



KIET
GROUP OF INSTITUTIONS

Department of Computer Applications
(MCA)

TechEdge

Newsletter

Vol IV, Issue 5

May 2021



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Software Testing Tools

Software testing tools have evolved to a great extent because of huge demand. It helps testers' life easier because of useful options and features. It is important to look for a quality tool because it helps in saving time. The Tosca automation tool has gained a lot of attention because it provides wide range of options.

What is Tricentis Tosca Automation Tool?

Tosca is one of the popular Automation tools offered by Tricentis. The tool comes with a certain price but provides an equal number of features to enjoy. Tricentis Tosca has gained a lot of attention because it offers a good balance between performance and quality.

Tosca is commonly compared with Selenium because of its features and options. It is important for every tester to know the actual difference between tools. The accurate difference helps you filter the right tool to use from time to time.

Tosca automation tool is a paid tool, which comes at a reasonable cost compared to other paid tools in the market. Most of the testers in the current generation do not mind paying a small amount of money to save time and effort.

What is the use of the Tosca Tool?

It is a known fact that every automation comes with both advantages of disadvantages. Hence, it is essential for testers to explore multiple tools to find the best option in the market. Tosca is an enterprise tool because it is suitable to use in large scale applications.

Tosca automation tool is one of the best and popular automated testing tools. It is highly used in large scale applications to find effective results. Most of the testers in automotive industries, Metal and Mining industries, Financial and education industries prefer using Tosca because of its user-friendly features.

Top 10 Benefits of Tosca Tool

1. Multiple Features in One Tool
2. No Scripting Required
3. Testing Methodology
4. Supports Multiple Platforms
5. Quality Vendor Support
6. Easy to Use Interface
7. Reasonably Priced
8. Regular Updates
9. Quick Results
10. Suitable for large scale operations

NASA discovery that may help crack mystery behind explosion of stars

NASA has made a new discovery through its Chandra X-ray Observatory that could turn out to be a major step towards pinpointing exactly how some giant stars explode. The space agency said that its scientists have found fragments of titanium blasting out of a famous supernova — an extremely bright super explosion of a star. For years, scientists had trouble understanding how giant stars — with masses 10 times that of the Sun — exploded when they ran out of fuel. The results are based on observations of the remains of a supernova called Cassiopeia A (Cas A).

Located in our galaxy about 11,000 light-years from Earth, Cas A is one of the youngest known supernova remnants and is about 350 years old. In an Instagram post, the space agency shared an image of the remains of a supernova and captioned it, “We're blown away”, adding that the amount of stable titanium produced in Cas A exceeds the total mass of the Earth.

“Recent 3D computer simulations suggest that these neutrinos — or very low-mass subatomic particles — made in the creation of the neutron star play a crucial role in driving bubbles that speed away from the neutron star. These bubbles continue driving the shock wave forward to trigger the supernova explosion,” it further added.

Toshiki Sato of Rikkyo University in Japan, who led the study, said that scientists think most of the titanium that is used in our daily lives such as in electronics or jewellery is produced in a massive star's explosion. He said that until now, they could capture the moment just after stable titanium is made. Astronomers used over 18 days of Chandra observing time from the supernova Cas A taken between 2000 and 2018.

A few days ago, NASA celebrated the 31st anniversary of the launching of the Hubble Space Telescope by aiming the observatory at one of the brightest stars seen in our galaxy. It shared an image of AG Carinae, which is located approximately 20,000 light-years away.



FluBot malware asks Android users to track package delivery using link, then steals bank details

FluBot is installed via text messages claiming to be from a delivery company that asks users to click a link to track package delivery. The phishing link then asks users to install an application to follow the fake delivery.

Reports of a new malware called FluBot spreading fast in the UK in disguise of package delivery tracker have surfaced. The malware is installed via text messages and claims to be from a delivery company that directs users to click on a link to track the package delivery. The phishing link then asks users to install an application to track the delivery. The app in reality is malware that steals information from affected Android phones.

The malware is spreading fast and widely affecting users in the UK, Spain, Germany, and Poland. The UK's National Cyber Security Centre (NCSC) has issued security guidance to identify the malware and network providers like Vodafone UK have issued warnings to users over the text message attacks. The NCSC says that affected users must reset their devices as soon as possible as the malware cannot survive a full data wipe. It also directs users to not log into any new accounts to prevent their data from getting compromised. Further, they should change passwords as the virus may have compromised the passwords too.

