

TechTalk



GALAXY OFFICE AUTOMATION PVT. LTD.

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GALAXY OFFICE AUTOMATION PVT. LTD. BAGS THE PRESTIGIOUS

'CRN EXCELLENCE
AWARD 2022'
FOR THE "DATA CENTER"
CATEGORY.



UPCOMING EVENTS

DELL Technologies /
**Forum
2022**

Galaxy is participating as Gold Sponsor for the Dell Technologies Forum India, the flagship event brings it all together! Emerging trends, innovative products, end to end solutions & endless solutions.



MD SPEAKS

Anoop Pai Dhungat
Chairman & Managing Director

Dear Readers,

Recently the European Union (EU) announced that from Autumn 2024, all phones, tablets and cameras sold in the EU would have to have a universal USB-C charging port. Surely, this was something that would have been on the wish list of every phone owner. I cannot even remember how many working (but obsolete) chargers that I've had to dispose off, unnecessarily generating electronic waste. That this rule will extend to laptops and other devices over the next 40 months is even better news! Let's hope the rest of the world follows and this becomes a global standard.

At Galaxy, we have invested heavily into skilling our resources in the latest technologies to help our customers implement & migrate their existing applications to more efficient and secure platforms in a time bound manner. Thanks to our 34 years of experience, our deep understanding of legacy systems as well as state of the art technologies, we are best equipped to help our customers on their information technology journey. Please reach out to our experts for any queries or consultations and we will be happy to help you.

Staysafe and happy reading.



Future Is Now

World's smallest remote-controlled robot medic could one day crawl through your arteries

A team of engineers at North western University designed the robot version of the peekytoe crab while experimenting with mechanisms to control robots without the need for any onboard electricity or hydraulic parts. Their movement instead relies on a metal alloy that can change shape with heat but remember its original position to spring back afterwards.

The robots created by engineers Prof John Rogers, Prof Yonggang Huang, and their PhD students, are less than a millimetre wide – small enough to move around arteries and veins in the body in search of blockages, for example. The crab's design began as a flat sheet of a plastic polymer, with the body, legs and chelae (or pincers) cut out. On top of each part they wanted to move, the engineers then lay the metal alloy, shown below in black.

The team then bent the 2D structure into a 3D robot, but its metal joints were able to remember its original flat shape.

"So, now if I come along and I heat up those joints, they will want to go back to that original [flat] plane," said Rogers. "But then, when I stop heating it, the skeleton will move the leg back into that bent geometry. Heating makes the leg go out straight, then cooling puts it down. And if you do that in a coordinated way, you can get the thing to kind of walk around."

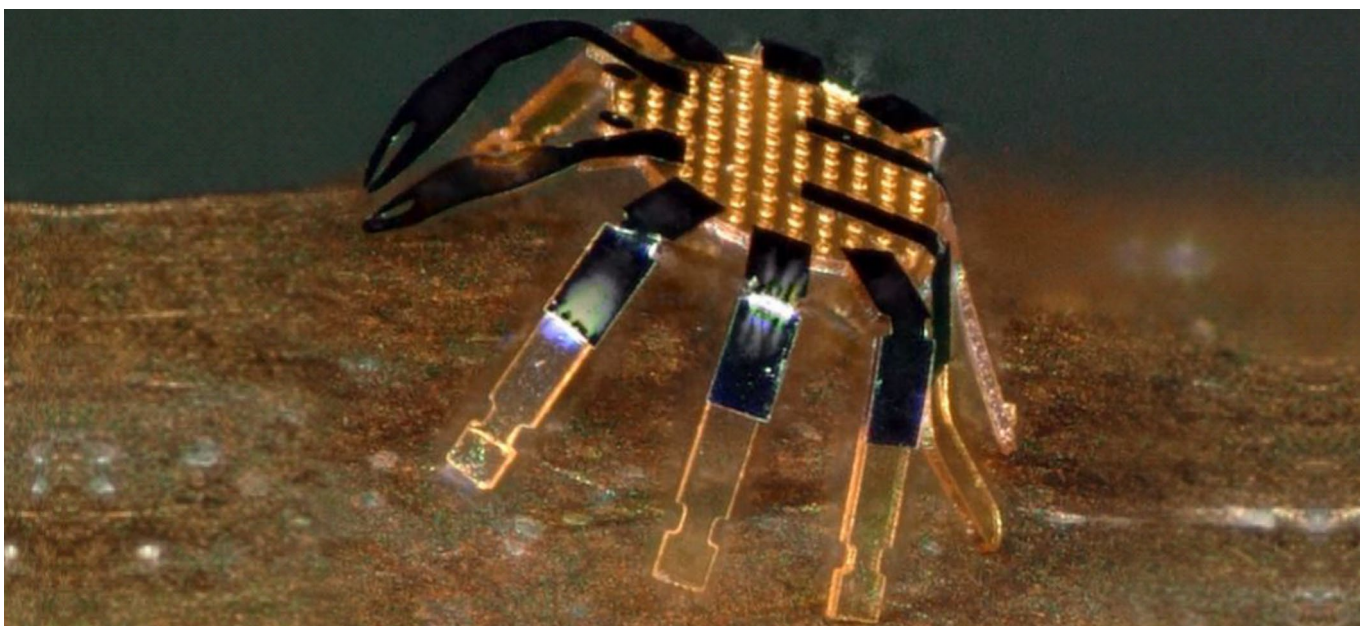
To apply heat, the team used a laser beam pointed at each

