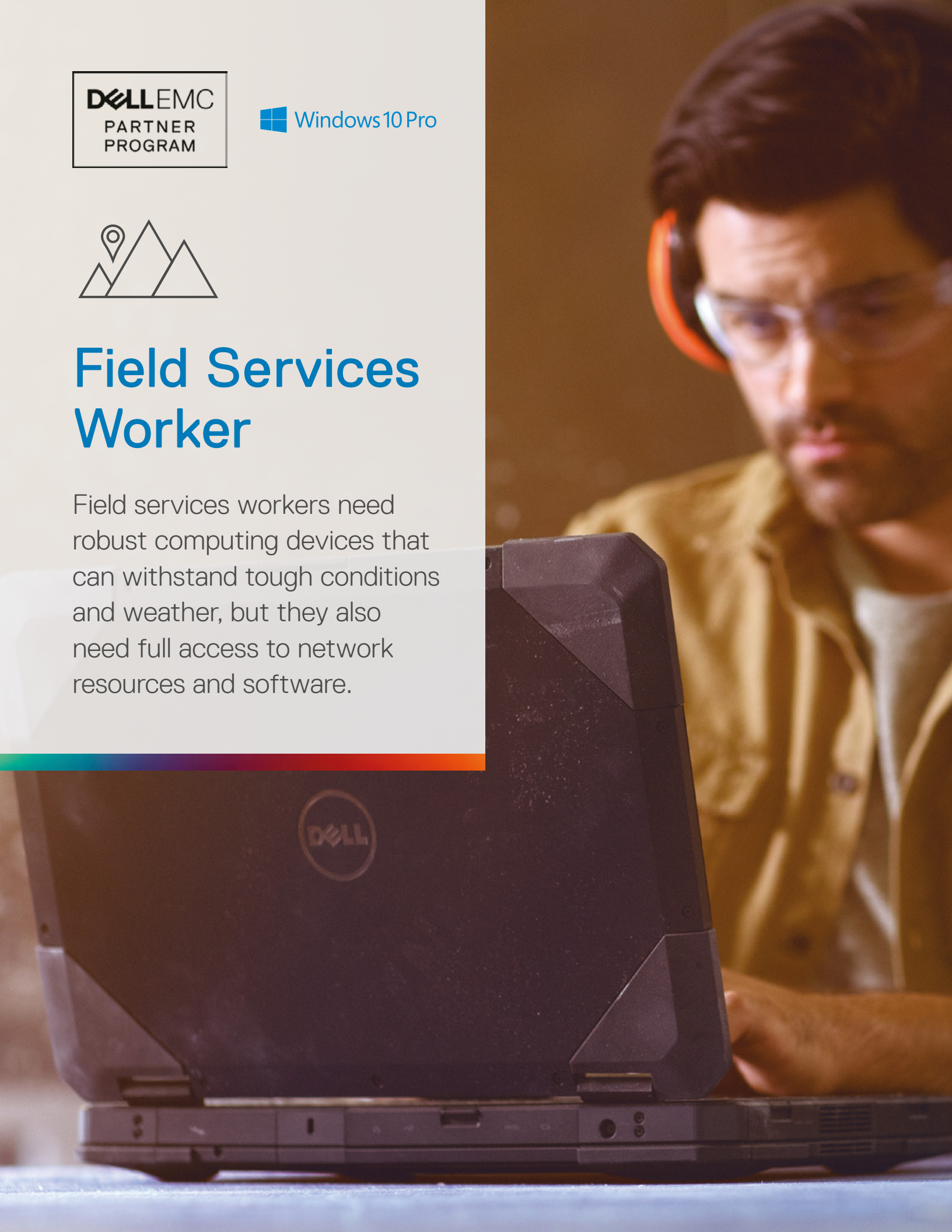




Field Services Worker

Field services workers need robust computing devices that can withstand tough conditions and weather, but they also need full access to network resources and software.



What field services workers do

Field services workers require access to their computing in any environment and at any time. They need a robust computing device that can withstand physical abuse and poor weather, but also a reliable mobile connection to data, software and infrastructure.

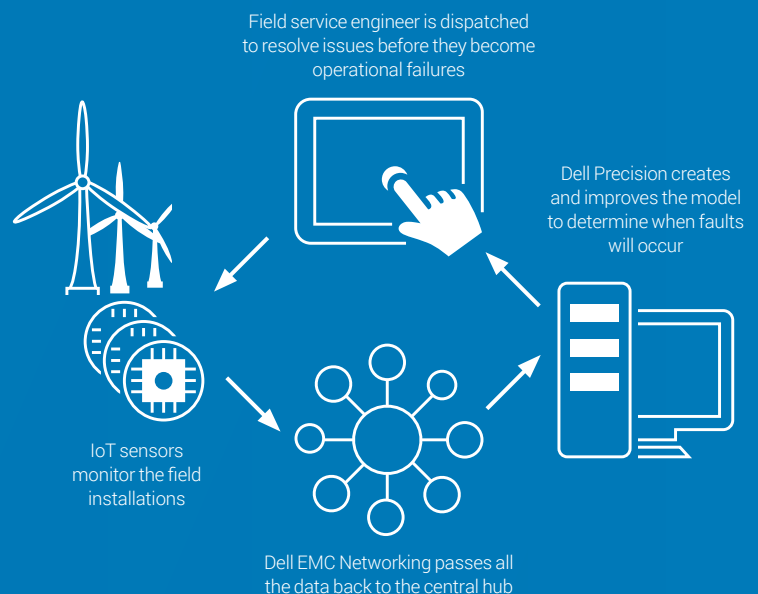
As a user out in the field, you take your computing on the road, and often to places that regular computing devices can't safely reach. You might be fixing customers' cars as a roadside mechanic, you might be in one of the armed services, or you could be a telecoms engineer working in mid-air up a pole. You could even be braving rough seas in the oil and gas industry, or looking after animals in the wilds of Africa as a vet.