FluBot is installed via text messages claiming to be from a delivery company that asks users to click a link to track package delivery. This phishing link asks users to install an application to follow the fake delivery. When an Android user clicks on this phishing link, he is redirected to a website that takes users to third-party sites to download malicious APK (Android Package File) files. The report notes that such files are usually blocked by default to protect users from attacks, however, the fake websites give users information on how to go about the protections to download FluBot.

First reported by BBC, the malware takes over devices and spies on phones to gather sensitive data, like passwords, banking details, and even the address book through which the fake message can be sent to other users in the affected user's contact book.



Google expands its Android-based earthquake detection system

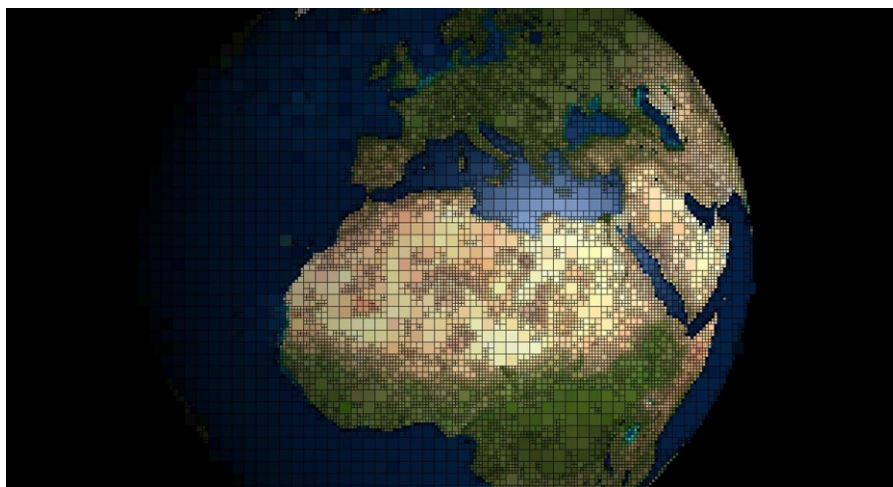
Google is expanding its Android-based earthquake detection and alert system, filling in gaps in places where there are few seismometers and no early warning systems. Starting today, the program that launched in California last year will also be available in Greece and New Zealand.

FILLING IN GAPS IN PLACES WHERE THERE ARE FEW SEISMOMETERS

This also marks a new step for Google; it's the first time the company will handle everything from detecting the earthquake to warning individuals. Android devices will first sense waves generated by quakes. Google then analyzes data from the phones and sends out an early warning alert to users in the affected area. Users will get the alerts automatically unless they opt out of the service.

When Google started on this endeavor, it worked with the United States Geological Survey and the California Governor's Office of Emergency Services to send earthquake alerts to Android users in California. This feature is now available in Oregon and will expand to Washington in May. Last year, Google started gathering earthquake data from phones. It then used that data to provide information to users if they searched for “earthquake” or “earthquake near me” on their phones.

Google's system works because each phone is already equipped with an accelerometer, which can detect movement. The accelerometer can also detect primary and secondary earthquake waves, almost acting as a “mini seismometer, joining millions of other Android phones out there to form the world's largest earthquake detection network,” according to Google. Seismometers are devices that detect ground movement, like earthquakes.



This metal is more valuable than gold

Palladium is a precious metal that is more valuable than gold, and its price has skyrocketed over the last couple of years. In 2018, it was worth nearly \$1,000 an ounce. Now, a single ounce is worth nearly \$3,000. But as its value has risen, devices that use palladium have become magnets for thieves.

The metal is primarily used inside of a catalytic converter, a device that converts harmful emissions such as carbon monoxide and nitrous oxide into less harmful ones before being released into the atmosphere. Since their adoption into the automobile industry in the 1970s, catalytic converters have led to a significant drop in carbon monoxide and nitrous oxide emissions. And the more palladium they use, the more efficient they are at combating these emissions — making them the perfect target for thieves.

Over the years, catalytic converter theft has drastically risen due to the increasing value of palladium. According to a study of reported thefts on average, 108 catalytic converters were stolen per month in 2018. That number rose to 282 monthly thefts in 2019 and 1,203 thefts per month in 2020.

With more and more manufacturers trying to reduce their impact on the environment and as stricter emissions regulations come into effect in places like Europe and China, the demand for palladium will only continue to escalate.

Verge Science spoke with a chemical engineer and one of the leading recyclers of catalytic converters in the country to find out what makes palladium so valuable — and what it would take to find new alternatives for this precious resource. Watch our latest video to see what we discovered.



