Center™.



SITE-SPECIFIC TURF MAINTENANCE

Site-specific turf maintenance allows you to control and budget your costs more accurately, reducing fertilizer, seeding and chemical costs.



With real-time sensor data and site-specific documentation, you gain valuable insights for making fact-based decisions. The right application rate, no overlaps and no gaps result in full coverage without any under- or over-applications. Easily define spray and no-spray zones so that only pre-defined areas get worked. Cut down on paperwork as all information you need is always at your fingertips and all process data is automatically recorded and stored.

NO MORE OVERLAPS, NO MORE GAPS, NO MORE WASTE

John Deere Section Control automatically turns individual nozzles on and off for pre-defined areas. By reducing product application overlaps and gaps, Section Control enables you to apply precise amounts of plant protection – saving input costs and treating the environment with care.

GREENSTAR™ RATE CONTROLLER

The GreenStar™ Rate Controller is the interface used on our PrecisionSprayer to enable Individual Nozzle Control and automatically adjust rate and pressure as required.



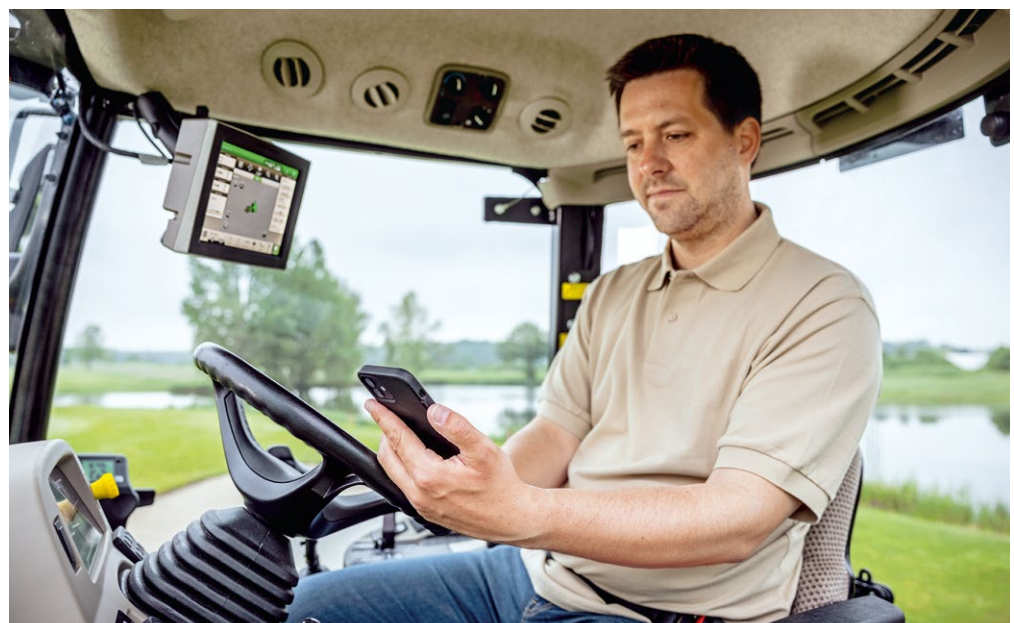
MANAGE

CONNECTED TURF MANAGEMENT

The John Deere Operations Center™ is your portal for collecting visualised agronomic, machine and labour information. Showing you all information at a glance, it helps you make fact-based decisions quickly and easily.

FACT BASED DECISIONS

Anywhere, for everyone! Proven tools support your decision making process.