Rugged, durable, mobile devices

Wherever you are, you'll need a mobile computing device that can survive being dropped, maybe from a considerable height, and will be fine if its caught in heavy rain or a sand storm. But that's just half of the equation. Field services workers are often first responders attending an emergency, and they will also need to access data or services wirelessly. This connectivity needs to be as robust as the device itself.

Powering the Internet of Things

Increasingly, Field services workers are moving from reactive maintenance to proactive management based on sensor data from rugged computing devices that stay permanently out in the field, as part of an Internet of Things (IoT) installation. These could be connected to wind turbines or air-conditioning units and temperature sensors. These new devices produce huge amounts of data, and may be responding dynamically to data too. Even the server side might be in the field, and so it needs to be rugged, as the first stage of collecting this data.





Case study

Talisen Technologies helps enterprises obtain meaningful analytics about their building operations, including energy usage and maintenance.

In particular, this includes aerospace, defense companies and other large enterprises. Talisen's Enterprise Sustainability Platform (ESP) takes advantage of big data and IoT technology to maximize operational efficiency.

Edge devices such as sensors, building automation systems, meters, utilities, IT and operational management systems feed information into local Dell Embedded Box PC 3000 appliances. These flexible, rugged hardware devices have been integrated perfectly into Talisen's ESP. The middleware on these systems collects interval data from the edge devices and securely transmits it to the Talisen cloud environment for analysis and reporting.

"Dell EMC is ahead of the curve with embedded server technology, which is one reason we chose this solution," says George Brill, CEO of Talisen Technologies. "We're often not sure how much space we'll have in any given building, so we need a flexible gateway. Also, we need something reliable, because it can be costly for us to go back to a customer building if there are any problems."

The reliability of the Dell Embedded Box PC 3000 means the need for field maintenance is reduced. "This translates to a high degree of data integrity at the cloud layer," continues Brill. The global support provided by Dell OEM has also helped Talisen to widen its market internationally, in particular into the Middle East, with an office in Dubai. "We can focus on our customers and not worry about local technology or deployment issues," says Brill.

"The field-level reliability we get with the Dell Embedded Box PC 3000 translates to a high degree of data integrity at the cloud layer. That strengthens our ability to provide accurate and robust analytics to our customers."

George Brill, CEO, Talisen Technologies

Dell Technologies for Field services workers

Dell EMC offers a comprehensive range of rugged portables for field services workers, but also infrastructure for emerging IoT markets.

Enabling a field services worker to function successfully outdoors starts with a client device that can take a beating. Dell has a wide range of options in its Rugged and Rugged Extreme ranges. Both laptops and tablets are available. The ranges have been subjected to independent environmental testing that prove a high level of resilience to environmental conditions.

Dell Latitude Rugged

The Latitude Rugged's MIL-STD-810G rating shows it can survive a drop from a height of 36-inch. It can cope with blowing dust, vibration, functional shock, humidity, altitude and thermal extremes between 20 degrees Fahrenheit and 140 degrees Fahrenheit. Its IEC 60529 ingress protection conforms to IP52, so it is resilient to dust and dripping water when tilted at 15 degrees.

Dell Latitude Rugged Extreme

The Rugged Extreme goes further, with MIL-STD-810G testing showing these products can endure a drop from six feet, blowing rain, dust, sand, vibration, functional shock, humidity, salt fog, altitude, explosive atmosphere, solar radiation, thermal extremes and shock, and freeze/thaw cycles. The IEC60529 ingress protection extends to IP65, indicating complete resistance to dust and water jets.

Despite the longer development and testing time of rugged products, Dell's Rugged ranges offer 6th-generation Intel Core i3, i5 and i7 processors as well as Windows 10 Pro. Both 12-inch and 14-inch displays are available, using a resistive touch-screen and anti-glare treatment. Discrete graphics acceleration is available

for applications that require it. Rugged solid-state and secure self-encrypting drives can be specified up to 1 terabyte.

Connectivity, docking and rugged servers

Dell Rugged products will keep you connected wherever you are, with built-in 802.11ac WiFi and optional 4G/LTE mobile broadband. Another option is Global Positioning System technology, so the Dell Rugged devices can interact with location-aware software. A full range of docking stations are also available. On the back end, Dell offers rugged servers such as the R420xr, conforming to MIL-STD-810G and MIL-S-901D, and supporting operation in conditions up to 113 degrees Fahrenheit with filter protection from dust ingress. The Tracewell T-FX2 is a 3U compact server based on the Dell EMC PowerEdge FX2 platform, designed for deployment in harsh, space-challenged environments.

Dell Edge Gateway for IoT

Dell Rugged products provide the perfect tool for field services teams in environments like the one Talisen engineers face when a problem is identified. For this emerging market of IoT, Dell can supply an Edge Gateway that will connect seamlessly with Dell's networking, server and storage products to provide a complete end-to-end infrastructure. This hardware integrates with Dell edge and predictive analytics platforms, and is backed by network security, so that IoT infrastructure can be deployed safely. The Dell Precision workstation range provides the perfect platform for developing the artificial intelligence behind the predictive analytics.

Talk to your Dell EMC partner about how you can benefit from the full Dell Technologies portfolio. workforcetransformation.com

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Windows 10 Pro means business.

 Windows 10 Pro

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