



Infrastructure. Anywhere.



HPE is Helping NASA Overcome Hurdles in Space. Imagine What It Can Do for Your Business.

It's incredible to consider how rapidly cloud technologies and AI are transforming our way of life. Every day, new applications are helping to overcome society's greatest challenges.

One particularly notable advancement is the use of commercial "off-the-shelf" technology solutions at the International Space Station (ISS). Prior to 2017, computers used aboard the ISS were generally custom-built, which made the programming changes slow, complex and challenging.

Now, the *Spaceborne Computer-2*, which is comprised of the **HPE Edgeline EL4000 Converged Edge system** and an **HPE ProLiant DL360 Gen10 server**, is significantly boosting computing speed at the "edge of space." The heightened efficiency and capacity is resolving the ISS's limited communication bandwidth for transmitting critical data to Earth.

A recent article describes how much of a "game-changer" this is for NASA. Read the full story [here](#) or skim the highlights in right column:

THE PROBLEM:

The sun's strong radiation is powerful enough to alter human DNA, and this is especially problematic for astronauts in space. Scientists have struggled to collect data on the health of astronauts at the International Space Station (ISS) because of limited collection and analysis capacities aboard the ISS.

The ability to adequately safeguard the health of astronauts in space, as well as the possibility of space travel, will remain limited until scientists can accurately measure DNA changes and create effective protections.

THE SOLUTION:

Using **HPE edge computers** located aboard the ISS (as well as open-source applications), astronauts have harnessed a pipeline developed by **Microsoft Azure** to collect their own DNA continuously and perform first-pass analysis "on the edge" of the ISS. These computers can identify interesting data points, meaning any changes potentially caused by radiation, and automatically transmit that data to Earth via satellite.

On Earth, additional processes map those data points against pre-established human genome maps to help scientists to direct future research. These "edge-to-cloud" experiments and proofs-of-concepts (POCs) aboard the ISS are proving just how powerful compute power at the edge can be in moving society forward.



WHAT DOES THIS MEAN FOR EARTH-BOUND BUSINESSES?

The applications of HPE and Azure are limitless, extending far beyond the boundaries of Earth. Regardless of the challenges confronting your business, you can rest assured knowing that with a proper assessment and a carefully tailored solution, these technologies will overcome your organization's greatest challenges in ways you never thought possible.



Team up with CPP and discover for yourself what's possible.

Schedule a complimentary consultation today to get started.

866.277.4621

FIND OUT WHY CPP IS HPE'S 2020 "SOLUTION PROVIDER OF THE YEAR"

At CPP Associates, we take the time to fully understand your business requirements and identify the best technology configuration (whether it be cloud, hybrid, on-prem, or any combination thereof). Our emphasis on customer service and close attention to detail is what earned us a powerful distinction as HPE's 2020 North American "Solution Provider of the Year."

Thanks to our highly certified HPE and Microsoft Azure solution architects and talented consultants, who are experienced in all aspects of IT infrastructure, CPP is a trusted partner ready to collaborate with your team.

NASA is using HPE and Azure to challenge our very notion of what's possible. CPP can do the same for your organization by channeling those very same technologies.



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