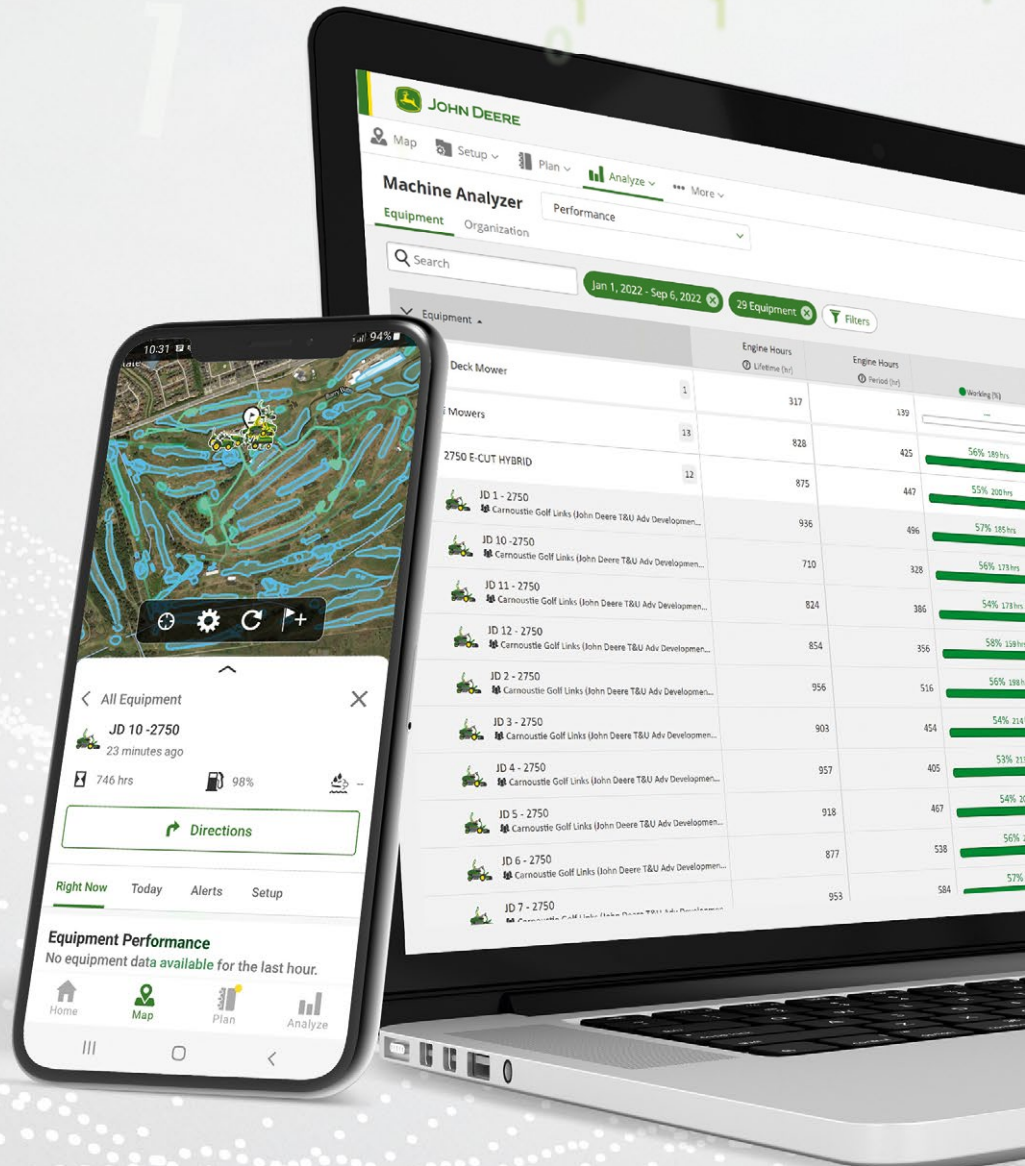


JOHN DEERE OPERATIONS CENTER™



ACCURATE DATA, SOUND DECISIONS

The John Deere Operations Center™ puts your operation in your pocket. Easy to understand, nicely structured information supports your decision-making process. As tasks are completed, documentation data is automatically uploaded to your Operations Center™ where you can visualise the processes on a structured timeline – anytime, anywhere.