NASA's Ingenuity helicopter achieves historic powered flight on Mars

NASA's Ingenuity helicopter nailed a successful debut test flight on Mars, engineers confirmed early Monday morning. The tiny spacecraft lifted itself 10 feet off the Martian surface for 39 seconds, marking the first powered flight on another world. The historic demonstration opens up tantalizing possibilities for a new mode of planetary travel that could send future rotorcraft far beyond the reach of traditional rovers.

The four-pound Ingenuity helicopter lifted its tissue box-sized body at 12:34PM Mars time (3:34AM ET, Earth time), spinning its twin rotor blades to achieve its first flight in the ultrathin atmosphere of Mars. Those blades spun faster than 2,500 rpm — much faster than the roughly 500 rpm helicopters need to fly on Earth. The craft hovered for about 30 seconds above the surface before descending for touchdown, concluding a fully autonomous 39.1-second flight test, NASA said.

The rotorcraft arrived on the Red Planet, 173 million miles from Earth, on February 18th, clinging to the underbelly of NASA's Perseverance rover. It was deployed from Perseverance over a month later, on April 4th, starting a 31-day clock to carry out five flight tests. Monday's successful flight sets the stage for more ambitious attempts in the next few weeks.

Engineers at NASA's Jet Propulsion Laboratory (JPL) broke out in cheers upon confirmation that Ingenuity's flight attempt appeared flawless. “Confirmed, that Ingenuity has performed its first flight of a powered aircraft on another planet,” Ingenuity chief pilot Håvard Grip declared, prompting applause inside JPL Mission Control. “We can now say that humans beings have flown a rotorcraft on another planet,” Ingenuity project manager MiMi Aung told NASA engineers in the room after confirmation of the helicopter's successful flight test.

A black-and-white image from Ingenuity's down-facing navigation camera was the first visual confirmation of the copter's flight, showing the experimental craft's shadow from roughly 10 feet above the surface. Minutes after flight confirmation, a sequence of images taken by Perseverance, watching from about 211 feet away, arrived at Mission Control and put Ingenuity's flight in motion for the first time.

The flight was delayed a few times from April 11th, with one delay last week requiring engineers to reupload Ingenuity's entire flight software after running into a glitch during preflight tests. The helicopter has a running track-shaped flight zone at Mars' Jezero Crater, the site of a dried-out lakebed that Perseverance will scour for signs of past microbial life.

Ingenuity's main mission is to demonstrate flight, with no objectives to explore Mars or carry out science experiments. Those jobs are reserved for Perseverance, whose primary life-hunting mission involves caching Martian soil samples that a future rover will send back to Earth as early as 2031.

Engineers will analyze loads of data from Ingenuity's first flight to set the parameters for its next four flights in the coming weeks, with the second one scheduled for April 22nd, NASA said. For those tests, Ingenuity will soar higher and travel across its flight zone at increasing speeds — though exactly how high and how fast is up for debate. During the press conference, Grip was modest about pushing Ingenuity to fly as high as possible: “probably ten meters, or a little bit more, but not much more than that.” That's how high Ingenuity's rangefinder — the laser that senses its altitude — can detect the ground.

Ingenuity takes its third flight on Mars

NASA's tiny Ingenuity helicopter made its third successful flight on Mars early Sunday, and flew higher and faster than it did even when it was being tested on Earth. At about 1:31 AM ET, the helicopter ascended 16 feet and flew 164 feet during its 80 second third flight, at a top speed of 6.6 feet per second.

NASA received the flight data shortly after 10AM ET. "Today's flight was what we planned for, and yet it was nothing short of amazing," NASA's Dave Lavery said in a statement. "With this flight, we are demonstrating critical capabilities that will enable the addition of an aerial dimension to future Mars missions."

In its second mission on Thursday, Ingenuity made a 51.9-second flight, traveling seven feet. For 'Ingenuity's first flight on April 19th, the little craft lifted 10 feet off the surface of Mars for 39 seconds.

Ingenuity arrived on Mars February 18th with its parent rover Perseverance, whose mission is to look for signs of life and take Martian soil samples. While Ingenuity isn't the main focus of the Perseverance mission, its ability to fly in Mars' thin atmosphere will provide data useful for future explorations of Mars.

NASA says it's planning a fourth flight for Ingenuity in a few days.