individual joint. The movement of the crab can be controlled "If you've ever been to a laser light show, you're familiar with all the fancy things you can do by taking a single laser beam and splitting it into a thousand beams," said Rogers.

"I've asked my students to see if next we could make these things fly. Maybe if we flap those legs a little harder, we could make them fly away... That's probably not going to happen any time soon, but I like to challenge my students." "A more realistic next step would be to integrate radios or electronic circuits into these devices. We make our robots flat, and it's exactly the same as the way Intel makes microprocessors. That's probably more realistic than a robot that flies away," said Rogers.

The tiny crab brings us one step closer to medical robots able to clear clogged arteries from within, or to find and destroy cancerous tumours inside the body. However, it is really only a small step in the right direction, as Rogers said the robots themselves aren't suitable for use in the body. "Our robots are operating in a terrestrial mode: they're walking on solid surface. But most biomedical applications will probably be in a fluid environment, where you'll need swimmers," he said. And while these are the tiniest remote-controlled robots the world has seen yet, they're still not small enough to get into every nook and cranny. The crab is ten times bigger than the smallest capillaries in the body, for example.

Despite this, there are many applications waiting to be explored. The half-millimetre size robots could inspire designs that are able to act as miniature repair bots, fixing broken machinery or even build small structures for bigger robots to utilise. As they say – every little helps.



<https://bit.ly/3cPQJK6>



Technology Focus

What is a Digital Workspace?

A digital workspace is a technology framework that manages and centrally controls the elements of an organization's IT assets including applications, data, and endpoints. A digital workspace also provides anytime, anywhere, any device access to applications for users, whether those applications reside on-premises or on one or more clouds.

This concentration of enterprise digital resources into a single virtual location simplifies management through a single cloud-based console while offering a secure remote access experience to users on both company-owned and BYOD devices.

By decoupling the physical client device from the workspace, the type of device used for access becomes less important as users experience a consistent user experience (UX) regardless of end-user client device. Users can access the resources in a digital workspace via digital workspace client apps, which are generally available as native applications on a range of device platforms and also as web-based apps, offering a familiar interface regardless of device or method of access.

Common features of a digital workspace include:

- ▶ Consistent, unified management of all devices whether mobile or desktop
- ▶ Single sign-on (SSO) for enhanced security
- ▶ Enhanced security when browsing the web and accessing Software as a Service (SaaS) apps
- ▶ Virtualization of both applications and user desktop
- ▶ Automated workflows

Benefits of a Digital Workspace

Key benefits of digital workspaces for employees include:

- ▶ **Increased Employee Productivity:** A recent Stanford study found that work-from-home (WFH) employees were 13 percent more productive.
- ▶ **Lower employee turnover:** The same Stanford study also found WFH employees were more satisfied with the employers, and their attrition fell by 50 percent compared to the non-WFH group. Thus, an improved employee experience directly translates into lower turnover, helping to ensure that talented team members stay on.
- ▶ **Engaged Employees:** Richer engagement leads to higher

productivity and a better employee experience. Eliminating the need for specific sign-ins for each application and the ability to use the employee's device of choice leads to higher productivity and increased innovation. Digital workspaces help attract and retain critical talent in a time when many skills are in short supply.