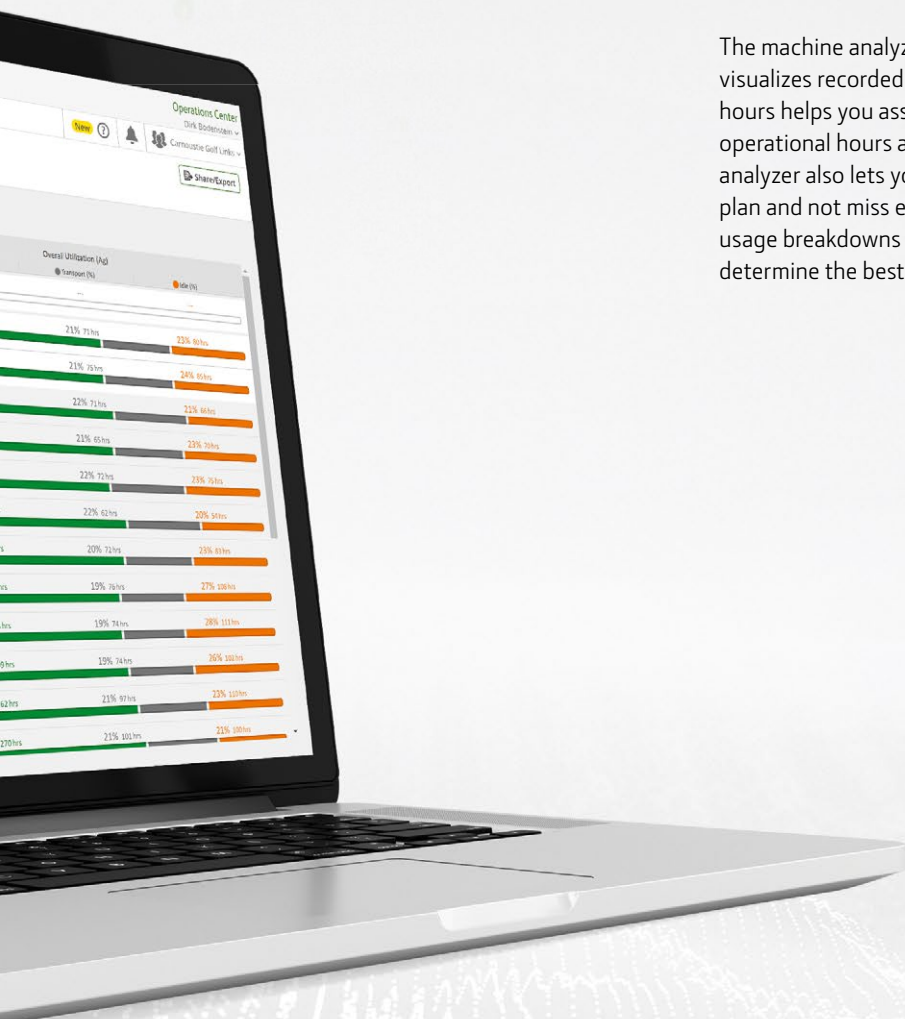
The John Deere Operations Center™ connects you to your machines and your operation from one central location. It also allows the seamless exchange of information with your John Deere Partner, contractors, or other trusted parties.

MACHINE ANALYZER™

The machine analyzer application is part of the Operations Center™ and visualizes recorded data from your machines. An overview of machine hours helps you assign machines intelligently, enabling you to distribute operational hours among machines of the same type equally. The machine analyzer also lets you know about upcoming service intervals so you can plan and not miss essential maintenance. Some machines also enable usage breakdowns by idle, transport and operation hours to help you determine the best operational windows.