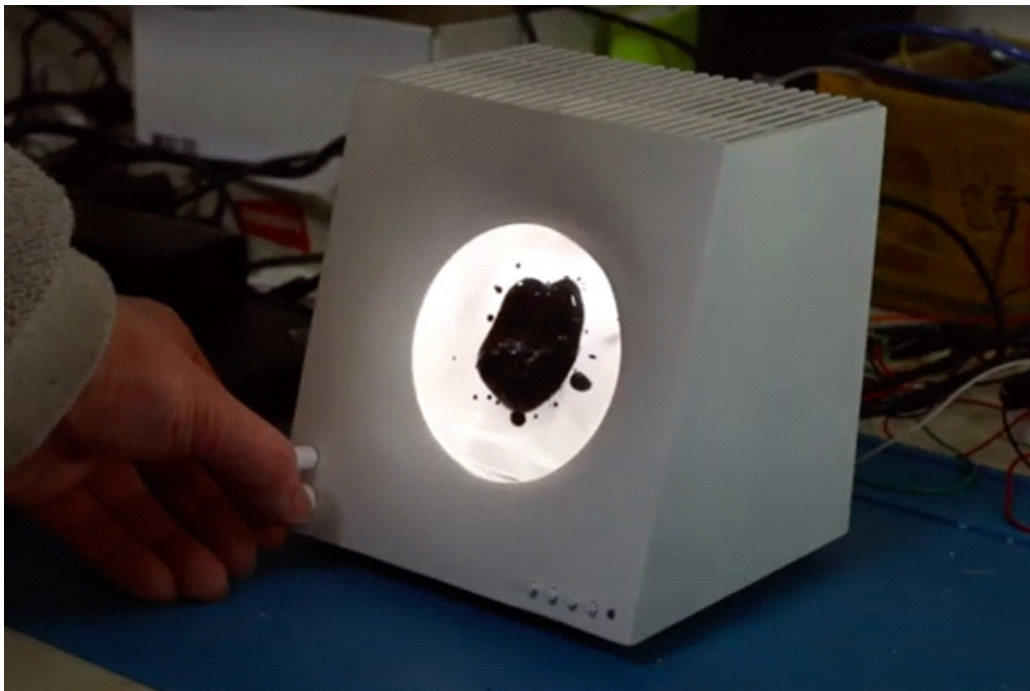
This speaker uses dancing ferrofluid to visualize music

A speaker made by artist Dakd Jung, spotted by Gizmodo, visualizes music with ferrofluid, a liquid filled with tiny magnetic particles. The ferrofluid, a viscous black blob, reacts to an electromagnetic device and dances around in sync with the sounds being played.

The video shows Jung's process for putting the speaker together: treating the glass container so the ferrofluid won't stick, sanding the 3D-printed casing, and wiring up the electromagnetic device. The full prototype in action is a little less mesmerizing than his initial test that's shown in the video because the blob breaks apart, but Jung says the speaker is still in development. He's used ferrofluid in artworks before, including a huge ferrofluid panel and a ferrofluid "pond".

Ferrofluid was originally developed by NASA for moving fuel into rocket engines without the help of gravity. It didn't work out for that purpose, but it did succeed in looking cool as hell and having other practical uses. It can be used for speaker dampers, as a lubricant in ball bearings, or as a sealant in hard drives. Some day it might even be used in biomedicine.

The liquid has been used to visualize music before, like in the video below, but having it in a closed container is much more appealing because it's a very messy substance. Plus it's just more fun to have a lava lamp responding to your tunes than a vat of liquid chilling next to your speaker system.



SpaceX capsule with four astronauts on board docks with the International Space Station

A SpaceX Crew Dragon spacecraft with four astronauts aboard successfully docked with the International Space Station early Saturday to start its six-month mission, NASA announced. Crew-2, as it's been dubbed, is SpaceX's third astronaut mission under NASA's Commercial Crew Program. It brings NASA's Shane Kimbrough and Megan McArthur, Akihiko Hoshide of the Japan Aerospace Exploration Agency (JAXA) and Thomas Pesquet, a French aerospace engineer from the European Space Agency (ESA) to the ISS, which travels at more than 17,000 miles per hour in orbit roughly 250 miles above Earth.

A Falcon 9 rocket which was used for SpaceX's Crew-1 mission in 2020, launched early Friday for its 24-hour trip to the ISS. The Falcon 9 carried Endeavour, the same Crew Dragon capsule that launched SpaceX's debut astronaut mission last year.

The four astronauts were welcomed aboard the ISS shortly before 8AM ET by the Expedition 65 crew of Shannon Walker, Michael Hopkins, Victor Glover, and Mark Vande Hei of NASA, as well as Soichi Noguchi of JAXA and Roscosmos cosmonauts Oleg Novitskiy and Pyotr Dubrov.