Digital workspaces offer a variety of benefits to organizations including:

- ▶ **Improved customer service and Net Promoter ratings:** Digital workspaces can offer front-line employees all the tools they need to rapidly solve customer issues, translating a better employee experience into a better customer experience.
- ▶ **Technology-agnostic solutions:** Digital workspaces enhance the ability to adopt new technologies on-premises, in the cloud, and at the edge without fear of compromising either the user experience or enterprise security. Digital workspaces enable users to access any application regardless of where it originates, with web, SaaS, cloud, and local applications all managed as a cohesive unit.
- ▶ **Better Security:** The battle between ease of access and strong security continues to plague most organizations. Since the network perimeter no longer exists, employees require access from anywhere, whether their home offices, the local coffee shop, or an airport lounge. Digital workspaces that offer SSO greatly reduce the risk of penetration or data loss since a single password provides less risk to the business.
- ▶ **Reduced costs:** Cloud-based digital workspace software can reduce the need for costly on-premises infrastructure.



<https://bit.ly/3zbCneu>

Dell Tech Takes On Ransomware With Better Backup Software

Dell Technologies launched an attack against ransomware, and competing backup and data recovery vendors, with new software and managed services that it says can help enterprises recover from a cyberattack.

The new products drop as the REvil ransomware gang, responsible for the attack against meat supplier JBS over the summer and Apple supplier Quanta earlier this year, reemerges from the depths of the dark web. JBS ultimately paid an \$11 million ransomware to decrypt its systems, and after attacking Quanta, REvil leaked stolen blueprints for yet-to-be-released Apple devices.

As data becomes ever more critical to the global marketplace, cyber criminals are working harder than ever to steal it. Ransomware attacks that exploit our dependence on data continue to increase in volume and severity. It's estimated that in 2021 a business will succumb to a ransomware attack every 11 seconds and that the average cost of a cyber attack like ransomware will rise to \$13 million. For organizations today, the critical question is no longer "Will we be the victim of a ransomware attack?" but rather "When we are attacked, will our ransomware protection be effective?"

"Ransomware continues to be a topic for many of our customers," said Rob Emsley, director of product marketing for data protection at Dell Technologies. And the growing amount of data that customers need to manage, store, and be able to recover in the event of a cyberattack compounds the threat (and potential cost) of ransomware.

According to Dell Technologies' most recent Global Data Protection Index study, also released today, organizations manage more than 10 times the amount of data than they did five years ago. Additionally, 62% fear their existing data protection measures may not be sufficient to cope with cyberthreats, and 74% agree they have increased exposure to data loss with the growth of employees working from home.

Dell Transparent Snapshots Backup Vms

To address these problems, Dell announced three new products and services. This includes a new backup software for virtual machines (VMs) called Transparent Snapshots, and it will be globally available this quarter at no additional

cost to existing Dell EMC PowerProtect Data Manager customers.

Dell has been developing this technology over the past couple of years, and it's a big deal because it essentially replaces vSphere Storage APIs for Data Protection (VADP) and provides faster VM backups, all in software, Emsley said.

Like most other backup vendors, Dell has supported VADP for years. "It's really been the default mechanism to deliver image-level backups," he said. "With this announcement, we've been able to develop an alternative to VADP that provides both performance benefits and dramatic simplicity, bringing the ability to deliver VM image-level backups with near-zero impact on your production virtual machines."

Some customers, and other vendors, integrate storage arrays to make the VM backup process easier and faster, but adding storage hardware "comes at a cost," Emsley added. "This is a software-delivered methodology that doesn't require any supplemental hardware capabilities in order to make the virtual machine backup work better." By automating VM image-level backups and requiring less infrastructure, Transparent Snapshots deliver up to five times faster backups and up to a five-time reduction in VM latency, the vendor claims. "Reduction in latency means the impact on a production workload becomes near zero," Emsley explained.

Scaling Data Protection Appliances

The second new product is called Smart Scale, and it's a new capability specific to Dell EMC PowerProtect appliances that helps organizations manage multiple data protection appliances at exabyte scale. "It also gives management insight into how the environment is running and how best to direct backups to different appliances within the data center," Emsley said.

Using Smart Scale, customers can configure multiple appliances as a single pool giving them the ability to see and manage large data sets in one entity: as many as 32 PowerProtect appliances and more than 3 exabytes of logical capacity.