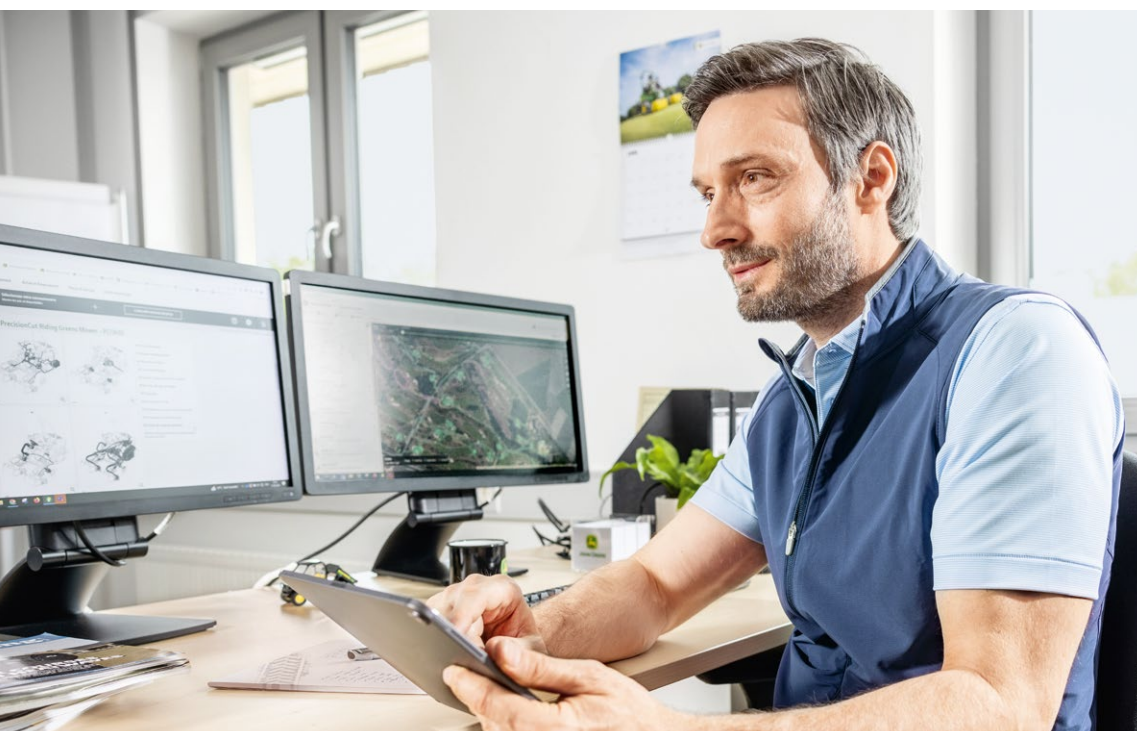
+ YOUR BENEFITS

- Raise your efficiency in the office with streamlined administrative workflows
- Generate documentation faster and easier than ever
- Exchange data with trusted partners while maintaining total control over it.



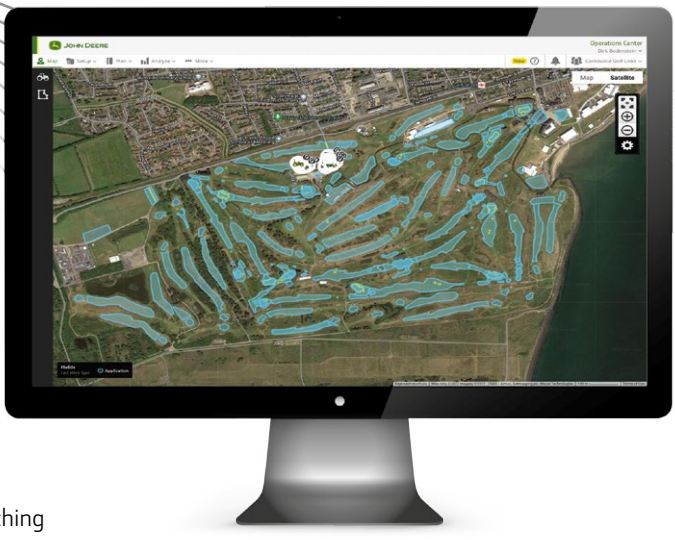
FLEET MANAGEMENT: LOCALIZATION, GEOFENCING, CURFEWS

Track and monitor operational information on a mobile device or a computer, with one map showing all your connected machines, their current and past locations, and work progress. Examine whether work was completed to spec or if a work order has been missed and manage tasks more efficiently by setting up geofences to create alerts when your machines move out of bounds. You can look up machine settings, utilisation and performance data remotely and compare some of the data across machines.



MAXIMISE PERFORMANCE AND UPTIME

Start your working day secure in the knowledge that you and your machines are taken care of. With your consent, John Deere Dealers have access to several unique remote tools such as Expert Alerts for extending advanced support that helps you optimise machine performance and maximise uptime. To minimise your downtime risk, remote machine monitoring enables your dealer to contact you proactively when service is due or if machine data indicates that your equipment needs attention.