Kimbrough, McArthur, Hoshide, and Pesquet will now spend six months in space conducting science experiments, including a focus on “tissue chips,” which NASA describes as “small models of human organs containing multiple cell types that behave much the same as they do in the body.” The chips may help identify drugs or vaccines more quickly than the current processes.

The mission marks the first time SpaceX has reused a craft for a crewed mission. SpaceX has launched and reused several Falcon 9 rockets and uncrewed Dragon capsules as part of an initiative to save time and money on space exploration.



Intel launches 3rd Gen Xeon scalable processor; CtrlS, Reliance Jio early ad

To handle a broad range of the workload - from cloud to network to intelligent edge - Intel has launched its new 3rd Gen Intel Xeon Scalable processors for data centres across the world. Early adopters of Intel's 3rd Gen Intel Xeon Scalable platform in India include CtrlS, ESDS, Pi Datacenters, Reliance Jio and Wipro Limited.

According to Intel, the new Scalable processor delivers a significant performance increase compared to the prior generation, with an average 46% improvement on popular data center workloads. The processors also add new and enhanced platform capabilities including Intel SGX for built-in security, and Intel Crypto Acceleration and Intel DL Boost for AI acceleration. These new capabilities, combined with Intel's broad portfolio of Intel Select Solutions and Intel Market Ready Solutions, enable customers to accelerate deployments

across cloud, AI, enterprise, HPC, networking, security and edge applications.

"The future of technology is being shaped by several inflections, including the proliferation of the cloud, AI, the rapid adoption of 5G and computing at the edge. As the pace of this digital disruption accelerates, Intel's technology and leadership products are more critical than ever," said Prakash Mallya, VP and MD, Sales, Marketing and Communications Group, Intel India.

Leveraging Intel 10 nanometer (nm) process technology, the latest 3rd Gen Intel Xeon Scalable processors deliver up to 40 cores per processor and up to 2.65 times higher average performance gain compared with a 5-year-old system. The platform supports up to 6 terabytes of system memory per socket, up to 8 channels of DDR4-3200 memory per socket and up to 64 lanes of PCIe Gen4 per socket. The scalable processors

are optimised for modern workloads that run in both on premise and distributed multicloud environments.

Intel Xeon Scalable processors are supported by more than 500 ready-to-deploy Intel IoT Market Ready Solutions and Intel Select Solutions that help to accelerate customer deployments -- with up to 80% of our Intel Select Solutions being refreshed by end of year. Rapidly ramping, Intel has shipped more than 200,000 units for revenue in the first quarter of 2021 with broad industry adoption across all market segments, including the world's top cloud service providers set to deploy services;

more than 250 design wins within 50 unique OxM partners; more than 15 major telecom equipment manufacturers and communications service providers readying POCs and networking deployments.



Govt working to free tech industry from unnecessary regulations

Addressing the NASSCOM Technology and Leadership Forum (NTLF) on 28/04/21, Prime Minister Narendra Modi lauded the Indian IT industry for the resilience shown during the coronavirus period and stressed on the need for use of technology in governance.

NTLF, NASSCOM's technology forum, in its 29th edition is focused on the theme 'Shaping the future towards a better normal'. The forum will continue from February 17 to 19.

The PM said that it is the responsibility of the tech industry to give proactive technological solutions for 21st century challenges to India. He called for solutions in water and fertilisation requirement of agriculture, health and wellness, telemedicine, and education and skill development. He assured that the government is aware that restrictions are not conducive for the development of the future's leadership and is working to free the tech industry from unnecessary regulations.

Modi also asked the tech leaders to emphasise imprint of Make for India in their solutions, and asked them to think about giving world-class products and leaders in the run-up to 100 years of Independence in 2047. He called upon them to establish new parameters of competitiveness to maintain momentum and Indian technological leadership. He also emphasised on developing a culture of excellence and institution building.

Stating that the government has full faith in the start-ups and innovators, he emphasised that young entrepreneurs should have the freedom to leverage the new opportunities. Steps like self-certification, use of IT solutions in governance, data democratisation through Digital India have taken the process forward. PM even asked start-up founders to not to solely target valuations and exit strategies. He said, "Think how you can create institutions that will outlast this century. Think how you can create world class products that will set the global benchmark on excellence."

PM Modi also congratulated the industry for the two per cent growth in the sector and addition of \$4 billion in revenue amidst the apprehensions of de-growth. "When the world-closed down, your code kept things running," he said.