Dell EMC PowerProtect appliances with Smart Scale is in technology preview today, and Dell plans to make it generally available in the first half of 2022.



Special Focus

Managed Cyber Recovery Services for Ransomware Protection

And finally, Dell announced new managed services for cyber recovery.

Dell previously provided both proactive and reactive managed security services. On the proactive side, this includes managed threat detection and response, and on the reactive side, this includes managed incident response after an attack.

With today's announcement, customers can tap Dell to manage their Cyber Recovery Vault operations and support recovery activities. "This provides an additional level of recoverability, not from operational issues or disaster-type situations, but cyber-specific attacks," such as ransomware, Emsley said.

Dell's cyber recovery software and hardware includes an on-premises, air-gapped Cyber Recovery Vault with

multiple layers of physical and logical security to isolate critical data from ransomware and other threats. This product "has seen triple-digit growth year over year," Emsley said.

After working with customers to deploy the vaults, "Our Global Services team is quite often asked, 'Can you provide the management of both the day-to-day operations of the Cyber Recovery Vault? But then also, when there's an incident, can the Global Services team manage the recovery?'" Emsley said. This latest managed security service does just that.

Ensuring successful ransomware protection requires a cyber resilient approach to data protection that leverages the latest intelligent tools and data protection solutions and services. That's why a growing number of organizations today are turning to Dell PowerProtect Cyber Recovery for proven technology that can isolate critical data, identify suspicious activity, and accelerate recovery of known good data to ensure business continuity



Recovering Your Organisation After a Ransomware Attack

Galaxy helps your organisation to get away from Ransomware attacks. To talk to our experts, email us at marketing@goapl.com



Facebook owner Meta announces new virtual reality login system

The company will roll out its new "Meta accounts" starting in August, Chief Executive Mark Zuckerberg said in a Facebook post on Thursday. Meta Platforms Inc is modifying how users log onto its virtual reality headsets, backtracking on an earlier change to require accounts from the company's flagship Facebook app on the devices while preserving links to social connections there.

With the new login structure, Meta accounts will control device-level access and manage app purchases, while Meta Horizon profiles will represent the users' social presence in virtual reality, with associated user names and avatars, the company said in a blog post.

People will also have the option to connect their profiles in a unified Meta Accounts Center, which will integrate existing social connections from Facebook, Instagram or Messenger into their virtual reality experiences, it said. For accounts not added to the Accounts Center, the company will only combine user data across apps for counting users and enforcing safety rules, a spokesperson told Reuters.

In a memo last week, product chief Chris Cox alluded to the change, which he referred to as Project Simile and said would "power continuity across the metaverse," according to a copy of the post viewed by Reuters. Meta has been pushing to integrate accounts and other products across its "family of apps," which gives users cross-app functionality while enabling the company to consolidate data about their behavior in different environments.

The company announced plans to unify its messaging structure across apps in 2019 and later that year rolled out a payment service, now called Meta Pay, through which users can process transactions across Facebook, Messenger, Instagram and WhatsApp.



<https://bit.ly/3zDf2ns>

India's digital payments jump by 29% in annual growth: RBI-DPI

The newly constituted RBI's digital payment index (RBI-DPI) stood at 349.3 in March 2022 against 304 in September 2021 and 270.6% in March 2021.

Digital payments across the country registered a growth of nearly 29% in a year through March 2022, as per the RBI's latest index that measures the adoption of online transactions. The newly constituted RBI's digital payment index (RBI-DPI) stood at 349.3 in March 2022 against 304 in September 2021 and 270.6% in March 2021. "The RBI-DPI index has demonstrated significant growth, representing the rapid adoption and deepening of digital payments across the country in recent years," the RBI said in a statement on Wednesday.

The Reserve Bank had announced the construction of a composite Reserve Bank of India – Digital Payments Index (RBI-DPI) in March 2018 as a base to capture the extent of digitisation of payments across the country. The RBI-DPI comprises 5 broad parameters that enable the measurement of the deepening and penetration of digital payments in the country over different periods. These parameters are payment enablers (weight: 25%); payment infrastructure – demand-side factors (10%); payment infrastructure – supply-side factors (15%); payment performance (45%); and consumer centricity (5%). The index is published on a semi-annual basis from March 2021 onwards with a lag of 4 months.



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