MANAGE YOUR JOBS ONLINE

Conveniently plan your jobs during the off-season so that everything will go smoothly during peak season. Easily edit display data like boundaries and guidance lines so that if you use our AutoTrac™ Guidance System and site-specific Turf Maintenance Solutions, you connect AutoTrac™ to the John Deere Operations Center™ and start working the moment you get to a job site. The system automatically detects when you approach the work site and lets you choose the loaded boundaries and preferred guidance lines from a pre-populated list. Once you have completed a task, the documentation map is also available in your mobile Operations Center™ App.

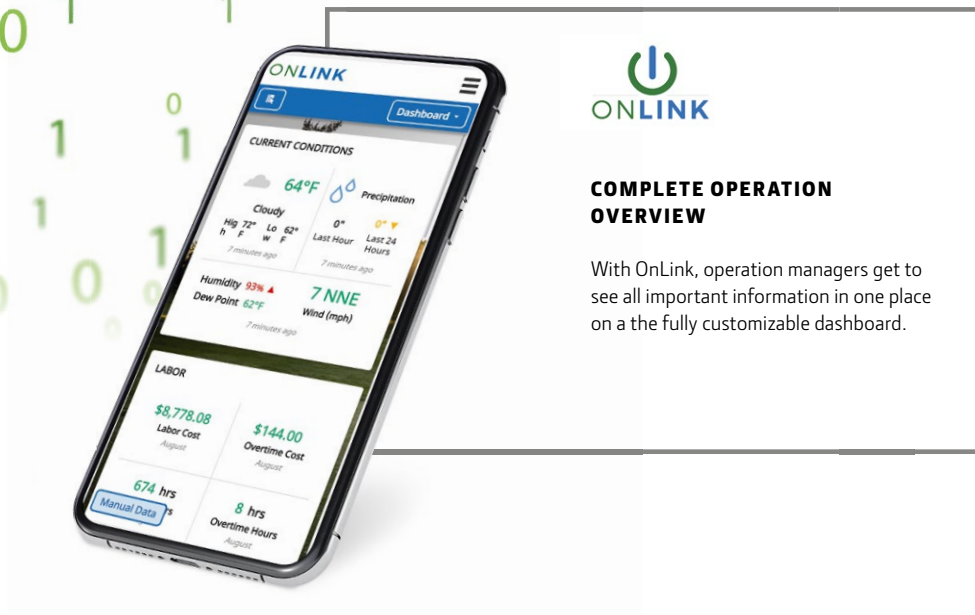


JOHN DEERE EQUIPMENT MOBILE APP

The John Deere Equipment Mobile App lets you manage, maintain, and keep your machines running. It allows you to prepare equipment for work, access important information from the operator's manual and find the parts you need.

The app also interfaces with the John Deere Operations Center™ via JDLINK™ Connect, providing a straightforward and reliable connection between you and your equipment.



