

NetMotion Diagnostics Brings Connection Visibility and Speeds Troubleshooting for UK Utility Yorkshire Water

Yorkshire Water had used the same VPN solution for more than 15 years. After extensive testing, they switched to NetMotion Mobile Performance Management software, including NetMotion Diagnostics. Results? Full visibility of devices and connectivity in the field. Faster troubleshooting. Happier field workers and managers. And an IT department that looks “brilliant” for driving the change.

Essential Connectivity

The 1800 field technicians at Yorkshire Water touch nearly all aspects of water delivery and quality. They respond to inquiries about water discolouration, burst pipes and other incidents, using rugged Panasonic CF-19 Toughbooks to access job schedules, maps, pipe location data, telemetry feeds from pumping stations and more. All of which are essential. “If we don’t have connectivity, we don’t have anything. It underpins everything we do,” summarises Martin Day, Technical Lead for the NetMotion rollout project.

“The previous VPN did what it was asked to do,” states Martin. “But we had problems with it because of the lack of control we had, and the lack of visibility to how and what was working. Because of that, we didn’t really understand our estate very well. We never had a full picture of what was going on with the field technicians.”

Conversations with Panasonic led them to a trial of NetMotion Mobile Performance Management software, which the business adopted after extensive testing. Among the reasons, as articulated by Darren Metcalfe, Infrastructure Clients Manager, “The diagnostics tools are particularly strong. It gives us a coverage map, by device, by 2G/3G/4G, and a view of connectivity across the whole area that’s user-generated by our guys in the field. That gives us the opportunity to go to our service provider to say look, you don’t provide the connectivity in this area, is there something you can do? Or if we get a call from an individual saying there’s no coverage, we say I know exactly where you are, if you drive a mile further down this road you’ll be fine.”

Echoes Martin, “It’s nice to be able to go to the business units with the coverage maps. When their technician says he can’t do a job because there’s no coverage, we confirm there’s a problem there and we take it up with our network operator.”



INDUSTRY:

Utilities

OBJECTIVES:

- Gain greater visibility into users, connections, coverage and devices
- Improve every aspect of connectivity

SOLUTIONS:

- NetMotion Mobility & Diagnostics
- Panasonic CF-19 Toughbooks

RESULTS:

- True, accurate picture of coverage in the field
- Root-cause analysis for faster troubleshooting
- More-reliable connections throughout the service area
- Fewer support calls
- Happier and more-productive users

“Now we’ve got the trust of the business and trust of the guys out there. The field technicians are saying, this is miles better. They walk away happy, they tell their colleagues, they tell their managers, and the managers are happy with us.”

Martin Day | Technical Lead

Root-Cause Analysis via NetMotion Diagnostics

Thanks to Diagnostics, the front-line resolution can now be handled by the support team, as Martin explains. “They have full visibility of what the clients are doing and can see the traffic. They know who the technicians are, where they are, what they’re doing, and whether and how often they’re connected.”

Diagnostics allows the support teams to quickly zero-in on the root causes of problems. “When the guys would ring up our service desk and complain they couldn’t connect, it could be the device, the network, the software, the modem, the SIM card,” details Martin. “It could be a multitude of things. Sometimes there wasn’t a resolution, we would have to swap the device out or have the technician drive to our nearest network site which could be 60 miles away. Now with all the diagnostic tools, we track where the guys are and see what the health of the device is like. If it’s a problem in the area, we can try and get that fixed. And since we’re now able to look into the full inventory of all our devices for the first time, we know the modem types, the firmware, everything else. If we see a lot of dropped connections, we drill down into that data. Some have really old SIM cards in them or an old modem. We’ve seen a hundred dropped connections on one unit, so we know the modem’s bad. He’ll get a phone call from the service desk that we know his device is failing. We’re able to swap out the unit. He doesn’t even have to ring us up.”

“It also tells us whether we’ve got a problem with an application on one of the devices,” Darren adds. “If an individual has tried to launch an application a certain number of times, or we see a massive amount of data being used, we know directly where the problem lies rather than rooting around for what seems like an eternity.”

A World of Connectivity Improvements

According to Darren, “NetMotion is much easier to use, the user experience is massively enhanced. It’s opened up a whole new world of connectivity for us.”

Among the benefits of adopting NetMotion Mobile Performance Management:

- Single sign-on, replacing a separate VPN login
- Device authentication, eliminating the need for separate tokens and licensing
- Support for home and third-party Wi-Fi networks
- Encryption to the standard required for use on military sites
- Resiliency and failover for the system between two Yorkshire water data centers
- Greater internal control over security
- Seamless patching and upgrades

Winning the Trust of the Business

As Martin recounts, it was important to bring the business along on the journey. “We swapped out our VPN for the right business reasons,” he states. One of our managers said, ‘We want no impact to the business.’ That was quite a lofty claim when he made it, but we put NetMotion on the devices and it just works. Now we’ve got the trust of the business and trust of the guys out there. The field technicians are saying, this is miles better. They walk away happy, they tell their colleagues, they tell their managers, and the managers are happy with us. For us, it’s brilliant.”

Martin ticks off the impacts on Yorkshire Water personnel: “The support guys have full visibility to what the client and users are doing. For IT, it’s easy to maintain and patch, it’s resilient and we can increase the capacity in no time at all. The third and most-important part is the technician and business side. They have a device that seamlessly connects, able to connect from home, over third-party Wi-Fi, over 4G and they only have one login. We’ve made all of our lives easier.”