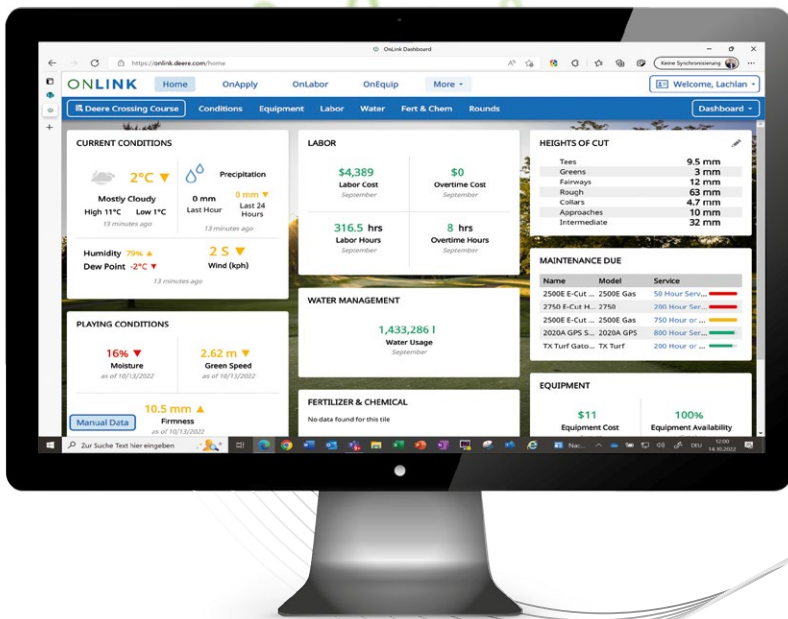


ONLINK

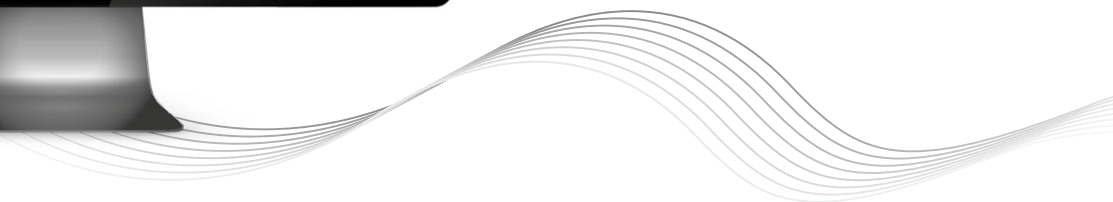
ONLINK GOLF COURSE MANAGEMENT SOFTWARE

OnLink is your solution for effective labour and machine management. It replaces your whiteboard with a digital workboard with all your important information organised and dynamically available in real-time. Using the MyWork function in OnLink, the operator “checks out” his job with a single click once he is finished and all relevant information has been uploaded. Telematics information from JDLink™ makes machine management even more comfortable and effortless.

Having all your data in one place puts data-driven decisions at your fingertips. Always understand your job costs on the course and how your equipment is used in each job. The dashboard will keep you informed about key performance indicators and lets you set up alerts when you exceed thresholds. With OnLink, you will improve communications between course managers and the crew – build and display digital work boards that show changes made to equipment assignments or schedules in real-time. Similarly, OnLink also improves cooperation with the workshop team, as they can manage machines due for service in the same manner. The visualisation of the crew and machine hours helps you find the right balance for the efficiency of your operation.



Weather conditions and forecasts, labour information, equipment information and more at a glance.



OnLink improves communications between course managers and the crew.





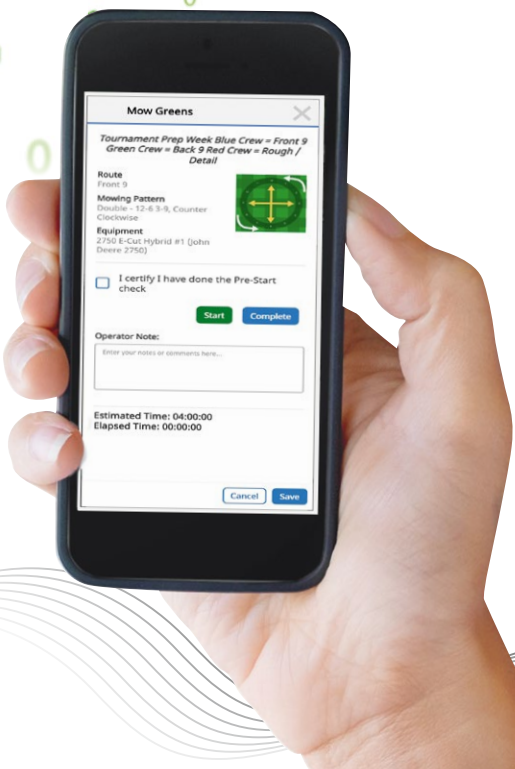
ONLABOR

Easily view, add, and assign jobs for the team from any device with an internet connection. Real-time updates let the whole team stay current on the most important golf course needs. With several automated reports you gain insights into labor costs and hours as well as other operational costs.

With OnLink, you will improve communications between course managers and the crew – build and display digital work boards that show changes made to equipment assignments or schedules in real time. Similarly, OnLink also improves cooperation with the workshop team, as they can manage machines due for service in the same manner. The visualisation of the crew and machine hours helps you find the right balance for ideal operational efficiency.

Use MyWork to assign work straight to your operators' mobile devices, where they can see their individual tasks. MyWork supports effective and timely communication across the entire crew by giving everybody access to essential information like mowing direction, mowing route information and task notes.

MyWork is fully customisable, allowing you to select how much or how little information each operator can see – you can enable their access to MyWork without providing access to any other part of the portal. Add pre-start check confirmation to ensure operators perform walk-arounds before heading out for work. The operator notes section provides free-form entries that are recorded in the system. Non-telematic equipment assigned to a job will also display – operators can enter current hours at the end of each job to reduce the time maintenance staff would need to record hours to keep fleets up to date.



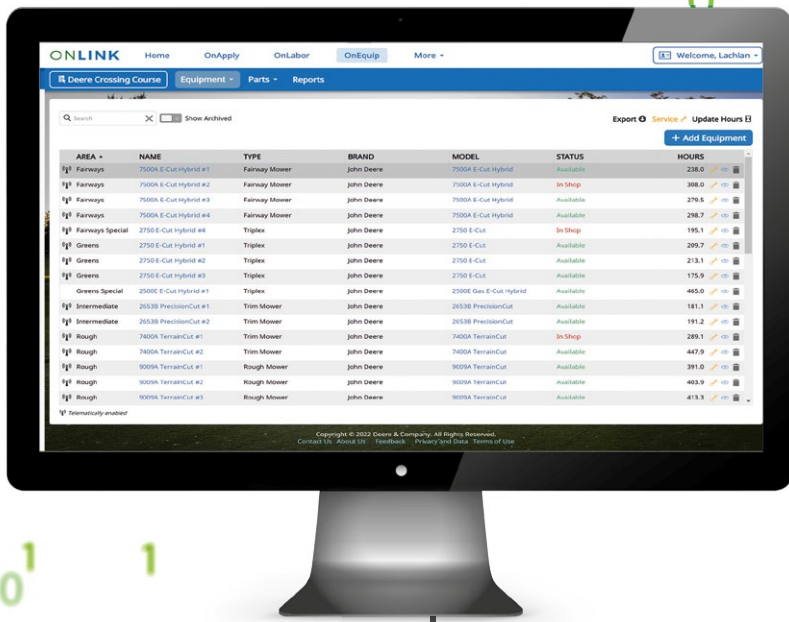
ONEQUIP

Equipment performance, uptime, and cost of ownership are all critical operational factors. With OnEquip you stay in control.

To maximise equipment uptime and availability, our integrated fleet management tool provides visibility into required upcoming service to ensure that preventative maintenance is always performed according to the manufacturer’s recommendations. Through JDLink™, OnEquip pulls information from connected machines, and machine information such as running hours, location, location history, geo-fencing, and curfews are automatically uploaded into OnEquip. Even if they’re not green and yellow, you can easily add non-connected machines manually and maintain them in OnEquip.

Having all your data in one place puts data-driven decisions at your fingertips. Always understand your job costs on the course and how your equipment is used in each job. The dashboard will keep you informed about key performance indicators and lets you set up alerts when you exceed thresholds. On your John Deere equipment, not only the maintenance schedules, but also service work orders are pre-populated.

Thanks to the OnLabor integration, an “in shop” declaration makes the machine unavailable for work assignments. Detailed reporting tools allow full visibility into cost of ownership to inform decisions on purchasing or leasing, fleet size needs, and fleet management practices. In addition to connected and John Deere machines, you can also list unconnected and third-party equipment.



FLEET MANAGEMENT MADE EASY

Up your equipment's uptime and performance and control your cost of ownership with the automated ease of OnEquip fleet maintenance management.

PRECISE DATA FOR BETTER DECISIONS

Efficient operation management is a growing challenge for greenkeepers, turf keepers and professional landscapers. John Deere Precision Technologies connect machines, grounds, and labour in real-time and make all relevant information readily accessible in the Operations Center™, or the Operations Center™ App. That means easy recording, faster reporting, better decision-making and data availability everywhere. Live machine positioning tracks real-time work progress, and proactive service reduces machine maintenance costs and downtime. Auto-steered machines reduce gaps and overlaps to significantly reduce input costs and boost environmental performance.



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